EXPLORING CONSISTENT USE OF TRADITIONAL FAMILY PLANNING METHODS IN UTTAR PRADESH, INDIA

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EXPLORING CONSISTENT USE OF TRADITIONAL FAMILY PLANNING METHODS IN UTTAR PRADESH, INDIA

Dr. Sushma Singh
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MESSAGE

The state of Uttar Pradesh (UP) is committed to ensuring universal access to sexual and reproductive healthcare services including family planning (FP), in alignment withthe Sustainable Development Goals (SDG 3.7). The state's Vision 2030 document also highlights theFP goals as satisfying 75% of the contraceptive demand by modern methods and attaining a modern contraceptive prevalence rate (mCPR) of 52% by 2030.

The evidence from last two rounds of National Family Health Surveysshowed a notable increase in the modern contraceptive prevalence rate (from 32% in NFHS-4, 2015-16 to 45% in NFHS-5, 2019-21) and demand satisfied by modern methods (50% in NFHS-4 to 59% in NFHS-5)in UP, highlighting the efforts of Government of Uttar Pradesh (GoUP) to meet the FP goals.However, there also has been an increase in the use of traditional FP methods (from 14% in NFHS-4 to 18% in NFHS-5). While the expansion of modern contraceptives has been encouraging, understanding the continued reliance on traditional methods is essential for designing inclusive and effective FP interventions.

Uttar Pradesh Technical Support Unit, in consultation with GoUP, conducted a qualitative exploration with the currently married women of reproductive age (CMWRA) who have consistently used traditional methods or have switched between traditional and modern methods, and frontline workers to understand the underlying social, cultural, and behavioral factors that influence FP choices across diverse communities in UP.

The findings from this study showed that normative acceptance of traditional methods in CMWRA's immediate network, clear understanding around theireffect, and their positioning as natural methods acted as enablers for traditional methods. On the contrary,recognition of modern methods as external methods, and high complexity associated with their exposure, adoption and adherence acted as barriers for their adoption.The insights from this study highlight the need for tailored interventions as per the family planning needs of CMWRA across different parities by leveragingexistingavenues such as saas-bahu-beta sammelans etc. (for young and low parity women), and improving sterilization services (for higher parity women).

I encourage the health officials at all levels across the state to use the insights from this study for making tailored plans and implementation, to address gaps, enhance outreach, and ensure access to accurate information and a full range of FP choicesin their respective areas.My sincere thanks to the UP TSU for their meticulous and participatory approach to this study. Their efforts to engage communities and stakeholders have ensured that the findings are rooted in the lived experiences of the people we aim to serve.

(Dr. Sushma Singh)

John Anthony
Senior Project Director

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MESSAGE

The Uttar Pradesh Technical Support Unit (UP TSU) supports the Government of Uttar Pradesh (GoUP) by providing techno-managerial inputs on planning, implementation and monitoring of health programs across the domains of reproductive, maternal, newborn, and child health. The UP TSU has been supporting the GoUP in its efforts to reach family planning (FP) goals laid down in the state's Vision 2030 document.

In line with this, UP TSU conducted an integrated study on FP in 2021 to gather the current status of key FP indicators across all divisions and population sub-groups. This involved currently married women in reproductive age (CMWRA), frontline workers, assessment of the facilities, and service providers in the facilities (PHCs and above) catering to the CMWRA's FP needs. The insights from this study helped in strengthening the FP program to improve the modern contraceptive uptake among the CMWRA in the state. One of the important findings of this study was around the rising use of traditional method (TM) in the state, which also highlighted that TM use did not differ by women's socio-demographic characters, and the majority of those who started with the TM as their first contraceptive, adhered to the same method consistently over time. On the other hand, there are also a group of sporadic TM method users and users who switched from TM to modern methods.

These findings underscored the need for a further deep-dive into the profiles of current and former TM users, to better understand the factors contributing to the adoption and continuation of TM, and the enablers for switching from TM to modern methods. With this aim, UP TSU designed and implemented a qualitative study in 2023 with three types of TM users (consistent TM users, users who switched from TM to modern methods and vice-versa), and frontline workers to understand the factors contributing to women's FP choices.

The findings from this qualitative study showed that TM's positioning as a natural method and their acceptance in the immediate network of women, ease in understanding their functionality, acted as triggers for the adoption and continuation of TM among women. Conversely, the portrayal of modern methods as external means, fear of side effects, and high cognitive efforts required to comprehend, adopt and adhere to modern methods acted as barriers to their adoption. The findings also underscored the need for designing targeted interventions tailored to the specific needs of CMWRA based on their parities, using strategies such as Shagun kits, and events such as Saas-Bahu-Beta Sammelans to engage young and low-parity women, while enhancing sterilization services to better support higher parity women in making informed reproductive choices.

We believe that insights from this study will serve as a crucial resource for various departments and officials of the GoUP and non-governmental organizations and agencies working towards a more responsive and inclusive family planning ecosystem in the state.

(John Anthony)

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LIST OF ACRONYMS

ANC	Antenatal Care
ANM	Auxiliary Nurse Midwifery
ASHA	Accredited Social Health Activist
CHC	Community Health Centre
CMW	Currently Married Women
DH	District Hospital
DIL	Daughter-In-Law
ECP	Emergency Contraceptive Pill
FDS	Fixed Day Static
FIL	Father-In-Law
FLW	Front-Line Worker
FP	Family Planning
FW	Family Welfare
GoI	Government of India
GoUP	Government of Uttar Pradesh
IFPS	Integrated Family Planning Survey
IHAT	India Health Action Trust
IUCD	Intrauterine Contraceptive Device
IUD	Intrauterine Device
MCH	Maternal and Child Health
mCPR	Modern Contraceptive Prevalence Rate
MIL	Mother-In-Law
MM	Modern Methods
MPV	Mission Parivar Vikas
NFHS	National Family Health Survey
NHM	National Health Mission
OCPs	Oral Contraceptive Pills
'P' (P0, P1, P2, P3, P4)	Parity
PAIUCD	Post Abortion Intrauterine Contraceptive Device
PHC	Primary Health Centre
PNC	Postnatal Care
PPIUCD	Postpartum Intrauterine Contraceptive Device
SC	Sub-Centre
SIL	Sister-In-Law
TFR	Total Fertility Rate
TM	Traditional Methods
UP TSU	Uttar Pradesh Technical Support Unit
WoM	Word of Mouth

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The successful completion of the study "Exploring consistent use of traditional family planning methods in Uttar Pradesh, India" was made possible through the invaluable contributions and support of several organizations and individuals. The IHAT-UP TSU acknowledges all individuals and stakeholders for their contribution to this study.

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The UP TSU would like to thank all the partners of the Family Planning Monitoring, Learning and Evaluation (FP-MLE) consortium, namely the Population Council, CARE India Solutions for Sustainable Development (CISSD), the International Center for Research on Women (ICRW) and the Center on Gender Equity and Health (GEH), UC San Diego for their inputs and support during the development and execution of the study. Special thanks to Dr. Suneeta Krishnan (Deputy Director, India Country Office, GF), Ms. Neeta Goel (former Country Lead, MLE, GF) and Ms. Priya Nanda (former Senior Program Officer, MLE, GF) for their strategic guidance and invaluable inputs throughout the study.

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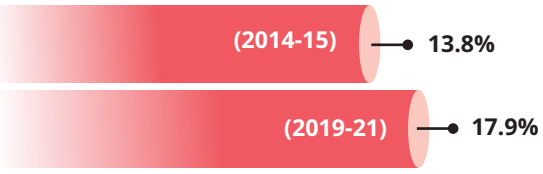
We also extend our sincere thanks to all the study participants who provided their time for this study and gave immensely important insights on the various aspects of the study. We also appreciate the efforts of all individuals and teams who contributed to the successful execution of this study. We hope that the insights gained will contribute to evidence-based strategies towards strengthening FP program and improving modern contraceptive use in the state.

EXECUTIVE SUMMARY

As one of India's oldest policies and program initiatives, family planning (FP) services are offered by public health at various levels of the healthcare system. Since its inception, the FP program has made significant progress in reducing the unmet need for contraception as a result of government efforts to increase the variety of FP methods. This includes introducing new methods like injectables and biweekly pills, focusing on commodity availability and strengthening the supply-chain mechanism, improvement in infrastructural facilities, and employing newer methods of promotion, education, and communication about FP. However, there are still issues with young married couples in numerous regions of the country, including Uttar Pradesh, an MPV[1] state.

[1] GOI launched Mission Parivar Vikas in 2016 for substantially increasing access to contraceptives and FP services in 146 high fertility districts with Total Fertility Rate (TFR) of 3 and above in seven high focus states. These districts are from the states of Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand and Assam. Based on the success, MPV has now been extended to all districts of these states as well as to 6 north eastern states.



The increased use of traditional methods (TM) in UP from 13.8% (2014-15) to 17.9% (2019-21) during the past five years[2] —is an important point to make here. Similar phenomenon is noted in other states as well[3]. A key question that arises here is, despite government efforts, ***why is the adoption and usage of TM rising?***

The present study aimed at exploring the consistent use of TM in UP, gaining a deeper understanding of the stages in the reproductive journey that lead to the selection of TM. Insights into the points of inflection where MM are chosen despite past experience with TM were also sought. To this end, qualitative interviews were conducted with currently married women (CMW) (49), husbands (24), front line workers (12), and mothers-in-law (4) across four districts of Uttar Pradesh – Saharanpur, Gonda, Mirzapur and Jhansi. These districts were selected to include a mix of high and low rates of TM usage; enabling researchers to map patterns, differences and similarities of the phenomenon of traditional and modern method (MM) uptake across case scenarios. CMW and husbands were recruited representing three cohorts of individuals engaging with TM-MM – (a) Consistent TM users, (b) Current TM users who have used MM in the past, and (c) Current MM users who have used TM in the past.

Findings reveal **key emotional, cognitive, socio-cultural and healthcare system-based triggers** for the adoption and rejection of TM and MM across cohorts. Factors leading to the adoption of TM include **(a) cognitive ease** in understanding TM's mechanism of effects, **(b) low financial, labour and perceived health costs of TM, (c) normative acceptance** of TM in social environment – leading up to **(d) a feeling of being 'in-control'** while using TM.

MM is often rejected or discontinued because they are (a) found to have **low cognitive ease and quality of understanding** – while usage might be understood for some methods, their **mechanism of action/effect of substance on body, visibility of effect, suitability for individual women, comparative advantage over other methods, and course of action in case of bodily changes,** become complex concepts with great cognitive load – for both clients and ASHAs[4], coupled with **(b) widespread negative word of mouth** about the bodily changes and/or failure of MM; (c) the current MM users also perceives them as an extra protection over and above TM – most use condoms, very few using injectables and pills. The 'basket of choice' hence has not penetrated this group as well. Based on the findings, programmatic implications, and a way forward for the FP program in Uttar Pradesh are drawn. **Training of ASHAs on community mobilization and technical counseling on FP,** focus of intervention at parity 1 stage[5], and expansion of information, education and communication using the cognitive load theory (CLT) are suggested. CLT indicates (a) the **need to simplify the mechanisms of action** of modern methods for both clients and ASHAs, (b) the **need to reduce impact of barriers** to access and uptake of MM by improving accessibility[6] and provider knowledge of MM[7], and (c) the **need to maximize use of existing knowledge about fertility, mechanism of pregnancy and menstrual cycles**[8] couples display in building awareness about modern methods. Building on the role models from the community can help leverage on the critical sources of trusted information. The '*Bhabhi* (sister-in-law)', for instance is suggested as a useful role model (figure representing the touchpoint) for IEC in Uttar Pradesh, being seen as a relatable and trustworthy source of information in a rural woman's social environment[9]. The importance of improving male participation in FP is noted – as both enablers and clients.

[2] Based on NHFS data

[3] In Namasivayam, V., Dehury, B., Prakash, R. et al. Understanding the rise in traditional contraceptive methods use in Uttar Pradesh, India. *Reprod Health* 20, 8 (2023). https://doi.org/10.1186/s12978-022-01547-y

[4] Due to which ASHAs often tend to advocate for TM along with modern methods

[5] Where ASHAs meet clients for ANC

[6] Including lack of knowledge of procurement of modern methods, lack of redressal mechanisms in case of side-effects and failures, etc.

[7] For instance, a gap in knowledge transfer from ANMs to ASHAs about modern methods is noted, resulting in limited capability of ASHAs to retain technical information and disseminate the same to 'clients'

[8] Concepts of the *'beej'* (seed or sperm) entering the woman's body through *'paani'* (ejaculation or seminal fluid), etc. were used by both men and women in interviews– displaying some biological knowledge of the mechanism of fertility and pregnancy. This knowledge can be utilised as a ground on which to build information on MM – helpful in explaining their mechanisms of action, incidence of use, etc.

[9] For instance, creative use of the figure in posters, audio-visual IEC materials, AI, etc.

INTRODUCTION

As one of India's oldest policies and program initiatives, family planning (FP) services are offered by public health at various levels of the healthcare system. Since its inception, the FP program has undergone substantial policy and operational changes. Repositioning the program to meet goals for reproductive health promotion and a decrease in maternal, newborn, and child mortality and morbidity are some of the major modifications[10]. Additionally, improvements have been made to support India's choice-based FP services. A key aspect of high-quality FP services worldwide is the concept of choice-based services or informed and voluntary decision-making.

Government efforts to expand the array of FP methods (by both – introducing new methods like injectables and weekly pills, and focusing on commodity and service availability, improvement in infrastructural facilities and employing newer ways of promotion, education, and communication about FP) have resulted in significant strides to reduce the unmet need for contraception among women and men. Yet, unmarried adolescents and young married couples continue to be of concern in many parts of the country, including Uttar Pradesh – a Mission Parivar Vikas (MPV) state[11].

[10] National Program for FP | National Health Portal Of India (nhp.gov.in)
[11] GOI launched Mission Parivar Vikas in 2016 for substantially increasing access to contraceptives and FP services in 146 high fertility districts with Total Fertility Rate (TFR) of 3 and above in seven high focus states. These districts are from the states of Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand and Assam. Based on the success, MPV has now been extended to all districts of these states as well as to 6 north eastern states.

Background of FP in Uttar Pradesh

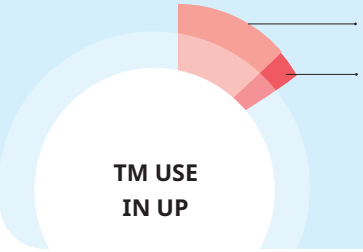
Uttar Pradesh (UP), the most populous state of India, has historically had higher fertility rates than the national average. By filling in the gaps in infrastructure, equipment, supplies, and human resources, the Government of Uttar Pradesh has been making aggressive efforts to increase the accessibility, quality, and utilization of FP services. The results of these efforts are visible in the significant reduction of fertility rates in recent decades; however, UP's current fertility rate[12] is still far higher than the government's aim of 1.9[13]

A large portion of the improvement is attributable to increased condom use (from 10.8% in NFHS-4 to 19.1% in NFHS-5)

While the share of new, contemporary methods like pills (1.2%) and injectables (0.4%) continues to be insignificant

An important factor to note here is the use of TM is as high as 17.9% in UP. Along with the increase in TM use, more than half of TM users have been noted to use it consistently for about three years[14].

According to the National Family Health Survey (NFHS) data,



TM use in UP has increased from 13.8% (NFHS-4) to 17.9% (NFHS-5) during the past five years.

These increases are not limited to certain regions or states, as the national TM use increased from 5.7% in NFHS-4 to 10.2% in NFHS-5, almost doubling, with increasing TM trend seen in 21 of the 37 states. Therefore, most eligible couples who are spacing their pregnancies either rely on condoms or on traditional techniques, which carry a higher risk of unintended pregnancy.

A question hence arises, **why are couples continuing to use and adopt TM?**

[12] According to NFHS-5, UP's TFR is 2.4 (compared to 2.7 in NFHS-4)
[13] As per state's Vision 2030 document, Government of Uttar Pradesh (GoUP) has identified its FP milestones as satisfying 75 percent of contraceptive demand by modern methods, modern contraceptive prevalence rate (mCPR) of 52 percent and TFR of 1.92 by 2030.
[14] Namasivayam, V., Dehury, B., Prakash, R. *et al.* Understanding the rise in traditional contraceptive methods use in Uttar Pradesh, India. *Reprod Health* 20, 8 (2023). https://doi.org/10.1186/s12978-022-01547-y

Need for Present Research

The present research is born from the realization that young and low-parity women are consistently using, or shifting to traditional FP methods, making it essential to understand the causes of its growth over the years. Further, with the implementation of *Mission Parivaar Vikas* (MPV[15]) in 146 high-fertility districts across states, the touch points of FLW and end-users have increased to include - counselling during door-to-door surveys, *Gram Kisan Sammitis* (collective village meetings of which women are a part), *saas bahu sammelans* (an innovative outreach program, and finally at community health centres and facilities, which women visit to access FP services and commodities. The continued usage of TM despite growth in promotion of and education on modern contraception is worth investigating.

IHAT collaborates closely with the national and state governments as well as India's most disadvantaged communities to lessen access disparities and enhance the availability, effectiveness, and use of public health services. It provides techno-managerial support to the government in improving availability and quality of services, focusing on maternal, newborn and child health, HIV/AIDS, TB and other infectious diseases, nutrition, health systems strengthening, and FP. Their efforts to improve said services can be noted in the data below (Fig. 1) – showcasing the improvement in availability of FP commodities in Uttar Pradesh. The present study is a stride in the same direction.

Table 1. Availability of Modern Reversible Contraceptive Methods in Public Health Facilities: Reported by Facility Mapping Survey 2018 and IFPS Survey 2021 (UPTSU-IHAT)

	2018	2021
% of public health facilities with availability of LAP/Mini-LAP/NSV services	84.4	84.1
% of public health facilities with availability of modern reversible contraceptive methods:		
IUCD-375/ 380-A	72.0	80.3
Injectable/Antara	17.0	78.2
Condom	73.4	77.5
ECP	57.8	73.7
Pills	64.7	72.3
Chhaya/Centchroman	16.3	63.7
% of public health facilities with availability of number of modern reversible contraceptive methods		
1 or more	81.7	92.4
2 or more	73.4	87.5
3 or more	66.1	81.3
4 or more	56.4	76.5
5 or more	13.1	65.7
6	10.4	42.2
Mean number of modern contraceptive methods available in public health facilities (minimum-maximum)	3.5 (0-6)	4.7 (0 - 6)
Number of public health facilities	289	289

[15] GOI launched Mission Parivar Vikas in 2016 for increasing access to contraceptives and FP services in 146 high fertility districts with Total Fertility Rate (TFR) of 3 and above in seven high focus states of India. The objectives of this program are to accelerate access to FP choices (information, services and supply), and ensure capacity building for service providers

Research Objectives

The study focused on understanding the universe of causes contributing to the consistent uptake of TM for FP among women in Uttar Pradesh.

The overarching objective is to arrive at a deeper understanding of the stages in the reproductive journey that lead to selection of TM.

This helped us identify:

1. Contextual factors, influences, individuals and experiences governing the woman's adoption of TM and; the factors that are prioritized at the time of decision-making when selecting TM
2. The objective and subjective knowledge, perceptions and attitudes of women that lead to preference for TM over modern methods and the role of the public health system in shaping them
3. Tipping points and motivations where modern methods are chosen despite past experience with TM

How is this envisioned to help the program?

- An understanding of the inflection points at which clients can be persuaded to switch to MM
- Customizing and upgrading outreach based on an understanding of priorities leading to uptake of TM
- Adapting existing replicable practices and experiences that lead women to adopt MM over TM

METHODOLOGY

A **qualitative study** was designed to gather open-ended responses through the in-depth interview (IDI) method. The in-depth interviews aimed at understanding the uptake and continued use of traditional methods among currently married women (CMW) and men, the role of mothers-in-law in the choice-making of FP methods among couples as sources of information and influence, and the role of front-line workers (ASHA's and ANM's) as service providers and sources and information and influence for FP. Combining different parts of the health system (clients, influencers and front-line workers), this study triangulated data from different stakeholders to gather a comprehensive picture of TM uptake in select districts of Uttar Pradesh.

Research Tools

Using comprehensive interview guides, different types of stakeholders were interviewed. Key areas of inquiry for each stakeholder are tabulated below.

Table 2. Key Areas of Information in this Study

Currently married women and men (husbands)

- The participant's personal, familial and social context and background
- Participant's salience and understanding of fertility and perceived risk of pregnancy
- Participant's reproductive timeline and history with FP
- Detailed account of decision making and current method choice to explore enablers and challenges for adoption and rejection of TM versus MM
- Understanding quality of awareness, depth of knowledge and sources of influence around all modern methods of contraception
- Participant's self-image with respect to their method of choice
- And finally, future considerations with respect to method of choice

Front-line-workers (ASHA and ANM)

- FLW's professional journey – current roles & responsibilities, and their definition and prioritization of tasks related to FP
- FLW's own understanding of FP - the need of the community, current programmatic priorities and method-specific understanding
- FLW's own approach to community engagement around traditional vs. modern methods FP
- Counseling methods and tools utilized for TM versus MM
- Key enablers and challenges with respect to the delivery of services related to FP

Mothers-in-law

- Salience and understanding of fertility and perceived risk of pregnancy
- Perceptions and depth of knowledge with respect to traditional versus modern methods
- Perception and recommendations for an ideal reproductive timeline of couples
- Quality of influence and role played by the MIL in FP decision making undertaken by couples (sons and daughters in-law)

These interview guides were translated into the local language of the participants (i.e., English to Hindi). Research study protocol, tools, consent forms, and implementation design were approved by the local Institutional Review Board.

Geography Selection

Based on IFPS data[16], IHAT identified four districts with varied contraceptive usage profiles as target centres for the present research.

Table 3. Contraception Usage Based on Survey Data

	Saharanpur	Gonda	Mirzapur	Jhansi
Rate of TM usage	**High**	**High**	**Low**	**Low**
mCPR	Moderate	Low*	High	High**
Rate of sterilization uptake	Moderate	Low	High	High

*Lowest in Uttar Pradesh (IFPS data, 2021)
**Highest in Uttar Pradesh (IFPS data, 2021)

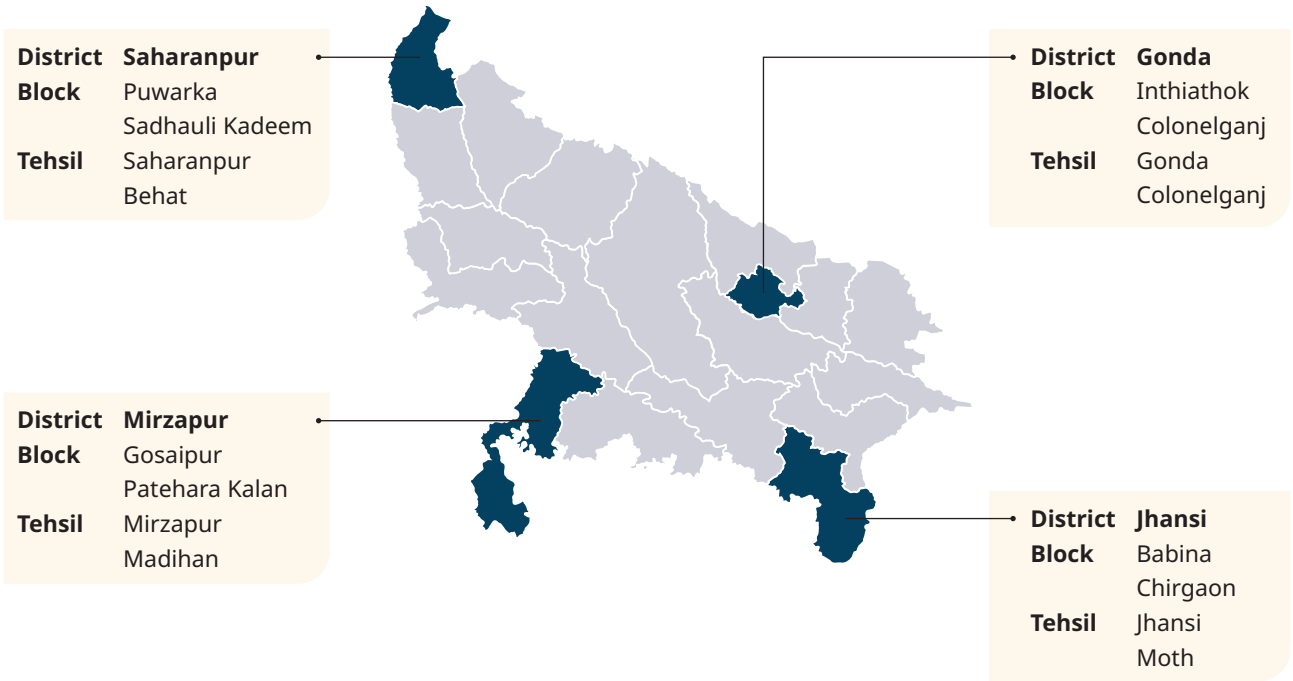
[16] IFPS, 2021- A survey by IHAT-UPTSU

Two villages from each district were selected for the study. The logic used for selection was two-fold. The first, was to select villages with substantial population (close to 1000+ households) to ensure incidence of the purposive sample identified for the study. The secondary logic (in the absence of any other pressing considerations) was to use 'distance from a given administrative centre' as a variable, with past research demonstrating that access to healthcare facilities, community resources, road connectivity, modes of transport etc. decreases as one moves farther from an administrative centre. In this case, the district headquarters was considered the central point; with block selection based on distance from this point. The selection was made as follows –

1. Village 1: Near to the district headquarter (within 10-15 kms)
2. Village 2: Farther from the district headquarter (within 60 kms)

The following villages were selected within each district as primary sampling units for the research:

Figure 1. Selection of geographies



Target Group, Sampling and Sample Coverage

The below sample was purposively defined to approach key participants to help meet the study goals. Variables taken into consideration for participant selection were as follows:

- Age: Younger skew to determine why young and low parity couples in particular, seem to have a preference for TM
- Men and women: Mix of husbands and wives to determine differential perspectives with respect to FP method selection, understanding and usage
- User profiles: A combination of those who are currently using TM and modern methods respectively; as well as variation in past usage of either type of method.
- For FLWs, those serving the communities from where client participants were recruited

Table 4. Recruitment Criteria

Clients: Women	Front Line Workers	Husbands and Mother-In-Law

• Younger (18-24 years) and older women (25-39 years)
• Mix of those who are:
  • Cohort 1: Currently using TM
  • Cohort 2: Resumed using TM
  • Cohort 3: Switched to modern methods
	ASHAs and ANMs – To provide a frontline worker's perspective on the uptake of TM in their respective communities	Same criteria for husbands as for Women

Inclusion and exclusion criteria for CMW and husbands is detailed as follows:

Table 5. Inclusion Criteria (CMW and Husbands)

Cohort	Description
Consistent TM user, no other method ever used.	• Currently using Rhythm or Withdrawal (at least 1 year) • Never or rarely used condom or ECP (1-2 times in the last 6 months) • Never used OCP, Chhaya, Injectable
Currently using TM Have used MMin this past for some time	• Currently using Rhythm or Withdrawal (at least 6 months) • Past usage of condom, OCP, Chhaya, ECP, Injectable • Currently NOT using condom, OCP, Chhaya, Injectable Exceptions - • Rarely used condom or ECP (1-2 times in the last 6 months) • Use of IUCD for 1 year in the past
Used to use TM in the past, now using a modern method.	• Currently using condom, OCP, Chhaya, ECP, Injectable (at least 6 months; at least 2 doses of Antara) • Past usage of Rhythm or Withdrawal Exception - Use of IUCD for 1 year in the past

For mothers-in-law, the inclusion criteria was defined as 'has at least one daughter-in-law within the age bracket of 18-39 years'.

Sample Achieved

Through the exercise of recruitment and interviewing, the following sample was achieved:

Table 6. Achieved Research Sample

Criteria	Respondent	Number of interviews	TOTAL
Currently using TM, never used MM	Younger women	10	49
	Older Women	6	
Currently using TM, have used MM in the past	Younger women	9	
	Older Women	7	
Currently using MM, have used TM in the past	Younger women	10	
	Older Women	6	
Currently using TM, never used MM	Younger Husbands	6	24
	Older Husbands	2	
Currently using TM, have used MM in the past	Younger Husbands	6	
	Older Husbands	2	
Currently using MM, have used TM in the past	Younger Husbands	6	
	Older Husbands	2	
	Mothers In-Law	4	4
ASHAs/ANMs serving in the same areas	ASHAs	8	12
	ANMs	4	
	TOTAL INTERVIEWS		**89**

*Younger defined as 18-24 years
**Older defined as 25-39 years

In terms of communal diversity, while most participants identified themselves as being Hindu, 8 out of 88 participants identified as Muslims (6 CMW's, 1 Husband and 1 ASHA) and 2 participants (1 CMW, 1 Husband) belonged to the tribal population in Jhansi district.

Recruitment, Data Collection and Study Setting

Recruitment of participants (CMW, Husband and MIL) took place in two steps in each district:

1. The District Family Planning Specialists (DFPS working with IHAT) were contacted to secure referrals to the ANMs and ASHAs of the selected villages. The ASHAs and ANMs were then approached for support with the identification of participant profiles. Data gathered from ASHAs' Village Health Index Register were utilized to map married women and men aged 18-49 years and to identify, list and contact potential participants based on the inclusion criteria
2. For further verification, home visits were conducted by the field teams and detailed screening tools (attached in Annexure 4) were administered to all the potential participants two days prior to fieldwork for the selection of participants based on inclusion and exclusion criteria

Data collection activities were carried out in the month of March 2023 across 8 villages in 4 districts – Saharanpur, Gonda, Mirzapur and Jhansi. 4 teams with a combination of researchers and moderators (4-5), operations team (1-2) and field team (1-2) were prepared for data collection in each district. For conducting the interviews, common places within the villages, for instance, *Pradhan Kaksh, Anganwadi Centre*, etc. were identified/selected as the central venues in each village, for ease of access to all participants.

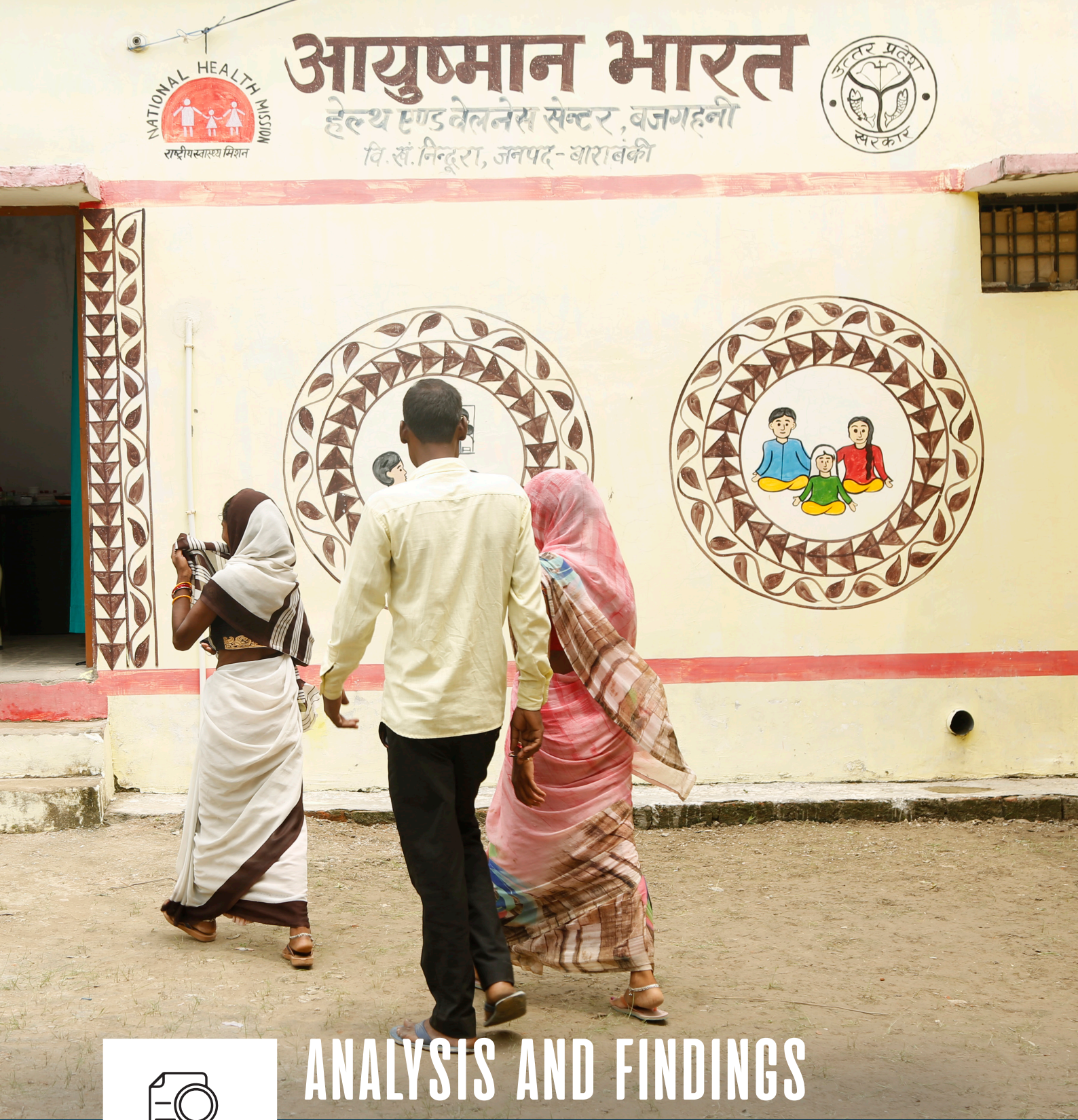
Data Analysis

The audio recordings from the IDIs were transcribed and translated into English (since the interviews were conducted in Hindi). A detailed content analysis was carried out through the identification of codes based on interview guides. Thematic analysis of these codes resulted in larger themes, presented in this report for each cohort. Insights were then drawn out from the findings that emerged. An action framework was then generated based on the overarching themes and need gaps identified during the course of the study.

Limitations and Suggestions for Future Research

While this research helps answer the question 'why is TM uptake rising in Uttar Pradesh' qualitatively using in-depth interviews with key stakeholders, it is not without some limitations:

- Due to limits on the scope of the research, we could not involve all stakeholders who are part of the health system in this research. Future studies can consider the **involvement of facility-level service providers** (nurses and doctors), **as well as administrative officials** (block, district, state or national level), which might provide perspective on program policies, targets, mechanisms of information dissemination and feedback for FLW's, supply side stories, etc.
- Participants may have experienced the 'Hawthorne effect', that is, it is possible that the interview settings could have modified the participant's behaviour or response, especially while discussing challenges experienced within the system. **Socially desirable responses** are often noted in qualitative interviewing. This is especially true for FLW interviews, wherein ANMs and ASHAs could have felt they were being tested for their knowledge and rigour of work. To minimize the impact of such a possibility, projective techniques (or third-person narrative association) were employed. A vignette called *'Teri Meri Kahani'* was presented to participants, made of characters with demographics similar to the participant to drive relatability and storytelling. As the discussion continued, participants were encouraged to complete the story – bringing in their own experiences, thoughts, and ideas into the interview by piggybacking on the fictional character (called Kavita/Savita). Another technique that was used involved user imagery – a hypothetical questioning technique ('what could be..') allowing participants to express personal thoughts without fearing judgement or responsibility – again using fictional characters to piggyback on. Journey or reproductive timeline mapping was utilized to encourage participants to articulate their responses in a story-like chronological format.
- The present study could be limited in scope due to a relatively small sample size, impacting its generalizability. An **expansion of its scope to include other districts** is a suggestion for future studies with similar objectives.



ANALYSIS AND FINDINGS

This section focuses on exploring the contextual factors, influences and experiences governing a woman's adoption of TM. The objective and subjective knowledge, perceptions, and attitudes of women that lead to preference for TM over modern methods, and the role of the public health care system in shaping them are looked at. Finally, the points of inflection where clients choose modern methods despite experience with TM are noted.

Before diving into the plethora of findings, a summary of the key insights from the study is given below.

Key Insights About Participant Context(s)

Bhabhi as the role model: Women in one's immediate vicinity (in the 'sasural'), specifically Bhabhi's, are seen as relatable and trustworthy sources of information and influence. Conversations on FP and contraceptive choice with Bhabhis often shape the choice of women. Other influential women include figures of *nanad, jethani,* and *saas.*

Restricted mobility intersects with limits on word of mouth about various contraceptive methods: Women's mobility is moderated/policed by male and elderly members of the family, limiting their day-to-day socialization with family members living in the same house and immediate neighbourhood. Sources of information on FP remain limited to such spaces.

Technology as a stepping-stone for new information, but seldom used for FP information: While all couples access technology in some form or another, usage and ownership vary by gender, whereby most of the men have their own phones, and women are seen to both, own their own devices; or sometimes share phones with their husbands. Women often access phones to keep in touch with their friends and family, entertainment purposes, and learning new skills (recipes, sewing, educational information for their child). Technology hence opens a window for women to seek new information. However, it is notable that such platforms are seldom used for accessing information on FP and contraception choices and usage.

Ease in sex conversations among couples, husband still prime decision maker: Inter-spousal communication is evolving, whereby couples express ease, comfort, and consistency in conversations about sex and aspirations related to FP. However, the final decision of contraceptive method invariably rests with the husbands.

Key Insights About Fertility Risk

Underlying cognitive capacity for information on FP: Comprehension of concepts including semen, uterus and eggs, and menstrual cycle[17] are clear in couples' minds.

Desired family of two with appropriate delaying and spacing: Based on their financial and health capacities, couples picture their ideal family to have two children, while delaying pregnancy up to first two years of marriage and spacing for two-three years after the first child.

Want consistency in use of contraceptive methods in the future: Couples display a tendency to continue using the contraceptive method they are currently using (TM or MM) in the future. A few women also wish to undergo sterilization after achieving their ideal family size.

Key Triggers and Barriers for TM and MM Rejection and Adoption

Tabulated below is a summary of the key emerging triggers for the adoption of TM and rejection of MM across cohorts.

Table 7. Cohort-wise Triggers for Contraceptive Choice-Making

Cohort	Emerging triggers for adoption of current method	Emerging reasons for rejection of other methods
Consistent TM users	NORMATIVE ACCEPTANCE OF TM: SOCIAL INFLUENCE BRING FAMILIARITY AND TRUST • **Successful use cases** in one's surroundings – Bhabhi and neighborhood friends provide information on use and efficacy mechanisms of TM. **This is especially useful for younger, low parity, first-time users of FP methods,** as they rely on the experience of older women in their ecosystem. • **Validation of women's TM Choice by FLW to avoid community resistance,** especially ASHAs, adding a sense of further trust to the method. **Prevalent amongst P0 parity especially,** due to the normative pressure of conceiving immediately after marriage. • **Internal locus of control** which makes it **shameful to admit failure** – reducing the possibility of social communication about TM negative use cases. **This is prevalent amongst older, higher parity women (P2+)** who rely on their own experience of success of TM to continue using it, AND to recommend it to other women. COGNITIVE EASE IN UNDERSTANDING MECHANISM OF EFFECT: BECOME 'BIOLOGICALLY' SOUND AND TRUSTED • Their mechanism of effect is simpler and tangible to visualize – semen does not reach the egg in pull-out method, and it does not reach the egg when conceiving is possible in calendar method. Hence, **low cognitive effort is required to understand TM.** • **Use of combination of TM** for increased protection, pleasure, and confidence (calendar on safe days, withdrawal on unsafe days) • Hence, seen as 'Natural' methods with **low adverse impact on health or fertility** SENSE OF APNAPANN: FEELING IN CONTROL OF CONTRACEPTION AND CONCEIVING • **Sense of agency over one's mind and body** (for both men and women) – 'discipline' and control required for pull-out, inter-spousal understanding required for calendar method	NEGATIVE WORD OF MOUTH: SEEN AS EXTERNAL INTERVENTIONS • General conception of **'chemicals' as adulterated and harmful** (exception of condom, but stories of condom tearing are often discussed). • On-going **fear of adverse health impacts, failure of contraception and infertility** due to widespread examples of the same in immediate vicinity. Commonly held fears include bleeding, alteration of menstrual cycle, infertility, abdominal pain, weight fluctuations and dizziness. • **External locus of control and lack of familiarity** – easier to blame for failure in social settings. COGNITIVELY OVERLOADED • **Cognitively difficult to understand** – mechanisms of efficacy found complex to comprehend. Questions including 'what are the chemicals doing?', 'how are these methods different from each other?', 'which method is suited for whom?', 'what need one do in case of adverse side effects?' remain unanswered for clients. • This is furthered by ASHAs due to lack of technical training and limited transfer of knowledge from the ANMs to the ASHAs. Their capacity to answer woman's queries remains limited. • Of the methods, condoms and sterilization are the most known. Scattered awareness about 'pills', injectable and IUCD exists. • Specifically, amongst those women and men with a need for delaying or spacing, these concerns lead to greater intensity of rejection of MM. MEN EXHIBIT VERY LIMITED AWARENESS/ KNOWLEDGE OF METHODS OTHER THAN CONDOMS DUE TO LIMITED EXPOSURE • Men report very limited awareness or depth of knowledge about methods other than condoms, and to some extent Mala-N. They have surface level knowledge (if at all) about injectables, IUCD. They are however, familiar with sterilization – which is often seen as the end goal by couples.

Current TM users who have used modern methods in the past	FAMILIARITY WITH TM DESPITE BEING USERS OF MM IN THE PAST • **Positive WOM about TM** – providing a sense of familiarity in one's surroundings. • **Sense of positive inter-spousal communication** about intercourse and FP, whereby women report having 'faith' in their husband's ability to control (ejaculation in pull-out method and sex drive in calendar method). **In the case of younger and lower parity women (P0, P1), this often comes on the back of recommendation from the husband and his expression of faith in his ability.**	TRIAL OF MM DUE TO PERCEIVED RISKS WITH TM • **Acknowledgement of the possibility of TM failure** leading to unplanned pregnancy, especially in the case of calendar method where the segregation between safe and unsafe days can be unclear. • **Brief introduction and information of use of MM by ASHAs. BUT,** a detailed understanding of methods is not built in such interactions (details on effect mechanism, advantages and possible side effects). • **A few cases of TM failure. NOTABLY, in such cases, self-blame for failure in experienced.** This leaves scope for getting TM use right the next time – with more caution, discipline and care. COSTS INCURRED IN USE OF MM: FINANCIAL, LABOUR, ADVERSE HEALTH IMPACTS • **Financial cost** of procuring modern methods is higher than that of TM, which is free of cost. • **Physical labour involved in the procurement and use of MM.** For instance, used condoms need to be disposed of with care, and OCP tablets need to be kept hidden in the household and consumed daily. • **User experience of side-effects** with MM – adverse impact on sex drive, menstruation, digestion, etc. from some of the MM • **Lack of redressal and resolution mechanisms** by FLWs in the face of side-effects from use of Antara, OCP and IUCD **Clear attribution of unwanted pregnancy with MM failure** – in the select cases where clients experienced conceiving while using MM, they blamed the method – it being an 'external intervention'.
Current MM users who have used TM in the past	MM: SOURCE OF EXTRA PROTECTION • Seen as an **additional protection with use of TM** – especially condom. This is usually a fail-safe in case the desire for intercourse emerges on an 'unsafe day' or if the husband does not comply with the agreed upon TM (withdrawal or calendar). PREFERENCE FOR CONDOM AND ANTARA BASED ON EASE OF USE AND ACCESS • **Mechanism of condom easy to understand** – provides a physical barrier between semen and eggs. And it does not intrude chemically • In a few cases, Antara found as a relatively long-term fix, compared to OCP which is seen as a daily hassle. **Comfort with ASHA during ANC vaccination increases trust in the health system for injectables**	PERCEIVED RISK WITH TM • **Experience of failures** (unplanned pregnancies) with TM use – found risky if used independently. **Usually seen to occur post P1 parity for men and women,** especially if the unintended pregnancy disrupted the intended spacing or limiting. • For instance, a condom user is seen as smarter and more responsible for using 'extra' protection during intercourse

The below table captures key differences between **younger vs. older women, men vs. women and differences based on other usership contexts.**

Key differences between Older (25-39 years) and Younger women (18-24 years)

1. **The depth of knowledge about modern methods is starkly lower amongst young and low parity women (P0, P1).** Invariably, TM comes into the picture due to a recommendation at P0 or P1 from a trusted older woman (bhabhi or jethani) or due to a recommendation by the husband. In most of these cases, young women have very little knowledge about modern methods (MM) or TM. In many cases, the ASHA herself recommends TM to a newly married woman, out of fear of negative reactions in case she suggests MM and newlyweds or zero and low parity women face any fertility issues in the future. **For the FP program, it is critical to enhance exposure of newly married/P0/P1 women to information on FP.**
2. In the case of older women who are at higher parity (P2+), the usage of TM is often a concerted choice over MM that they may have had negative experiences with, or have heard of other people's experiences of failure or bodily changes. Here, **the programmatic need is to promote switching of methods, rather than discontinuing usage altogether or incorrectly using TM.**
3. With older women, a "window of error" opens up after their desired family completion. Many older women report treating this period as a transition between family completion with the intent to adopt sterilization. However, if not adopted post-partum, this window can extend to as long as seven years. This period is usually observed as a buffer before taking an irreversible or permanent decision. Many older women reported discontinuing modern methods at this stage, due to a reduced frequency of sexual intercourse, as well as the belief that their fertility decreases with age; and therefore not seeing the value in using methods that require adherence such as OCP/Chhaya/Antara. Condoms in this phase tend to be used for unsafe days. **However, it is in this "window" that many P2+ women report having unintended pregnancy and exceeding their desired family size. This was especially seen to be true in Jhansi and Saharanpur.**
4. Younger women who report having positive inter-spousal communication (such as 'a loving relationship' or 'a caring husband') report that they advocate for and in some cases demand the adoption of a contraceptive method due to alignment on the couple's shared aspiration to improve quality of life, and provide a better quality of life for fewer number of children.
5. Younger women who are TM users report feeling a greater sense of 'control' and 'agency' in being able to implement a method in collaboration with their husbands. This gives them a sense of empowerment and the ability to feel in control of physiological and psychological outcomes for themselves, as well as an elevated self-image. **Most of these women cite MM users as being women who share "an unfortunate" or "unsupportive" relationship with their spouses; and deem 'external' methods to be a crutch for women who need to adopt methods covertly, without their husbands' knowledge and support.**

Key differences between men and women

1. Men's involvement in contraceptive decision-making is high, in that they are usually the final decision-makers. However, their limited contribution to informed choice is a function of:
   - Lower immediate threat perception of an unintended pregnancy as compared to women, as they are impacted by the long-term outcome of having to support a child economically, whilst the risk perceived by women is more urgent due to physiological implications.
   - Limited opportunities for exposure to information on FP methods other than TM and condoms – **Since their sources of information are usually restricted to older men or peers, men's source of FP knowledge rarely comes from systematic sources.** ONLY IN A FEW INSTANCES, men who visit the doctor along with their wives during the first pregnancy, seem to receive systematic information about the basket of choice
   - Amongst most men, while there may be varying levels of awareness about modern methods, the depth of knowledge about products and services other than condoms is severely limited. There is little incentive for them to explore this information. **However, if the woman sources this information, men are most likely to oppose it owing to the perceived threat to her fertility.**

- Even in the case of TM use, **men take responsibility only for withdrawal (that too with reminders from the wife).** The responsibility for tracking, maintaining and adhering to the calendar/rhythm method rests solely with the women.

2. Men tend to prioritize pleasure as a key variable when deciding on the adoption of a method. For instance, in many cases of discontinued use of condoms, the trigger for adopting TM has been the growing confidence in their ability to control themselves, and the growing displeasure with the feeling of using a condom.
3. The man's self-image is a significant catalyst in the selection of a method of contraception. Much like women, men place immense importance on the intelligence, accuracy and effectiveness of the methods they decide to use.

A note on dual method usage

1. Both men and women express preference for using two methods (combination usage) **to ensure 'extra' protection.** Some frequently noted combinations include: withdrawal method + condom, calendar method + condom, withdrawal + calendar method.
2. Use of more than one method at a time **indicates a high threat perception**. It is typically rationalized as helping with (a) ensuring greater/double protection, (b) since the 'primary' method of choice is mostly not directly in the hands of the woman, she assumes some power by adding in a secondary method of her choice (TM and condom come handy in this process)
3. Combination use is found across all cohorts – those who report being 'current TM users' as well as those who report being 'current MM users.' This is noted in participants across cohorts, with varying degrees of frequency x occasions of use of both methods and choice of 'primary' method.

   Clients are clearly creating their own combinations of methods to be doubly sure of their steps taken to avoid unintended pregnancy. There is an evident need for clients to be able to make sense of the basket of choice available to them, and to have the ability to choose correctly for their requirement.

It is notable that factors like education[18], family type (joint/nuclear), and occupation do not vary significantly across cohorts. It can be said that intervention with information about MM is a key reason encouraging clients to try, and then use modern contraceptive methods. Notably,

- The trial and uptake of MM takes place at P1 stage in most cases, wherein ASHAs usually first interact with women at the time of ANC during their first pregnancy to promote spacing methods.
- Across cohorts, **MODERN METHODS ARE SEEN AS COMPLEX, DIFFICULT TO COMPREHEND/ ADOPT/ RETAIN**– surrounded with several unanswered questions including *'what are the chemicals doing?', 'which part of my body will they effect?', 'how do I know they are working?', 'which method is suited for whom?', 'what need one do in case of adverse side effects?'* **for clients and ASHAs both** – who are able to introduce modern methods of contraception to clients but are unable to share technical information about the same.
  - Consistent TM users are often those whose first exposure to FP and contraceptive adoption commenced with TM. They are typically people who have seen consistent success in their use of TM, and may or may not have occasionally tried MM like OCP, ECP, or condoms in the past. This cohort has a mix of participants who have and do not have great depth of knowledge about MM.
  - Current TM users who were MM users in the past tend to be those who have experienced adverse bodily changes after the use of a modern method, have sought counsel from a known, trusted source such as a sister in-law, or even an ASHA; and have switched to TM. These are also users who would have had some past experience with TM before adopting modern methods.
  - For clients in the third cohort of past TM users who are current 'MM users', there are limits on the basket of choices explored by them. The most used MM is condom, followed by a few cases of Antara, and even fewer cases of OCP. Other MM are not known or tried by the participants. Hence, **at large, the overall idea of MM remains tabooed and difficult to understand for all cohorts.**

[18] Lack of relationship between level of education and contraceptive choice also noted in Sri Lanka by Hettiarachchi & Gunawardena (2012)

The following sections will provide a detailed explanation of the aforementioned findings. Let's begin by understanding the context and background of the research participants.

SECTION A

A Dive into Participants' Profile: Who are Women and Men from Saharanpur, Gonda, Mirzapur and Jhansi?

This section provides insights on participant contexts and backgrounds across district, helping map differences in districts based on the findings of TM and MM uptake in Uttar Pradesh. These differences are charted in the summary table (Table 8) below, and elaborated upon in the sub-sections that follow.

Table 8. Summary of District-wise Key Comparisons

Factors	Saharanpur	Gonda	Mirzapur	Jhansi	Implications
Data from quantitative research[19]	• High TM • Moderate mCPR • Moderate sterilization	• High TM • Lowest mCPR • Low sterilization	• Low TM • High mCPR • High sterilization	• Low TM • Highest mCPR • High Sterilization	These factors lay the foundation for exploring if enablers and inhibitors of TM vs MM show variation in geographies where quantitative trends for adoption are different.
Education levels of participants in the present study	Lower level of education noted, compared to other two districts – illiterate going up to 8th standards/ matriculation; rare examples of graduates. Reportedly low level of education in Saharanpur		Higher level of education noted, compared to other two districts. 8th standard up to graduation; rare cases of those studied till primary school or lesser. Exposure to ITIs (vocational education) in Jhansi.		While districts with low TM may have higher education levels, ***this does not appear to be a key variable impacting choice of contraceptive method, as covered later in the report.***
Field observations on women's agency and articulation during interviews	Most women do not enjoy the agency to go outside their homes, but have female friends or relatives in their vicinity/ at their maternal homes, to have open conversations with, **mostly over phone**, sometimes using social media texting platforms. Use of social media is noted	Women appeared to be confident in their choices and aspirations to educate children and take calculated economic decisions for access to better resources. They are in contact with relatives/ friends from larger or Tier 1 cities through phone conversations.	Limited agency seen over FP. However, overall some women seen to have the mobility to work in local industry/ mobility to achieve relatively higher levels of education. FP decision making is strongly influenced by family members.	Women appeared to be confident in their choices and aspirations to educate children and take calculated economic decisions for access to better resources.	**Most women face limitations in accessing large information networks.** It appears women build networks much like branches – extending wherever they find due space and a conducive environment. Even women with limited abilities to articulate and limited agency, tended

[19] From IFPS 2021 survey conducted by IHAT-UPTSU

Factors	Saharanpur	Gonda	Mirzapur	Jhansi	Implications
	most often in younger women. These also serve as platforms for conversations around FP methods.	However, these conversations tend not to cover suggestions on FP methods. Focused more on access to better infrastructure, amenities, commerce etc. *Lowest age of marriage reported in Gonda (13-14 years)*			to have platforms of 1-2 women or more, where FP is discussed. These are potent platforms where FP-related information may be transferred.
Employment of women noted in present study	Most women are homemakers. Very few women engaged in jobs and farming		Some women engage in farming (flower farming)	Some women participate in entrepreneurial jobs – beauty parlor, small shop-keeping, etc.	Being engaged in employment certainly leads to greater mobility. However, there is no direct evidence that this mobility leads to differential decision-making when it comes to choosing a type of FP method
Observations and notes on geographical and healthcare access	Well-connected to the road network, developed housing and access to commercial establishment. However, access to local healthcare is limited, whereby doctors in immediate vicinity are not trusted. Block level facilities are a little farther away	Limited access to the 'city life' as both villages were in far interiors of the district. Local healthcare available in nearby proximity, but is less trusted	Local healthcare (small-scale rural practitioners or quacks) available in nearby proximity, but are a less trusted	Both villages are well-connected to highways. Sub- centres with consistent availability of FLWs in walking distance	The proximity of healthcare facilities could be a distinct factor impacting the frequency, quality, and nature of counselling, services and outreach being conducted by FLWs; as well as access to facility-based services.
Technology access and use noted in client interviews	Less prevalent compared to other districts	Widespread use among men, monitored use among women, allowing women to connect with friends and family outside one's district.			Technology appears to be a potent source of exposure to information as well as exposure to new products, quality etc. **The utilisation of technology for accessing FP related information, reported in a few interviews across cohorts, remains largely unexplored.**
	There appears to be significant diversity in smartphone utility amongst men and women, alike. Men and women alike cite the use of entertainment apps for video viewing and listening to music. In some districts, when it comes to participants with relatively higher levels of education (10th standard upwards) it has been seen that phones are used for e-commerce purchases (Meesho, Amazon); for payment using a wallet or UPI, as well as to find new information using 'voice search' (whether on Google or on YouTube).				

[20] From IFPS 2021 survey conducted by IHAT-UPTSU

A detailed account of participant backgrounds – their varied education and employment profiles (based on qualitative findings), access to health-care services on account of geographical placement, and community composition of various districts can be found in Appendix B.

In order to understand the lives of participants, it is critical to deep dive into key contextual aspects that may influence the capability, intent, knowledge and motivations towards FP choices. The below section thus encapsulates –

- **Familial Context**
- **Mobility of Women**
- **Social Context & Sources of Information, and**
- **Technology Use Behaviors** of men and women engaged in this study.

Married Life: Familial Context(s) and Aspirations

The Average age of marriage is between 17 and 21 years for most couples. The average age of marriage for couples in this cohort remains 17-18 years. A few women in the older cohort (25-39 years) were married at 21-22 years' age.

The decision of number of children is influenced by a variety of factors, including economic considerations, cultural beliefs about limits of a woman's body and sex composition of children, and access to FP resources. This is evident in the experiences of women from different regions, as detailed in the following accounts.

Most married women have between zero to three children, with the majority believing that the ideal number of children is two to three, based on their understanding of the rising cost of living and the benefits of having fewer children for a better quality of life. SAHARANPUR presents a unique case, where couples generally prefer no more than two children due to the financial and emotional responsibility of having children. The rationale behind this seems to be based on the understanding that having fewer children allows for better quality of resources, facilities, and life in general.

> *"Small family happy family"*
> ***- Husband, Current MM User, Younger, Saharanpur***

It appears that the among women participants **ideal number of children among respondents in Gonda and Mirzapur is 2-3, while in Jhansi and Saharanpur, it is 2.** The rationale behind this seems to be based on the understanding that having fewer children allows for better quality of resources, facilities, and life in general. Quantitative data from the IFPS demonstrates greater adoption of modern methods of FP in these districts as well, as compared to Mirzapur and Gonda. This is also corroborated by the anecdotal evidence cited in Gonda and Mirzapur wherein FLWs reported bigger populations to cover due to paucity of staff.

In terms of the decision-making process, **women in all study districts seem to have limited say in the matter, especially when it comes to the number of children they have.** Women in Mirzapur and Jhansi got married at an early age without much involvement in the decision-making process[21], while women in Gonda and Saharanpur did not express any strong opinions about having more children than the ideal number. However, it is interesting to note that **women in Jhansi seem to be more involved in the FP process despite being married at an early age.**

Overall, it seems that the decision to have fewer children is influenced by financial and emotional responsibilities, rather than personal choice or autonomy.

[21] The self-image, or desire of women presents an ambitious picture- extending to wanting to have a say in FP. While they attempt to voice their opinions in the decision making process, the final word remains with the husbands

Moderate Mobility for Women

While men use bikes and buses for going out for work, women enjoy moderate mobility varied by socio-economic profiles and engagement with employment.

Most women are homemakers, who either don't step out of their houses because there is 'no need' for them to go out, or because they are not allowed to do so. In both these cases, their mobility is restricted, either implicitly or explicitly – limiting their day-to-day socialization with family members living in the same house and immediate neighbourhood. The few women who work in farming and shop-keeping and visit the college for their on-going educational/vocational courses step out of the house and engage in occasional conversations with other women outside their houses. Further, control on mobility on younger and low parity women was noted to be qualitatively higher than older woman.

> *"I don't go anywhere, don't interact much with people in our neighbourhood. My Bhabhi goes out for farming and talks to a lot of people"*
> ***– CMW, Consistent TM User, Younger, Mirzapur***
>
> *"Women don't go out much in our families, they respect the elders"*
> ***– Husband, Consistent TM User, Younger, Mirzapur***
>
> *"I always go out with my husband to the market, or my brother-in-law, I don't go out alone"*
> ***– CMW, Consistent TM User, Older, Jhansi***
>
> *"We do not go inside their house, we only sit at our house's gate, from there we talk to each other."*
> ***- CMW, Current TM User, Younger, Jhansi***

Everyday Life: Social Context(s) and Sources of Information

Women appear to share camaraderie with slightly older female family members in their maternal and marital homes. The *nanad* and *bhabhi* appear to be a critical component of their social circle, with frequent conversations cited around everyday occurrences, relationships and conflict, aspirations and decision-making and advice related to self, marriage, family, health, purchases etc.

Most couples live in joint families with the husband's parents and brothers and sisters. They share varied relationships with different members of the family. For instance, women frequently talk with their Bhabhi's (sister-in-law's) to discuss their lives and aspirations. While most women share cordial relationships with their mothers-in-law, some women share a difficult relationship with them.

The family structure and community dynamics in different regions of India play a crucial role in shaping people's attitudes towards FP.

A comparison between GONDA, MIRZAPUR, AND JHANSI's Ammargarh village reveals interesting insights into the influence of family and community on FP practices. While families in Gonda look up to their relatives living in Tier 1 cities or abroad for information and validation, the women in Mirzapur rely heavily on their family members and community for guidance on FP. In contrast, the community members in Ammargarh village in Jhansi have access to both traditional knowledge passed down through kinship ties and modern technologies like smartphones, which reflects a relatively high level of technological literacy. These differences in family and community structures and access to information highlight the need for a nuanced approach towards promoting FP practices in India.

> *"I talk with my Bhabhi often. We talk about our future, we both want our children to be happy. We want our families to be happy"*
> ***– CMW, Consistent TM User, Older, Gonda***
>
> *"My MIL is the most commanding, she has a certain attitude. We are young, we can't speak much in front of her. But I can make all general decisions by myself, I don't seek her permission to go out, I can go anywhere, talk to anyone, but I ask my husband"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***

Consistent Interaction with Technology for Men, Moderated Access for Women

Technology access through the mobile phone has been found to be ubiquitous through the study. While all couples access technology in some form or another, usage and ownership vary by gender, whereby most of the men have their own phones, and women are seen to both, own their own devices; or sometimes share phones with their husbands. All husbands access technology through smartphones. Some women have smartphones of their own, some have keypad phones, and some share phones with their husbands or MILs.

There appears to be significant diversity in smartphone utility amongst men and women. Men and women cite the use of entertainment apps for video viewing and listening to music. In some districts, when it comes to participants with relatively higher levels of education (10th standard upwards) it has been seen that phones are used for e-commerce purchases (Meesho, Amazon); for payment using a wallet or UPI, as well as to find new information using 'voice search' (whether on Google or on YouTube).

Phones are utilized by men for socializing (calling, texting, etc.) and entertainment purposes. Due to engagement with physical labour for most husbands (farming, daily wage labour, etc.), their interaction with mobile phones remains limited to making calls to family and occasionally engaging with YouTube for entertainment in the form of listening to music, watching movies, etc.

> *"Mobile can show you everything, weather, news about corona, you just have to Google or YouTube it. I also watch health videos, which food is best for health and stuff like that. I am using Redmi and my wife has a keypad phone"*
> ***– Husband, Consistent TM User, Younger, Gonda***
>
> *"I watch YouTube, use Google and make calls...my wife does not have a phone, my mother has a keypad one"*
> ***– Husband, Consistent TM User, Younger, Mirzapur***
>
> *"I get information from YouTube, Facebook and many other apps are available. I get information about latest news or latest things happening in the country through my mobile phone. she watches only serials like Saath nibhana sathiya, Pratigya on Hotstar. I only watch cricket."*
> ***- Husband, Current MM User, Younger, Gonda.***

Women on the other hand, utilize phones to stay in touch with their families *(mayka)* and friends through calling, WhatsApp, and at times, Instagram and Facebook. They use YouTube to watch serials, listen to music, and learn about some household work – new recipes, sewing, etc.

- **For women, the availability of smartphones appears to augment their frequency of interaction with family members who are not present in their immediate vicinity**
- **There is a marked stated effort to leverage technology-based information to the best of their abilities,** in order to work gain exposure to the world outside the village; and to achieve 'self-improvement' through gaining access to new knowledge or learning new skills. This is done through media consumption, interaction with family members located in different places, social media engagement, etc.

> *"When my husband comes at home then we see in his mobile. He is having touch mobile. Sometimes we watch movie in his mobile and sometimes I watch serials. Children watch cartoons or study videos. I watch Iccha pyari naagin serial."*
> ***- CMW, Current MM User, Younger, Gonda***
>
> *"I have a Samsung phone, if I get time I watch videos or movies on it, nothing else. I use Instagram also (to connect with my elder sister-in-law, my sisters) just to ask what are they doing, have they eaten. But I mostly talk on normal phone calls. I do operate Facebook but now my husband has told me to not do that, he does not allow me to post status (due to safety concerns). I am in touch with my friends on WhatsApp too"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***
>
> *"I have Samsung touch phone, in the morning he takes it to his work, I use it in the evening. I have Lava phone for emergency calls. I sometimes watch YouTube, my children watch cartoons on it"*
> ***– CMW, Consistent TM User, Older, Saharanpur***
>
> *"I watch serials on YouTube, on my phone. My children watch some cartoons"*
> ***– CMW, Consistent TM User, Older, Gonda***
>
> *"In my free time, I watch YouTube videos to educate myself, I want to become better in the future. I am preparing for PET exams to become an ANM. I also watch videos on embroidery and weaving"*
> ***– CMW, Consistent TM User, Younger, Mirzapur***
>
> *"I make reels and snaps on my phone for my friends and sisters"*
> ***– CMW, Consistent TM User, Younger, Jhansi***
>
> *"About the health of kids that how to keep them healthy, how to take care of mother-in-law. If you go to doctor then it will take money but if I do home remedy by watching it on YouTube then also it gives relaxation."*
> ***- CMW, Current TM User, Older, Saharanpur.***

Access to technology is generally widespread in some areas, such as in Jhansi, Gonda and Mirzapur, but less prevalent in others, such as Saharanpur. In some regions, the use of technology has increased comfort levels in discussing sensitive topics like sex, but in others, the husband's usage of technological devices is prioritized, and women are often prohibited from using social media. To illustrate, the presence of technological gadgets was found to be severely limited in Saharanpur as there were no personal phones with either the wife or the husband.

Here, it is notable that for women, access to technology is limited and often monitored, compared to men. This is by way of shared usage with family members, and suggestions by the husband to limit social media interaction to ensure 'safety'. At the same time, technology provides a window for women to access occasional interaction with their family and friends, and information as and when they require it.

Hence, women have access to technology, and it does seem to impact social interaction and access to information, albeit within controlled environments. To a great extent, even though mobility is limited, technology serves as a small but significant portal to the outside world. Even though controlled, there does not seem to be limitation on the volume of interaction with 'bhabhi' or other people in her virtual ecosystem.

A note on technology usage for seeking FP information:

It is critical to note that instances of technology being used for 'information seeking about health, specifically FP' were limited to men and women who had education levels greater than secondary education. These instances too were limited to more urgent or immediate action such as a heightened need for switching methods after an unintended pregnancy, or seeking methods for abortion.

> *"I told my husband about calendar method. My friend had explained it to me. My husband is also educated, he is working and meeting people and using phone – he would be seeing all this too"*
> ***- CMW, Consistent TM User, Older, Saharanpur.***
>
> *"Today is modern world, he (user imagery character) must have seen about condoms on phone"*
> ***- Husband, Current TM User, Older, Saharanpur.***

This may be attributed to the comfort and familiarity with technology usage. Early stages of technology adoption tend to be driven by passive discovery rather than active exploration. The ability to systematically seek information about specific subjects requires a process-driven understanding of "how to search" or "which keywords to use." Most technology usage reported by men and women is discovery-driven in that they consume information targeted to them related to news, entertainment content, and social engagement mostly through WhatsApp, and in some cases using platforms like Facebook.

SECTION B

Relationship with FP: Understanding of Risk Perception and Attitudes towards Fertility

This section sheds light on participants' understanding and comprehension of the mechanisms of intercourse. These factors include approach to the subject matter of sex and pleasure, and conversations around desired families with respect to their size, spacing between children, gender composition of children, etc.

Approach to Intercourse: Pleasure for Men, Pleasure & Pleasing for Women

When asked what happens when a couple comes close, women blush for some time and easily recognize the theme of conversation. It is worth noting that **most women engaged in the study did not appear to be too uncomfortable with the vocabulary around intimacy and sexual intercourse. That is, they were quick to use words like 'sex' *'pati ke paas jaana' 'sambandh banana' and 'pati se milna'*. Some also used terms like *'sambhog.'***

> *"It's about sex, they would have sex"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***

Sexual intimacy is seen as holding positive value for both men and women, albeit cited as being of greater interest to men. Mostly women cite it as being an act that they sometimes seek and sometimes do not. Men however report it to be an enthusiastic desire for both genders.

Both women and men see intercourse as a stressbuster, a time for enjoyment, and a medium for a couple to come close and understand each other better. It is notable here that while both the parties express desire and consent for intercourse, it is often the husbands who initiate the act. While some women are able to say no when they do not wish to engage in intercourse, most report that they "give in" to their partners' wishes to make their partner happy and satisfied.

> *"If my husband wants to do it (have intercourse on unsafe days per calendar method) I go near him and he throws out. I use this method to make him happier"*
> ***– CMW, Consistent TM User, Older, Gonda***
>
> *"He tells me that he wants to do something (intercourse) but sometimes I refuse because I am not in the mood. He also comes late at night and is tired, so he goes to sleep and we are not able to spend much time together"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***
>
> *"It (intercourse) happens with consent of both, for enjoyment"*
> ***– Husband, Consistent TM User, Younger, Mirzapur***

Ideal family size stated to be Two Children: Pregnancy Risk Intensity Fluctuates based on Parity

All participants report clear and technically accurate knowledge about the mechanism of fertility, pregnancy, and risk in intercourse. The biological understanding that a sperm ("paani", "kitadu/germs") has to meet the egg by way of entering a woman's body is clear. Most couples emphasise their socio-economic realities of limited resources for raising children, and keep these considerations in mind when speaking about their idea of an 'ideal' or complete family.

> *"Husband and wife form relations, they will have concerns about pregnancy. We use precaution (TM) so we don't have this kind of concerns in our mind"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***

i. Couples want to 'delay' – have their first child after 1-2 years of marriage.

The reasons for the same are (a) achieving some financial stability, especially at P0 stage, and (b) delaying pregnancy to 'enjoy' life without the responsibility of childcare. This is especially true for younger couples married at the age of 17-18 years.

- At this stage, while **couples utilize home remedies to avoid conceiving,** the need for a contraceptive method intervention is low.
- Unplanned pregnancy is largely accepted wherein the child is seen as 'God's will'. Negative connotations around health impacts of abortion also encourage couples to accept unplanned childbirth.

> *"Me and my husband have sex, but we don't want kids. My husband also knows that. My MIL also tells me to have kids, I am not ready for them yet"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***
>
> *"I tell them (MIL and husbands) that it is our age to enjoy, if we have children at this young age it's not right"*
> ***– CMW, Current TM User, Younger, Saharanpur***
>
> *"This is the age of travelling and fun. My wife said let's do it for 4-5 years (married at 17 years of age) and then we will have children"*
> ***– Husband, Consistent TM User, Younger, Gonda***
>
> *"First kid should be after two years of marriage – the child will be healthier and even the mother will be healthier. If we hurry for a child, then both mother and the child will be weak. She should have only two kids"*
> ***– CMW, Current MM User, Younger, Saharanpur***
>
> *"We were not using any method before our first baby"*
> ***– Husband, Consistent TM User, Younger, Mirzapur***
>
> *"Doctors recommend a medicine if someone has conceived but does not want to keep the child. But it is better not to conceive in the first place. If a woman does conceive, she should complete pregnancy"*
> ***– CMW, Consistent TM User, Younger, Gonda***

ii. Most participants unanimously agree that 2 children are the most desired family size. This is to ensure that (a) they are able to provide for their children (access to education, nutrition, technology, etc.) without financial pressure, and (b) the woman's body has enough capacity to bear children – since it becomes 'weak' due to childbirth and breastfeeding.

> *"If the family is small they will be happy. Kids can be educated, we can feed them well and can take care of their requirements. If the husband is drinker then also he can take care of 2 kids and if there are more children, then one kid will get meals, one will get clothes and then parents will be in trouble always. That's why having 2 kids are enough."*
> ***- CMW, Current TM User, Older, Saharanpur***
>
> *"Only two children are sufficient, after 2-3 years of marriage only, one should have children"*
> ***– CMW, Current TM User, Younger, Saharanpur***
>
> *"If I get pregnant I will keep the child, I would not like to take medicines (ECP or MA) and take someone's life (after having two children)....if the child is not aborted (with ECP) it dries and dies in the stomach itself. I don't like that"*
> ***– CMW, Consistent TM User, Older, Gonda***

iii. Participants wish to space between P1 and P2 stages, the average duration being 2-3 years. The reasons for this remain the same as mentioned above. For a select few women, education becomes an important goal after their first child, and they express desire to complete their degrees before bearing their second child.

> *"We don't have a business or a job...we get only Rs. 200-300 a day. We have to feed our children, buy their medicines, everything we have to see. There is a difference of 3-4 years between my two children. There should be someone to take care of the second child, so we kept that gap"*
> ***– CMW, Consistent TM User, Older, Gonda***
>
> *"There should be a gap of at least 4-5 years between the two children, it causes harm to wife's body. If one child is breastfeeding and we have another child, it will cause harm to the mother's body, it's not good for the child either. I see a lot of people have children, they don't get nurtured properly, and don't get education. I don't want my children to go through that"*
> ***– Husband, Consistent TM User, Younger, Gonda***
>
> *"I am doing B.Ed. after my first child. I will complete my degree first and then plan for the second child"*
> ***- CMW, Current MM User, Younger, Mirzapur***
>
> *"There should be a gap of 2-2.5 years between two kids. It will make a difference like- wife goes through painful phase during pregnancy, there will be improvement in her health. Kid generally drinks milk for initial 1-2 years of age, there will be weakness in the mother's body in that phase. If you do planning for the baby, it takes 9 months or 1 year normally. There will be a gap of 3 years ultimately"*
> ***– Husband, Current TM User, Younger, Saharanpur***

iv. With respect to gender composition, most participants express desire to have one girl and one boy to have a 'complete' family. However, a select few exceptions exist – where couples are satisfied with either one child or want to go further than two children to achieve complete gender composition in their family.

> *"I only wanted one child, I do not need a son now that I have a daughter"*
> ***– Husband, Consistent TM User, Older, Jhansi***
>
> *"My husband says he wants a girl because we have two sons. I tell him I will get operated (sterilised) if he forces me, but I am afraid of operations"*
> ***– CMW, Consistent TM User, Older, Saharanpur***
>
> *"It is all in God's hand, nothing is in our hand, whether girl or boy, it is his wish"*
> ***– CMW, Current MM User, Younger, Jhansi***

Key takeaways

- Sex is approached as an act of pleasure by women and men, where **women sometimes seek it and sometimes don't.** This is evident in the vocabulary used by participants to talk about intercourse.
- **Comprehension of concepts including semen, uterus and eggs, and menstrual cycle are clear in couples' minds.**
- **Desire family of two with appropriate delaying and spacing:** Based on their financial and health capacities, couples picture their ideal family to have two children, while delaying pregnancy up to the first two years of marriage and spacing for two-three years after the first child.
- **Gender composition of children, though relevant in a few cases, does not emerge as a key factor** impacting a number of children most couples desire
- Couples display a **tendency to continue using the contraceptive method they are currently using (TM or MM) in the future.** A few women also wish to undergo sterilization after achieving their ideal family size.

SECTION C

Agency and Decision-Making Process for FP

This segment focuses on mapping the factors that impact a couple's agency and FP decision making process. The inter-spousal communication on FP and the gender dynamics between the woman and the man in such conversations are noted.

Inter-spousal Communication is evolving

Couples express ease, comfort and consistency in conversations and vocabulary around sex, intimacy, preferences, especially conversations around both, the man's and the woman's pleasure during intercourse.

Throughout districts, active inter-spousal communication on personal themes of financial management, aspirations, day-to-day purchases, health decisions (fever, cough, cold, etc.), is noted. Both men and women initiate such conversations. It is observed that there is an ease in bringing up these topics into everyday conversations, because

(a) being married at a young age, couples grow comfortable with each other – being true for both younger and older couples, and

(b) exposure to diverse content through technology as well as exposure to 'metro city nuclear couple' counterparts in the form of friends, cousins etc. has set a precedent for emulating more open communication between couples. Further, it can be said that, with access to technology and achievement of a certain level of education, the vocabulary to have these conversations is present. For instance, terms including "smartphone", "future plans", "good connectivity through roads", "Google", etc. are frequently mentioned during interviews. In line with this, **both women and men initiate conversations on FP, discussing their ideas of aspirations related to their family, delaying pregnancy in the first few years of marriage, health related concerns, etc. A certain vocabulary to discuss these themes is noted ("sex", "shukranu/sperms", "bahar nikal dete hai", "bacha girana", "goliyan", "bacha daani", "taake/stitches").**

(c) given that economic pressures on men seem to be higher than ever, men and women express the need to rely on one another more intensely to manage the economic burden, with the woman managing expenses within the home and sometimes even taking on work with the single-minded focus to take good care of children.

Younger couples especially talk about their pleasure, and time for 'enjoyment', whereby sex is seen as a medium of coming together to unwind from the tasks of the day (as noted 'Approach to pleasure' theme under A2). They express their aspirations about wanting to raise their children with the facilities of education, nutrition, etc. It can hence be said that the conversation around sex has shifted from coercion from husband to negotiation between the couple.

> *"Kavita (projective figure) will talk with her husband about not needing any more kids (after birth of two children)"*
> ***– CMW, Consistent TM User, Older, Saharanpur***
>
> *"When his (husband's) friends gather together they talk about these things (contraception), he told me when we were talking about this. We have a consensus that we will not have sex 7 days prior to menses"*
> ***– CMW, Consistent TM User, Younger, Mirzapur***
>
> *"Before having sex, we talk about the sex and what we are about to do. We have to do this and that today. We have to do FP or not, we have to use condom or not? Before having sex, we discuss about it, then we have sex."*
> ***- Husband, Current TM User, Younger, Saharanpur***

Final decision of contraceptive method choice invariably rests with the husbands

However, despite substantial references made by women to indicate the attempts made to negotiate; the final decision about sexual activities remains the husband, with a few exceptions of women asserting their choices actively in Mirzapur and Jhansi. This is also reflected in the socio-familial contexts of the participants, where their mobility and technology usage is often moderated/policed by family members and husbands in the name of 'safety'.

> *"My husband is the dominant one in my family. If he tells you have to do something, means you have to do it. I have to obey what my husband says"*
> ***– CMW, Consistent TM User, Older, Saharanpur***
>
> *"I have a good relationship with my wife. I suggest her to not fight with our family members and live happily with everyone. If I say anything to her, she never says no"*
> ***– Husband, Consistent TM User, Younger, Gonda***

It is notable that for most women across districts, pleasing the husband, or fear of going against his wishes is a running theme when it comes to frequency of intercourse, choice of method, decision of family size, and gender composition of children.

> *"If my husband wants to do it (have intercourse on unsafe days per calendar method) I go near him and he pulls out. I use this method to make him happier"*
> ***– CMW, Consistent TM User, Older, Gonda***
>
> *"I will discuss with him but he does not ask anyone, he advises me on how to live and how to speak with family members. He always says that you should listen to your mother-in-law. If my husband say something to his mother, everyone says that he is favouring his wife, so, he also does not say anything. If the matter is small, I do not say anything. Because all day he works and he will be in tension if I inform him this type of matter. So, I do not disturb him."*
> ***- CMW, Current TM User, Younger, Jhansi***
>
> *"My wife wants only two children, I want three or four kids...final decision will be mine since I am the sole earner"*
> ***– Husband, Consistent TM User, Younger, Kantit, Gosaipur, Mirzapur***

Note on mobility, agency and power over FP decision making –

In a few cases, the women were completely unaware of the mechanisms of pregnancy and need for contraception. These women are fully dependent on their husbands for all decision making related to FP, due to lack of knowledge and deficient access to sources that could help build this knowledge (mobile phone, internet, people outside the family to talk with about this personal theme).

Here, it can be said that especially P1+ women who 'go out' for work due to financial needs of the family have greater access to and means for socialization with other women as compared to women who stay at home. This opportunity to socialize on fields while farming, with customers while shop-keeping, etc. becomes and avenue to discuss themes like children and FP. Mobility hence impacts the agency one has over their choice of FP methods, simply by way of knowledge of the subject matter and confidence in conveying the same to one's partner.

Key takeaways

- While couples express ease and comfort in conversations around sex preferences and intimacy, the **final decisions about frequency of sex, contraceptive choice, etc. remain in the hands of the husbands.**
- Women engage in sex for both – pleasure and the need to please to their husbands' demands for intercourse.

SECTION D

The FP Decision-making Story: Currently Married Women and Husbands

This section explores the decision-making journeys of men and women across the three cohorts recruited in the present research:
(a) Consistent TM users
(b) Current TM users who have used MM in the past, and
(c) Current MM users who have used TM in the past.

Cohort A: Consistent TM Users

Focused on participants from this cohort, this sub-section covers the universe of factors leading up to a couple's decision of adoption of a TM – withdrawal and/or calendar method. Sources of information and influence, triggers for uptake of TM and rejection of MM, and the future plans of contraception expressed by couples are discussed.

A1. SOURCES OF INFORMATION: WOMEN IN IMMEDIATE PROXIMITY – THE BHABHI ROLE MODEL

Women in immediate proximity, including *Bhabhi, nanad, jethani* and neighbourhood friends are seen as relatable figures by women, based on shared contexts of household setting, age, marital status, religion and caste. These are **women who have used TM effectively and are happy to disseminate information about it to fellow young married women.**

Such interactions take **place one-on-one, allowing for comfort and privacy, or in neighbourhood circles of women where they are able to share stories of FP freely.** In-depth information about TM is discussed – specifically for calendar method where one woman explains to another in detail the segregation of safe and unsafe days. The frequency of sharing, however, remains not more than once or twice, taking place immediately before or after marriage. That is to say, consistent conversations on experience of the method tried and used remains low. Hence, clarifications on experience and usage of methods are not sought, the sexual lives of couples being a personal and 'private' matter.

While CMW are able to gain information on TM methods and their mechanisms and convey the same to their husbands, the only person they discuss their intercourse experience is their husband. Here, spaces for sharing issues and fears faced remains low. **With time and increased parity (P1 through P3), participants become strong advocates of TM to newly married women in their family and friend circle.** Hence, a chain of communication about TM is noted.

> *"My Bhabhi told me about calendar method. Mother-in-law also explained the dates to me"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***
>
> *"When I meet my sister and my Bhabhi, they joke about me, ask me what precautions I am taking (to avoid unplanned pregnancy), I get shy in front of them but when I ask them about these things, they tell me everything…my Bhabhi never lies, I trust her"*
> ***– CMW, Consistent TM User, Older, Gonda***
>
> *"My friend and my sister-in-law at my parent's place gave me this information (about calendar method). She told me how to use it. My husband also knows about this method, both of us have a consensus on this method, we both don't want a child for now"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***
>
> *"I use the calendar method, I educate ladies about the calendar method"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***
>
> *"When we don't want a child we can ejaculate outside. I got this information from my friends after marriage"*
> ***– Husband, Consistent TM User, Younger, Mirzapur***

This is **also APPLICABLE FOR HUSBANDS, who learn about TM from their friends.** For instance, one husband learnt about the calendar method from his friend, told his wife (our participant), after which she confirmed the same from her Bhabhi and friends.

> *"When his (husband) friends gather together they talk about these things (contraception), he told me when we were talking about this"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***

Other sources of information on TM for women are

1. **Reportedly, biology and home science books studied in classes 9th and 10th** – presenting as the first interaction with the concept of fertility, intercourse and TM for avoiding unplanned pregnancy for some women (reportedly, these methods only include traditional ones of pull-out and calendar method).

> *"I had read in biology in class 9th or 10th. My biology madam used to say about this... during your periods if you don't have intercourse till seven days you will not get pregnant. And after having sex if you go to the washroom directly, you will not get pregnant. My friends were also married in 9th standard. My friend is a doctor, and another works in the police station. They both told me these techniques are safe"*
> ***– CMW, Consistent TM User, Older, Saharanpur***

2. **Google and YouTube** – wherein, it is **sought as a confirmation for information already gathered** from women in one's vicinity – found in narratives on women in Gonda and Mirzapur. This is also true for men across districts, who often enjoy more frequent and monitoring-free access to technology than women (noted in section A1). Hence, only information on TM is searched for.

> *"I heard about days (calendar) from my Bhabhi. When we were studying biology also, they taught us. I read on mobile as well, I searched on YouTube – when can a woman get pregnant after the menstrual cycle is complete"*
> ***– CMW, Consistent TM User, Younger, Mirzapur***
>
> *"I searched on YouTube, they show us everything, if you do these things (withdrawal), your wife will not get pregnant. I searched for what are the things one should keep in mind while having sex. I saw that for these many days you should stay away from your wife"*
> ***– Husband, Consistent TM User, Younger, Gonda***
>
> *"15 saal ki umar mei hi maine sab kuch dekh liya tha YouTube pe"*
> ***– Husband, Consistent TM User, Younger, Saharanpur***

Case in focus: Provider and FLW's validation to use TM

One woman from Gonda experienced the death of her child within 30 minutes of birth. Upon consultation with a private doctor, the couple was referred to the calendar method, as opposed to 'external' contraceptive methods, with the implication that the latter might lead to health complications and impact fertility. They also sought validation on this method from ASHA, who encouraged them to use it (as we will note further in this report).

Limited role of MIL

The role of MIL remains to provide information on FP methods based on her own experiences of contraception and childbirth. While MILs are reported to encourage or even pressurise women (their daughters in-law) to conceive at P0 stage in the want of grandchildren, **their 'influence' with respect to choice of FP method remains limited, as couples see themselves as independent entities within a family. Men and women alike express** the preference to consult with each other, citing FP as a personal (*'niji'*) matter. Further, there is limited interaction with (the women's) mothers about FP.

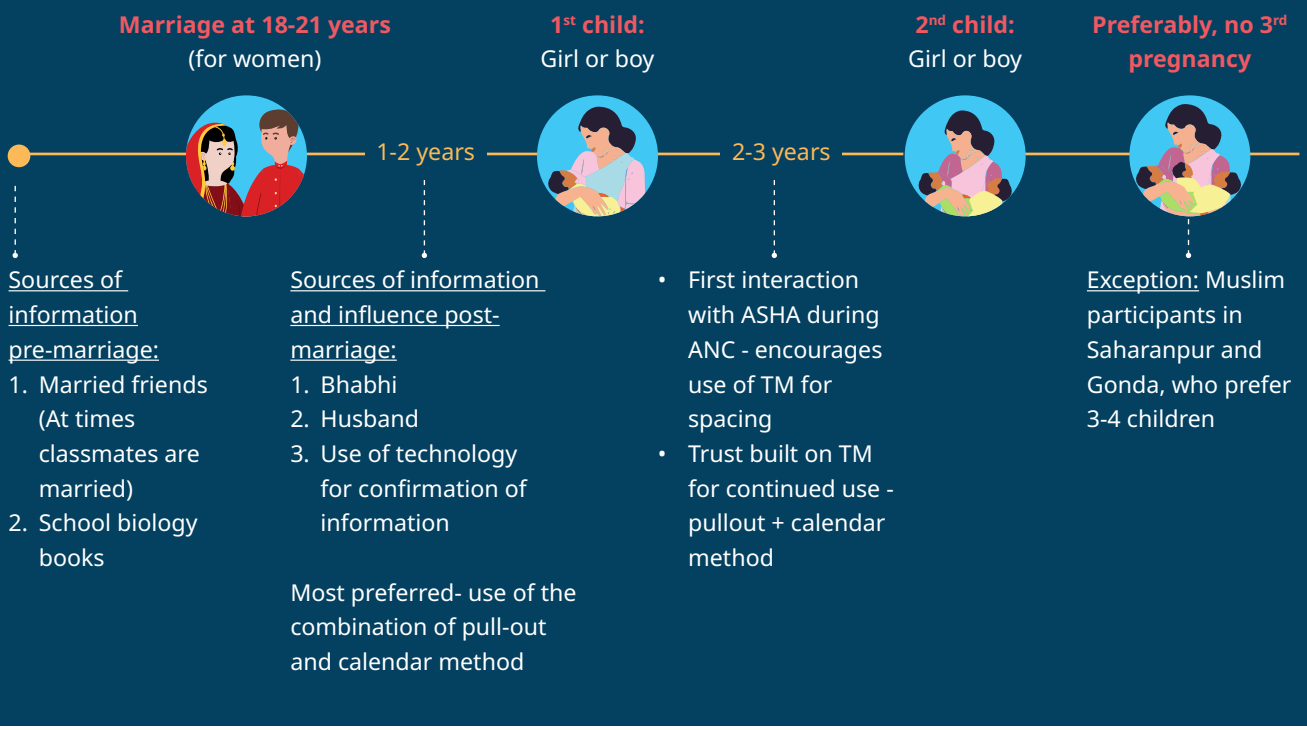
After marriage, women in the *sasural* (Bhabhi, Jethani, MIL) and their husbands become important sources of information and influence for women. This implies before marriage, women gain information about pregnancy, childbirth, FP and contraception from their friends and schoolbooks.

> "My mother-in-law and father-in-law have the most say in household decisions. But everyone has a right to have say when it comes to their children. I have to think about my children"
> **– CMW, Consistent TM User, Older, Gonda**

Hence, **'Bhabhi's' often become role models for women to learn from and follow**, while MIL and ASHA remains peripheral sources of information and influence. However, even Bhabhi's are not approached for clarification or doubts about methods and experience of use of methods.

With this information, let's explore the specific interaction of participants in this cohort with TM of contraception.

Figure 2. Aggregated Reproductive Timeline for Consistent TM Users



A2. TRIGGERS TO ADOPT TM

This section will expand on the key reasons for choice of TM expressed by participants.

Affective and Medical Associations with TM: Familiarity Bias, Biological Rationalization, Pleasure and No Harm

TM is seen as natural and free of cost home remedies, or '*ghar ke tareeke',* working on sound biological and medical concepts.

- **Visually reinforced efficacy and perception of rational, scientific mechanism of action heightens comprehension, acceptability and perceived ease of usage:** Physiologically, **TM** are easy to visualise, and in line with men and women's understanding of fertility and reproduction.
  - **The pull-out/withdrawal method** is a process that is reported to be clearly visible to the eyes, wherein **couples can 'see' that semen does not enter a woman's body to meet the egg for conceiving** – hence making the science trustworthy.

- **Ease of comprehension due to familiarity with the premise:** The process of implementing TM is also simpler to understand. It does not cause distress or discomfort due to complexity, **building a level of comfort, familiarity and therefore trust in the methods.** The cultural legacy of 'homemade being better than anything from outside' is automatically thus associated with these methods, reinforcing trust further.
  - Both withdrawal and calendar methods are based on a familiar premise and process which is 'part and parcel of the body' and are therefore easier to trust.

- **Limited level of effort in usage: Because the TM 'piggybacks' on a natural process, it enhances the ease of adoption and sustained usage.**
  - For instance, the withdrawal method piggybacks on ejaculation and requires no additional task to be conducted; and is therefore not cumbersome.
  - The calendar method is counted from the first day of menstruation, a **process that is tracked due to the need to manage bleeding.** Using the bleeding as a frame of reference becomes a simple extension of the existing cycle.
  - HOWEVER, it is critical to note that this **EASE does NOT correspond to CORRECTNESS of the duration being calculated.**

> *"If it is about to come (ejaculation) then I put it outside – you will be satisfied, and your wife will also be. And if you will cum inside then obviously, she will get pregnant. This all depends upon us only. Many people become excited when they have sex, you have to control your mind too…Then there are days also, in those 7 to 10 days you have to stay away from your wife, you can talk to her, just don't have intercourse"*
> ***– Husband, Consistent TM User, Younger, Gonda***

- The use of *'gharelu tareeke'* or 'homemade methods' is seen as a **promoter of inter-spousal communication**: Usage of TM is associated with a better relationship with husbands, since the couple needs to discuss questions including when to have intercourse, when to pull-out, wash, etc.
- Qualitatively speaking, it **takes intelligence to properly implement TM – attaching a sense of control, empowerment and achievement with TM usage.** For women, this presents for a positive self-image, wherein she 'able to' make her husband understand about FP –an internal locus of control in this area of her life. This is true for husbands as well, who pride themselves on their sensibilities required to pull-out on time and monitor the urge for intercourse.
- TM lead to a feeling of 'control' over **body and mind.** The following aspects govern the need for a feeling of control over the fertility mechanism –
  - For men, using the withdrawal method effectively is a matter of pride to be able to control an urge they believe to be inherent and natural to men. Sexual intimacy outside the context of the couple, still comes with associations of 'shame,' 'disgust' 'overindulgence' or even 'giving into material desire.' **To be able to exercise restraint and to be in control of the fertility process reinforces their sense of pride – it provides fulfilment from a sense of 'regulating' an act that is seen as an indulgence**

- For most women, using the calendar method gives them sole control of managing their fertility, and the possibility of doing so discretely, given that they can track the period of fertility. It is seen as a way **of empowering themselves to control when and how they have children, and how to communicate to their husbands that they 'cannot' have sex on a given unsafe day.**
- Further, the calendar method is found feasible due to the belief that too much intercourse has negative effects on one's body, an understanding expressed in a very few interviews. That is, there is limited semen source pool in body for men – impacting their ability to conceive, 'too frequent' intercourse impacts women's bodies – they wear out and tire their reproductive ability. The calendar method also helps to keep the urge of frequent sex in check. There is **a pride attached in being 'able' to control one's sexual impulses.**

> *"We have intercourse, but if we avoid some days and period related things, we will not get pregnant. My husband also takes it out. We started doing this only after our second child. My husband listens to me when I tell him not to come near me"*
> ***– CMW, Consistent TM User, Older, Saharanpur***
>
> *"I make him understand (to not have sex on unsafe days)...my husband is a wise man"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***
>
> *"My husband has never made any mistake till date, when my monthly period is over my husband does not ejaculate inside me...he listens to me"*
> ***– CMW, Consistent TM User, Older, Jhansi***
>
> *"First my Bhabhi told me, then ASHA did also said the same thing, then I had a conversation with my husband (about pull-out method), he also knew about it, he is very smart"*
> ***– CMW, Consistent TM User, Older, Jhansi***

- **Source of pleasure:** TM is attached with pleasure by both men and women, since it **does not lay any restrictions on the quality of intercourse,** noted with condoms by way of 'physical barrier' during sex, and pills and injections by way of negatively impacting a woman's menstrual cycle (as we will also note in further segments).
- **Do not harm woman's body and fertility:** Compared to modern methods, which are *'bahar ke tareeke',* TM are seen as **unharmed from external intervention** (without use of chemicals).

> *"It does not spoil ladies' health and while having another child there should be no problems. There is no such fear of getting unwanted pregnancy. I have 100% trust on this method"*
> *– CMW, Consistent TM User, Younger, Saharanpur*
>
> *"If she (a woman) is taking pills, a little bit of fluids have already entered her body, there is a possibility of a problem (unwanted pregnancy)"*
> *– CMW, Consistent TM User, Younger, Saharanpur*

Hence, TM is seen as a route to happy family –

Table 9. User Imagery of a Typical TM and MM User for Consistent TM Users

TM couples seen as –	MM couples seen as –	Implication
• **More educated and happy women adopt TM** – they have a better say in FP, and lesser children due to effectiveness of TM • Having a **better understanding between husband and wife**	• Husbands who like to enforce sex on wife use modern methods	• Modern methods are relatively ineffective and run the risk of impact on health. • TM encourage conversation between husband-wife – a route to feeling empowered in the dynamic. **TM = SUKHI JODA**

> *"We prefer home remedies, we not try any other remedy. When we are doing home remedy, what is the use of this pill (ECP)?"*
> ***– CMW, Consistent TM User, Younger, Asanwali, Puwarka, Saharanpur***
>
> *"Those using condom and pill would have a larger family...would be less educated since she does not knowledge about home method. People using condoms and pills would spoil their health much faster. The one using the calendar method– her health would be fine. There is no trust in these (modern) methods, she might get pregnant unexpectedly"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***
>
> *"I think Savita (projective female figure who is a TM user) is innovative, people don't like using outside medicines a lot these days"*
> ***– Husband, Consistent TM User, Younger, Mirzapur***

TM Partially Supported by the Health System

As we will note in the FLW section below, ASHAs validate the use of TM in case women ask them. For instance, in Saharanpur, one of the ASHAs was a calendar method user herself, who would also convince other women for the use of the same based on her experience and satisfaction with the method.

Additionally, **ASHAs also shed light on the side effects of modern methods. While this is part of her counselling process to explain FP methods to clients with transparency, in an overall conversation, the tonality unknowingly highlights the benefits of TM and the downsides of modern ones.**

Further, there is **low trust on ASHA as a figure of information on FP**[22] – at times she is less educated than the clients, at others, she belongs to another ('lower') caste or religion. Such information on contraceptives, as noted above, is sought from personal and very trusted sources, given the importance of privacy of FP discussions. In such cases, conversation between FLW and clients by lack of socio-cultural relatability and stereotypes. Hence, ASHAs only remain a secondary figure of information and influence when it comes to FP.

> *"ASHA tells to maintain age gap between children. She tells to use the calendar method. She told me not to use copper-T because it is bad for health. She says bahar ke methods are not good"*
> *– CMW, Consistent TM User, Younger, Saharanpur*
>
> *"I asked the ASHA but she doesn't tell much. She is less educated than me"*
> *– CMW, Consistent TM User, Older, Saharanpu*

[22] Other health-related information, especially about ANC in sought from ASHAs frequently. Such a relationship of trust is also dependent on the years an ASHA has spent in the area, slowly working her way into the community

> *"ASHA is from scheduled caste category...I don't meet her separately, only for vaccination when my children were born. I never talked with her about these things (contraception)"*
> ***– CMW, Consistent TM User, Older, Gonda***
>
> *"If she (projective female figure) has a health-related concern she can go to the ASHA. She will talk to her husband first but doctors and ASHAs are also there"*
> ***– CMW, Consistent TM User, Younger, Mirzapur***

Note on correctness of knowledge about TM

Having noted the affective, cognitive and usage associations with TM, let's take a look at the 'factual' knowledge participants have about withdrawal and calendar methods.

Table 10. Usage Understanding of Withdrawal and Calendar Methods Among Consistent TM Users

Withdrawal method	Calendar or Periodic Abstinence method
• Correct knowledge on timing of pull-out (at the time of semen ejaculation – *"paani"* or *"kitadu"* or *"beej"*) • Recognition among men and women that the responsibility of pulling out lies on the man • Anecdotes of women who 'stand up' or 'sit straight' to ensure further that the semen does not enter their body	• Mostly, **incorrect knowledge of safe and unsafe day count among women and men** • However, some instances of correct knowledge were also noted (2-3 participants among the pool of 24 women and men under this cohort) • The incorrectness of knowledge is categorically true for women with irregular menstruation cycles. In case of irregular periods, the count for safe and unsafe days is not known • **Women keep track of their menstruation cycle in their memory.** A diary or calendar for keeping track was found functional by a very few women

> *"Once the periods are over and immediately after that if they have sex then she will conceive"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***
>
> *"How would I forget? I remember the dates, I don't want a child as of now. It's been almost two years since I got married, it (conception) has not happened till now"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***
>
> *"I remember my days, sometimes they are one or two days here and there, but I can tell by the stomach pain. Stomach pain is of different types, I know this is period one"*
> ***– CMW, Consistent TM User, Older, Gonda***
>
> *"To tell you about my wife, her periods start on 21st or 23rd every month. I remember the days"*
> ***– Husband, Consistent TM User, Younger, Gonda***

Use of Combination Methods for Increased Protection

Participants reported use of two to three TM to ensure extra protection from the possibility of unplanned pregnancy. This includes **pull-out, calendar and vaginal washing methods.** At times, they supplement the former with washing the vagina immediately after semen's ejaculation, to rid the area of any semen residual after withdrawal. Further, it **helps lift the restrictions on days of intercourse put by calendar methods – husbands can simply pull-out on unsafe days.** This confidence further increases with years of marriage.

Of the two TM methods in focus for this research, **withdrawal is seen as the most effective, since it doesn't let the semen enter a woman's body, removing all doubts about the possibility of pregnancy in a couple's mind.**

> *"If we have sex, we do not let the semen go inside us and take it out, so that I don't conceive. I immediately sit in an upright position so all his secretions go out – if all the fluids come out then, you see, there is no chance"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***
>
> *"I want to be super safe, which is why I am using these methods (withdrawal, calendar, washing). Withdrawal I trust most, because if nothing goes inside my body then I am the safest"*
> ***– CMW , Consistent TM User, Older, Saharanpur***
>
> *"There is no loss in using the home remedy...and it is always effective, it has not harmed me till now"*
> ***– CMW, Consistent TM User, Older, Gonda***
>
> *"Six times we meet in a month, three times I throw the seed out, three times it's safe, on an average"*
> ***– Husband, Consistent TM User, Younger, Mirzapur***
>
> *"My Bhabhi used to do it (withdrawal method), she told me about it...it was working for her because if she wanted, she would have had a child. But she has conceived now after six years of marriage"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***

Social Cost: Difficulty Narrating Stories of TM Failure

Stories about TM heard from the touchpoints discussed in section A3 become positive word of mouth for TM. Further, the **use of TM is a very private experience for the couple. This sense of privacy hinders conversation about fears related to TM usage among relatives, friends, etc**. (*"sharam aati hai"*). The process is simpler to talk about, it being technical and biological in nature. But to talk about failure means taking responsibility of one's own 'mistakes' (could not take it out on time, for instance), requiring admission of lack of control, hence shame is associated with failure of TM. This is **reflected in the way a few women from Mirzapur justify unplanned pregnancy while using TM –**

> *"I made a mistake...it happened all of a sudden (pregnancy), we had not thought about it. I had met with an accident and we were spending more time together, that is why it happened. If it is your own mistake then it is fine, but if these (modern/external) methods fail then you will be more angry"*
> ***– CMW, Consistent TM User, Younger, Mirzapur***
>
> *"If we do the things in the right manner, we don't need to worry or seek help from others"*
> ***– CMW, Consistent TM User, Younger, Mirzapur***

A4. BARRIERS TO ADOPTION OF MODERN METHODS

This section will explore the key challenges to adoption of modern methods, presenting for the reasons behind their rejection by women and men in this cohort

Negative word of mouth: Advocates of MM failure in immediate surroundings

There are notable **widespread instances of MM failure and subsequently, lack of strong personal advocates for MM** compared to the positive word of mouth we noted above for TM. Participants have both – (a) personal examples of impact of MM on health (menstrual cycle, weight, mood, fertility) and MM failure (news of pregnancy despite use of method), (b) and stories based on hearsay in their immediate vicinity.

> *"My friends were married in 9th standard. Some were taking pills, some had injections. They got problems, in stomach, some got fat"*
> ***– CMW , Consistent TM User, Older, Saharanpur***
>
> *"My bhabhi had used condom and told me that it can burst open. I also don't like it, I don't want to use such dirty things at home"*
> ***– CMW, Consistent TM User, Older, Gonda***
>
> *"My wife told me not to use condom, she says it's not good for health, it will spoil my body. Her friends told her that"*
> ***– Husband, Consistent TM User, Younger, Mirzapur***
>
> *"I have heard that despite taking the injection, ladies become pregnant. Ladies told me, they come to my house every week to chit chat"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***
>
> *"After vasectomy they (husbands) don't trust their wives. Even after operation sometimes children are born, how does that happen?"*
> ***– CMW, Consistent TM User, Older, Saharanpur***

Qualitatively speaking, **to externalize one's conversation of modern methods to an 'object' is found easier – that is, negative word of mouth is simple to navigate for modern methods.** This is because the blame for failure lies on an external entity, the functioning of which is seemingly out of one's control.

> *"They (condoms) are bahar ke methods. Homemade things are useful, whatever comes from outside has harmful things"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***

Note on communal sentiments towards invasive mechanisms-

From Muslim participants in Gonda and Saharanpur, it is noted that **any invasive method is not religiously sanctioned** – hence pills, injections, copper-T cannot be used by religious mandate for these couples. This is also true for any 'gharelu' method of drinking kaadha. Natural methods of pull-out and calendar become the only possible options, along with the non-invasive method of condoms (for select participants, part of Cohort C – those who switched from TM to MM).

Affective, Medical and Cost Association with MM: 'Bahar ke Tareeke'

Modern methods are seen as 'bahar ke tareeke' – external methods that can harm the body by way of adulteration and low quality of products. This is a function of multiple reasons, as follows.

- General conception of **chemicals and their long-term impact on one's health:** Stories of MM experience and failure are marked with ideas of low quality and product. Since participants are **not able to 'see' how they function**, it becomes difficult to trust the work of chemicals, especially through pills and injections. This results in a **perceived inefficacy and cognitive complexity in understanding MM.**

> *"Uterus gets impacted if you take pills. Whenever you want a child you will not able to give birth then"*
> ***– CMW , Consistent TM User, Younger, Saharanpur***

- **Lack of In-Depth Knowledge about MM:** While a few participants have 'heard about' some methods, they don't know how they work, where they can be procured, how much they would cost, etc. Most women reported awareness of at least one modern method – **scattered information about (a) condoms, (b) sterilization, and (c) OCPs. One-off information about ECP and abortion pills was also reported**. Hence, several misconceptions about MM are reported. For instance, the availability of condoms with ASHAs for free is not known by many participants. The free availability of and incentivisation for Antara injections also remains unknown

> *"I don't know who uses it (contraceptive pills) or who doesn't, I have not used it till date"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***
>
> *"Condom you can buy with money only"*
> ***– CMW, Consistent TM User, Older, Saharanpur***
>
> *"Condom you can get on medical stores"*
> ***– Husband, Consistent TM User, Younger, Gonda***

- **Lack of Touchpoints for Information on MM:** Misconceptions noted above are further aggravated by the lack of trustworthy sources that can help disseminate information about FP. Information, Education and Communication mediums, covered under MPV (saas-bahu-sammelans, nayi pehel kits for the newly married), have not reached the clients of the present research.

> *"I have never seen any posters (on FP)...I don't listen to the radio"*
> ***– CMW, Consistent TM User, Older, Gonda***
>
> *"I went to the DH once, there was a poster depicting all these things (Copper-T, Antara and Chhaya), I clicked a picture in my phone. I showed it to my husband but did not search about it on Google, I was pregnant at the time"*
> ***– CMW, Consistent TM User, Younger, Mirzapur***
>
> *"They (a given couple) may get sterilization done, but I don't know about any other method (that government or health facilities are providing)"*
> ***– Husband, Consistent TM User, Older, Jhansi***

- As compared to TM then, MM are seen as something 'wrong' and 'dirty'. TM becomes a simpler and mess-free option. Hence, a **general perception of MM <u>as 'harmful/costly/difficult to comprehend/external methods'</u> is created.**

> *"If I just take this pill, then I will keep having sex with my husband, that will make our bodies weak"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***
>
> *"One of the ladies got the Copper-T fitted, when she got it removed she could not give birth to another child. Then I told them about the calendar method"*
> ***– CMW, Consistent TM User, Younger, Mirzapur***
>
> *"Your health would suffer; money would be spent and there would be problems all around. There is no point in using any other method. Health would also get spoiled. Since I have not purchased it, so I don't have any information about the cost, but money is spent on these things. Nothing comes for free"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***

A5. FUTURE INTENT: DESIRE TO CONTINUE WITH TM

Most participants express **intense comfort with and trust in the use of TM.** They plan on continuing to use the same till menopause is achieved. As noted above, this is a function of various factors, including **(a) built trust based on years of use and experience, (b) challenges of MM adoption** listed above, and **(c)** In some cases, **lack of say in decision-making about FP even after the achievement of desired family size** – about 5-6 women of the sample of 16 women in this cohort reported bringing up the subject of modern methods with their husbands at least once, but found it difficult to make it into a complete discussion – resulting in lack of conversion of intent into a decision in favour of MM use.

> *"We will keep doing home remedy for a few years and then my wife will get sterilization done (have a daughter, wanted one child only)"*
> ***– Husband, Consistent TM User, Older, Jhansi***
>
> *"I will not get sterilisation; it may have bad effect on your body (P2). Some people have got it done, doctors also say it makes your body weak"*
> ***– CMW, Consistent TM User, Older, Gonda***
>
> *"After the birth of my second child, the nurse suggested to get copper-t, but my family said no. I do not know anything about it"*
> ***– CMW, Consistent TM User, Older, Jhansi***

A few women in Jhansi however, spoke about their decision to get sterilized after their second or third child. **Jhansi, is, notably the only district with a positive word of mouth for sterilisation procedures.**

> *"After my third child, I will get sterilised"*
> ***– CMW, Consistent TM User, Older, Jhansi***

Key takeaways

- **Bhabhi's and other women in one's immediate vicinity play a key role in the advocacy of tradition methods.** However, there is a limited role of MILs in this regard – while they are sources of information, their influence on a couple's reproductive behavior is limited

Key triggers for the adoption of TM	Key barriers to the adoption of MM
• **Successful use cases** in the immediate vicinity – Bhabhi and neighbourhood friends provide information on the use and efficacy mechanisms of TM • Mechanism of action is simpler and tangible to visualize – **low cognitive effort required to understand** • **Belief in effectiveness** due to cognitive understanding – semen does not reach the egg in the pull-out method, and it does not reach the egg when conceiving is possible (in withdrawal method) • Notably, incorrect information about safe-unsafe days among participants • 'Natural' methods with **low adverse impact on health or fertility** (compared to MM where stories of ill-effects are widespread among clients and FLWs) • **Use of combination of TM** for increased protection, pleasure, and confidence (calendar on safe days, withdrawal on unsafe days) • **Advocacy of TM by FLWs,** especially ASHAs, adding a sense of further trust to the method • **Sense of agency over one's mind and body** (for both men and women) – 'discipline' and control required for pull-out, inter-spousal understanding required for calendar method • Hence, **internal locus of control** or 'apnapann' in TM, which also makes it **shameful to admit failure** – reducing the possibility of social communication about TM negative use cases	• On-going **fear of adverse health impacts, failure of contraception, and infertility** due to widespread examples of the same in immediate vicinity • General conception of **'chemicals' as adulterated and harmful** (except of condom, but stories of condom tearing are often discussed) • Commonly held fears include bleeding, alteration of menstrual cycle, infertility, abdominal pain, weight fluctuations, and dizziness • **Cognitively difficult to understand** – mechanisms of efficacy found complex to comprehend ('what are the chemicals doing?', 'how are these methods different from each other?'). • Lack of awareness and in-depth knowledge about MM – their mechanisms of action and efficacy, usage, advantages, disadvantages, which method is suited for whom • Of the methods, condoms and sterilization are the most known. Scattered awareness about 'pills' exists • **External locus of control and lack of familiarity** – easier to blame for failure in social settings • **MM becomes complex and difficult to understand and use**

Cohort B: Current TM Users who have Used Modern Methods in the Past

This section explores the narratives of users who switched from MM to TM usage, elaborating on the key reasons for this switch. Factors triggering the trial and use of MM, experiences recalled of MM use and triggers for final decision for adoption of TM are elaborated on.

B1. TRIGGERS FOR TRIAL/USAGE OF MODERN METHODS AND USER EXPERIENCE

Participants from this cohort tried MM **to be able to limit their number of children**, in most cases, after their first pregnancy. This is specifically true for high parity and older women. A few women also started using MM at the suggestion of women around them – ASHAs and neighbourhood friends.

Information from Health-Care System about MM

Women reported gathering information about MM for various touchpoints within the health system. **ASHAs, Anganwadi sahayikas, at times doctors and through posters at hospitals (about condoms and OCPs)** encouraged them to checkout MM. Husbands also spoke about government efforts for the FP program – which encouraged them to try out the promoted methods. However, **such interactions are brief, often involving exchange of basic information about a given method, including its name and use. Other information, including the mechanism of action, advantages and possible side-effects is not discussed. Hence, <u>while they build awareness, in-depth knowledge of MM remains scarcely available for clients.</u>**

> *"I didn't bring it (condom), it must be for 20-30 Rs. ASHA didi does not take any money. The machine to check for pregnancy was also given 3-4 times for free, since I was not getting MC."*
> ***- CMW, Current TM User, Older, Saharanpur***
>
> *"She (ASHA) has recommended oral contraceptive pills because it can help me to space between two children, when I and my husband agree to have another child then I can stop consuming oral contraceptive pills."*
> ***- CMW, Current TM User, Younger, Jhansi***
>
> *"She (projective figure of Savita) is afraid for pregnancy. But now a lot of things are in the market from which she will not get pregnant."*
> ***- CMW, Current TM User, Younger, Jhansi***
>
> *"Our government has introduced condoms for safety measures and one also has to use his intelligence to withdraw, like during intercourse you need to be very careful and withdraw before time. The government has also introduced female sterilization to permanently prevent pregnancy. A lot of measures are being taken by the government to safe protection and unwanted pregnancy."*
> ***- Husband, Current TM User, Older, Jhansi.***
>
> *"Benefits of this thing is like, it does not have any side-effects. It is government-oriented medicine and you can do sex anyhow, there is no problem."*
> ***- Husband, Current TM User, Younger, Saharanpur***

Further, while sometimes health-care providers inform clients about the possible side-effects of MM, for instance Antara (at the time of first injection), what can be done if one faces them is not discussed. There is a lack of redressal and feedback mechanisms for resolution of such complaints.

> *"Yes. She told me that I will have irregular periods, I will have headache and I could also get migraines."*
> ***- CMW, Current TM User, Younger, Jhansi***
>
> *"There is a lot of benefit, no harm in it (TM). (Because of Antara injection) I was not having MC, I was getting late, there was no periods in the 3 months, I also took injection of weakness, I took 4 bottles of glucose in 3 months - 3 ½ months."*
> ***- CMW, Current TM User, Older, Saharanpur.***

Experience & Expectation of TM Failure (Very Few Cases)

Participants report that at times, keeping track of one's menstrual cycle is not a fool-proof way of ensuring segregation between safe and unsafe days. This is especially true for women whose cycle naturally fluctuate – an experience reported by a very few women in this cohort. Further, a very few women also experienced unwanted pregnancy with TM use. However, while these cases encouraged them to try out MM, **women blamed themselves and their lack of care with calendar dates.**

> *"It was unplanned because we should take care of something during sex which we didn't so he came. After periods we should not be in contact for 15 days but I forgot my date so I got pregnant."*
> ***- CMW, Current TM User, Older, Saharanpur.***

Such an internal locus of control **often leaves space for women to go back to TM, wherein the next time they will try and 'do it right', with the discipline, caution and control** these methods require. Hence, it can be said that for most participants, MM was tried/used as an alternative to TM.

Reported Experiences of Modern Methods

Participants recall experiencing adverse health impacts of modern methods tried, tabulated below. Such experiences **bring back to their memories all the negative use case stories they have heard about MM**– confirming them. A general discomfort and contempt towards 'external' products is hence expressed.

Table 11. Reported User Experiences of Modern Methods Among Trialists/Users of MM

	Condom	Antara	OCP and Chhaya
Reported experience	• **Lack of satisfaction** and pleasure from condom use, reported by men and some women • **Tearing** of condom during intercourse, resulting in **unwanted pregnancy**	• Stomach ache and digestion issues • **Fluctuation in menstrual cycle**	• **Reduced sex drive** from a year of OCP consumption for women • **Tiredness and dizziness** upon taking the tablet
Other relevant factors discussed	• **Physical work** of procuring the condom • **Disposing** a used condom within the set-up of a joint family is **embarrassing**	• **Lack of redressal of side effects** by FLWs. This is noted due to lack of information among ASHAs to provide technical information and counseling in such cases	• Fear of forgetting to take the pill on correct days and times – system of pill taking found complex and difficult to keep track of • Hence, **while the format of usage is known to women, their mechanism of action/effectiveness is unclear.**

Here, users report both – a lack of initiative to seek counseling upon experiencing bodily effects of Antara, OCP and Chhaya, and a lack of follow-up or redressal mechanisms from the FLWs.

> *"Kavita (projective condom user) who uses condom have to spend money on this and she will be worried also on how to discard it and Savita (TM user) will be free of all tensions like just do it, clean it and no tension."*
> ***- CMW, Current TM User, Older, Saharanpur***
>
> *We were using Nirodh and it got torn that is why we had a third one."*
> ***- CMW, Current TM User, Younger, Jhansi.***
>
> *"Once it had happened (condom tearing), and then my periods got disturbed. My health was not good. I got my periods for 2 to 3 days. It stopped and again I got them for 2 /3 days."*
> ***- CMW, Current TM User, Younger, Jhansi.***
>
> *"After operation (IUCD) ladies get fat and then they start having pain in back and everywhere so it is better to have home remedy. Back pain causes problems, acidity, indigestion type of problems occurs."*
> ***- CMW, Current TM user, Older, Mirzapur***
>
> *"I was not scared however I thought that since this pill has to be taken regularly and I forgot to take it once, then it was possible to forget again and if I forgot again then I would have problems, so I quit taking these pills."*
> ***- CMW, Current TM User, Younger, Mirzapur***

B2. KEY REASONS FOR SWITCHING TO TM

Most participants expressed having existing knowledge about TM, from before participants tried MM, whereby upon experiencing side-effects from MM, it was easier for them to switch to TM.

> *"I don't know about that. As the periods end, if we do sex before 14 days, then the child will be conceived. The mouth of the uterus remains open, I will conceive."*
> ***- CMW, Current TM User, Older, Saharanpur***

Negative WOM about Modern Methods – Side-effects

As noted above, the experience of ill-health after the usage of MM brings back to memory all the negative stories participants had heard about modern methods.

> *"For the first time I have heard this name from my sister-in-law, she has told me while having sex with her husband, her husband was using a condom and the condom was torn while having the sex, after that she got pregnant, the child in her womb was spoiled. She had fallen due to which their child was spoiled after that she get infected and it had happened many years back, around 10 to 12 years ago."*
> ***– CMW, Current TM User, Younger, Jhansi***
>
> *"Taking pills everyday is not good for health"*
> ***– Husband, Current TM User, Older, Gonda***

At times, they were actively stopped from using modern methods by family members due to their fear of side-effects (mother-in-law and father-in-law through the MIL). Sometimes women themselves are scared of complex procedures like IUCD. The **visual image of an outsider operating on one's vagina is fear-provoking. This is also true, to an extent, for injections – generally feared medical devices.**

> *"They (in-laws) didn't let me eat it (ECP). They said that if you will, something bad happens like what if you never get to become a mother again, then what will we do."*
> ***-CMW, Current TM User, Younger, Jhansi***
>
> *"I do not want IUCD also because I feel fear. They plant it inside, if it goes inside maybe it will pain. My MIL told me about it – doctor will wrap it with our vein so that the pregnancies don't happen. When there is child, those nurses put their hands inside, then it hurts so much. To have children, the pain is compulsory, but we will do all the other things, but we will never go through pain for this method. Sterilization is also scary because first they cut the vein and do the sterilization, so I feel fear. It's done on women."*
> ***-CMW, Current TM User, Younger, Mirzapur***
>
> *"I am scared about injections"*
> ***-CMW, Current TM User, Younger, Saharanpur***

Note on husband's lack of satisfaction with condoms

Husbands frequently reported the lack of satisfaction and pleasure in use of condoms. In the face of this admission, a few women also spoke about simply not having a say in the decision of switching from condoms to using TM (especially withdrawal)

Belief in Mechanism and Cost-Effectiveness of TM

Both women and men express confidence in the use of TM (for reasons cited in Cohort A). While they speak about the **biological effectiveness of TM**, they also mention that they are free of cost and does not require a lot of cognitive (for understanding mechanism of action) and physical effort (procurement, using the method itself – taking a pill, putting on a condom, visiting health facilities for injections). Hence, **TM is low on effort – financial, cognitive and physical.**

> *"7 days will have physical relation, then 15 days we will take a gap."*
> ***-CMW, Current TM User, Younger, Jhansi***
>
> *"You don't have to use your mind for it and it is done free of charge"*
> ***- CMW, Current TM User, Older, Jhansi***
>
> *"No harm in using the FP method of 14 days of abstinence, hence stuck to it."*
> ***-CMW, Current TM User, Older, Saharanpur***

These methods are seen as **within one's control, independent of factors like chance and luck** – leaving no possibility of an unwanted pregnancy. Women also **express faith in their husbands** for pulling-out on time – providing them with a sense of comfort and pride towards their husbands. However, it is notable that most women and men have an incorrect knowledge of safe-unsafe days in the calendar method (as found in Cohort A as well), and couple it with withdrawal method for extra protection.

> *"Husband simply refused that he doesn't require condoms. My husband does not adapt to other methods quickly. He says when we are not making a mistake, then why we should switch to these methods."*
> ***- CMW, Current TM User, Younger, Mirzapur***
>
> *"Technique is safe, it is sufficient for us. There are some special days. After the end of periods, the mouth of uterus remains open for 15 days. During these 15 days if you take semen inside, you will be pregnant but after 15 days of period, there is no problem for pregnancy. According to my dates, we use this trick. Mostly my husband discharges outside, but we keep notice of that 15 days of my period time. BECAUSE WE DO NOT DEPEND UPON LUCK. PERIODS can be back and forth a day or two."*
> ***- CMW, Current TM User, Younger, Jhansi***
>
> *"If she used home remedies then she cannot be pregnant, but if she has used modern techniques like condom then she can become pregnant as the condom can be torn and this is not good for health also because if it gets torn then pregnancy can happen."*
> ***-CMW, Current TM User, Older, Saharanpur***

In this way, **TM provides users with a sense of control over their body, mind and inter-spousal communication** (*as noted in Cohort A findings*). Hence, TM is seen as the more practical and convenient option.

B3. FUTURE PLANS – CONTINUED TM USE, STERILIZATION FOR SOME

Most women expressed that they would continue using the withdrawal method, while occasionally using condoms, if required (based on the husband's desire to have sex, especially on unsafe days). While some women would like to get sterilized (being a 'permanent' solution) after achieving their desired family size, it is difficult for them to plan for such a procedure – since there is no replacement for the household work they engage in. Further, **stories of fear of side effects of sterilization and failure are widespread**, sometimes rooted in user experiences of women in the same family (extremes being Saharanpur – where such stories were spread due to 1-2 failure cases a few years ago, and Jhansi – where trust on sterilization has been built over years). A common understanding of sterilization is that it can weaken the body – doctors often advise not to lift heavy weights for some time after the procedure.

> *"I was also saying for the operation, but there is no one to work. When winter comes, I will get the operation done. You don't have to work, you have to abstain for a month. Can't lift weights."*
> ***- CMW, Current TM User, Older, Saharanpur***
>
> *"Nasbandi is scary because we might still get a kid. So, my elder sister-in-law has done it but she still got a kid. So, nowadays most people go for surgeries. But there is a fear because even after surgery one lady had a kid."*
> ***-CMW, Current TM User, Older, Saharanpur***

Key takeaways

Participants in this cohort, while tried using MM, switched to (and in some cases, switched back to) using TM

Key triggers for trial of MM

- **Information on MM gathered from different touchpoints of the health system** – ASHAs, posters at hospitals and doctors. However, **only a brief introduction to MM** is noted here, a detailed understanding of methods is not built
- **Acknowledgement of the possibility of TM failure** leading to unplanned pregnancy, especially in the case of calendar method where the segregation between safe and days can be unclear. Here, the responsibility of failure is taken upon oneself
- **A few cases of TM failure** – while clients are motivated to try out other methods (MM) in such situations, the **self-blame for failure** leaves scope for getting it right the next time with more caution, discipline, and care

Key reasons for adoption of TM

- **Financial cost** of procuring modern methods is higher than that of TM, which is available free of cost
- **Physical labour involved in the procurement and use of MM.** For instance, used condoms need to be disposed of with care
- **User experience of side-effects** with MM – adverse impact on sex drive, menstruation, digestion, etc.
- **Lack of redressal mechanisms** by FLWs in the face of side-effects from the use of modern methods (Antara, OCP and IUCD)
- **Clear attribution of unwanted pregnancy with MM failure** – in the select cases where clients experienced conceiving while using MM
- **Positive WOM about TM** – providing a sense of familiarity in one's surroundings
- **Sense of positive inter-spousal communication** about intercourse and FP, whereby women report having 'faith' in their husband's ability to control (ejaculation in pull-out method and sex drive in calendar method)
- However, some women also report the use **of TM upon the husband's desire** for more pleasure – found absent in condom use

Cohort C: Current Modern Method Users who have Used TM in the Past

This final sub-section maps the journeys of participants who were using TM in the past and have since switched to modern methods of contraception. The key reasons for rejection of TM, leading up to triggers for adoption of MM are explored.

Notably, **most participants in this cohort belonged to the P1+ stage**. This is most often due to the increased need for spacing at this point in time of one's reproductive journey. The established contact with ASHA workers for ANC at the P1 stage proves to be a key source of trusted information, who encourage them to focus on spacing methods.

C1. ASSOCIATIONS WITH TM: NON-COMPLETE REJECTION

It is noted that while users in this cohort are modern method users, they do not completely reject use of TM from their lives. **TM were found unreliable and risky on their own, especially if the family is not keen to expand its members with newborns.** Many participants said TM must be used in combination with a MM as this will give a sense of trust to the user that unintended pregnancy will not happen. Hence, **MM is seen as an addition to the existing use of TM for upgraded protection.** For instance, in most cases, a condom was used for contraception, but home remedies (calendar method) were also followed in cases when the husband did not want to use a condom.

> *"I wanted to have 2 kids only and I had 2 children, but now I don't want any more kids because a small family is a healthy family. He used to take out sperm but I don't know how I got pregnant and in our religion nobody allows us to eat any medicine or to get abortion. Our religion doesn't allow us to go for any operation or medicine, God will not forgive us. God will not accept our prayers. We do home remedies now, and we use condoms"*
> ***- CMW, Current MM User, Younger, Gonda***
>
> *"I wanted only two kids. It was my decision to have only two kids. Husband also thought of two kids. All were saying same thing in village, that you have only two kids, then my husband thought to plan for 3rd one. Then I changed my thinking. Then after 4th kid we started using condom."*
> ***- CMW, Current MM User, Younger, Mirzapur***

- **Select cases of unplanned pregnancies with TM:** Some participants report **experiencing repeated failures when using TM** for FP, placing them in positions they do not want to be in due to the socio-cultural stigma attached to abortion, compelling them to give birth then despite their contrarian wishes.
- **View of MM users as more educated:** Notably, there was an understanding that a woman preferring a condom over a home remedy for contraception is more educated and would be having more information. Men also agreed with the fact that **a woman using modern methods was 'smarter'** than the one using TM. A more responsible husband would also be of a woman who prefers condoms over traditional home remedies since the latter is more prone to leading to unwanted pregnancies. However, it is notable that **such an imagery only exists for condom users**. Knowledge regarding modern methods of FP, such as IUCD and Antara, was limited among respondents in Gonda, Jhansi, and Saharanpur. For instance, participants from Gonda used the terms Antara and Chhaya interchangeably[23].

> *"The home remedy failed. Ejecting outside failed*
> ***- CMW, Current MM User, Older, Jhansi***

[23] In fact, the ASHAs too were getting confused between the two while talking about them

C2. TRIGGERS TO ADOPT MODERN METHODS

The majority of participants in this cohort are users of condoms (sometimes in combination with inconsistent TM). Some are Antara and OCP users. Let's look at the key reasons encouraging a switch from TM to MM

Interaction with the Health-System at P1 Stage – Limited Exchange of Technical Information

At P0 stage, majority married women and men preferred to use TM primarily because of their desire to avoid conceiving immediately after marriage. Only following the birth of their first child, women would engage in conversations with their female relatives or with community health workers to explore modern methods. Herein, ASHA workers inform women about the importance of spacing, encouraging them to use condoms, and in some cases pills (daily OCP and weekly pills) and IUCD.

> *"She told that you need to take precaution during those 7-8 days and when sex happens within those 7-8 days, you need to take precautions (taking pills). During that time the mouth of the 'bacha daani' opens"*
> ***– CMW, Current MM User, Younger, Saharanpur.***

This shows some level of exchange of technical information (mechanism of action) is already taking place for select modern methods.

Experience of TM Failure, and Moderated Husband Encouragement for MM Adoption

It was found that fear of sexually transmitted diseases and unintended pregnancies was the primary trigger for choosing MM in Gonda and Jhansi. The usage of combination methods, such as condoms and calendar method, was perceived to be effective, with ASHA providing information and tips on the use of both.

> *"Her (projective figure of Kavita) husband does not like using condoms but they also don't want to have another child, so hence, according to them, she uses condoms and on safe days, she has unprotected sex and with this calendar, information of using condoms and tips were given by ASHA"*
> ***- CMW, Current MM User, Younger, Mirzapur***
>
> *"Baar baar karne se tabyat pe bhi asar padta hai, kuch bemari ka khatra rehta hai"*
> ***– CMW, Current MM User, Jhansi.***

Failure of TM made a few participants shift to a modern method[24]. Herein, **condom was found to be an accessible method, devoid of fear of chemical intrusion**. It is also the method most promoted by ASHAs across districts, introduced to the client at the time of ANC while carrying the 1st child.

In Saharanpur, Mirzapur and Jhansi, one of the key triggers for participants to shift to using modern methods included encouragement from husbands for adopting MM in the face experiencing the TM failure. The **husband's encouragement and decision to use Condom/Antara** injections shows that the locus of choice of method lies with the husband. However, this encouragement comes only after partial or complete achievement of the family size, that is, after crossing parity levels P1 or P2. That is, when husbands decide not to have more children, in consultation with the wife (whether spacing or limiting), they become supportive of modern method use.

[24] For instance, one participant from Jhansi reported using the withdrawal method as a means of FP, but she accidentally got pregnant. After the birth of her child, the couple started using condoms as a method of contraception.

An exception can be observed in the case of the Muslim participant who reported that there was no communication involved in the decision-making of contraception choice and that the husband of the CMW bought a condom and started using it.

> *"I never heard about it, my husband told me about it and he said we will use condom and it helps us to avoid pregnancy."*
> ***- CMW, Current MM User, Jhansi.***

Ease of Condom and Antara Usage: Desire to Have Frequent Intercourse

Desire to have frequent sexual intercourse was observed prevalent among those adopting MM such as the use of condoms. Condoms also helped **relieve participants of the constant duty of keeping a track of woman's menstrual cycle**. Some couples initially found condoms to be less pleasurable than TM methods, but others reported that it provided a more 'natural feel' than some other barrier methods for both males and females, adding that it increased their enjoyment and satisfaction during sex. Participants were also aware of the free-of-cost availability of condoms at local health facilities. Condom users also express how it is the **most effective method with the least side effects**. Here, the physical barrier it provides, stopping the semen from entering the woman's body is seen as a marker of its effectiveness.

> *"In our methods, the fluids do not remain inside so there is no chance of conceiving, however there is a possibility of conceiving despite using this 72-hour pill. If we start consuming 72-hour pills often, then we will also become weak, as the husband will try to have sex daily, in that case both of us will become weak. If a woman has sex frequently, she will become physically weak"*
> ***- CMW, Current MM User, Younger, Saharanpur***

Case in focus: Discovering information on quality of condoms using technology

One woman from Mirzapur talked about researching the usage, benefits, and side effects of a condom online and talking to her husband about the same. She learnt that when good quality condoms are used, chances of tearing and unplanned pregnancies are lower.

Antara was found to be a relatively long-term fix (three months at a time), compared to condoms and OCPs. **Comfort with ASHA during ANC vaccination also helped ease the process of trusting the health system with injectables. The process of receiving an injectable at the nearest facility was found to be hassle-free.** For instance, the participant taking Antara injections narrated that ASHA came to her house introduced injections to her and told her about the benefits and side effects of injections. Information about the consistent need for Antara injections every three months, and their free of cost availability was provided to her.

> *"It is right to get vaccinated, my sister-in-law had told that tikas also work. Whenever ASHA comes, she tells whenever her camp is organized."*
> ***- CMW, Current MM User, Younger, Saharanpur***

Instances of Positive WOM in Network: Improved Familiarity

Networks of familiarity, in some cases, were revealed to play a key role in triggering the choice of individuals to adopt modern methods of FP. Most participants switched to a MM after they were made aware of the various options they have and are given information about their efficacy, safety, and side effects either through ASHA (as noted above), sister or some relative who had already gotten it done. The positive stories made them confident in their choice.

Hence, while men and women in this cohort are 'modern method users', there are limits on the basket of choices explored. For instance, two women who had gotten the IUCD inserted in the past, switched to condoms later after the birth of their second/third child, since the device was causing a lot of pain in the lower abdomen area during intercourse. They believed that taking pills is a hassle as they could be easily forgotten, the accessibility of injectables is limited since travelling long distances to receive an injection is not feasible. In most cases, only condoms have been successful in MM penetration among couples. Antara's use remains scattered, and other MM methods are not known or tried by the participants. It can be said that **at large, the overall idea of MM remains tabooed and difficult to understand in this cohort as well.**

C3. FUTURE INTENT: STERILIZATION

The desire to continue using modern methods of FP emerged as a common theme for CMW belonging to this cohort in all four districts.

Most of the women interviewed expressed that they are **happy with the method they are following**, be it injectables, pills or condom, but plan on **following it only until they decide to have another child. The ultimate goal for many of these women appears to be sterilization,** with the expectation that they will have one extra baby before undergoing the procedure. In Mirzapur and Jhansi particularly, once the ideal family size is met, women want to get sterilization done as they think it is the most effective and permanent solution to unwanted pregnancies, as other women around them, their mothers, sisters, sisters in law have gotten it done – making it one of the most socially accepting limiting methods.

> *"When my mother in law will give me permission, then I will go for the operation."*
> ***- CMW, Current MM User, Jhansi***
>
> *"After the second baby operation should be done, my sister-in-law told me."*
> ***- CMW, Current MM User, Mirzapur***
>
> *"I will use vasectomy after two children. It is best method and after using that method I know that my wife will not get pregnant."*
> ***- Husband, Current MM User, Gonda***

Key takeaways

- The varying degrees of awareness and understanding regarding MM (lesser in Saharanpur and Gonda, while more in Mirzapur and Jhansi) showcase a strong **correlative link between access to information and willingness to adopt MM**.
- People were more willing to use MM than TM, even if they doubted how safe and effective MM might be, because of their need to space or limit children.
- In most cases across districts, even with different levels of inter-spousal communication, the husband is seen to play a significant role in influencing the decision for MM usage for FP and at times even being the locus of control for the choice.
- **Accessibility of MM** (characterization of condoms as non-chemical intrusions, agency afforded to women in deciding to use injectables and pills) appeared as a **strong characteristic motivating people to adopt it for FP**.
- Misinformation and the disproportionate focus on the perceived negative impacts associated with MM can be seen as factors dissuading more people from trying MM.
- It can be noted across districts the participants who are currently using modern methods are **content using MM for FP**.

Key triggers for adoption of MM	Keys triggers for rejection of TM
• Seen as an **additional protection with the use of TM** – especially condom • **Interaction with ASHA at the P1 stage** whereby spacing is focused on. ASHA often advocates for condoms, Antara, OCP and IUCD, in addition with TM • **Mechanism of condom easy to understand** – provides a physical barrier between semen and eggs. And it does not intrude chemically • Condom usage does not lay restrictions on frequency of intercourse, as experienced in calendar method • In a few cases, Antara was found as a relatively long-term fix, compared to OCP which is seen as a daily hassle. **Comfort with ASHA during ANC vaccination increases trust in the health system for injectables**	• **Experience of failures** (unplanned pregnancies) with TM use – found risky if used independently • A condom user is seen as smarter and more responsible for using 'extra' protection during intercourse

SECTION E

Role of Frontline Workers (FLWs)

This section will explore the role FLWs (ASHAs and ANMs) play in the adoption or rejection of traditional and modern methods of contraception as the first touchpoints of information between the clients and the health system.

General Context of Work: FP is not a Priority

FLWs in all four districts report being **swamped with work throughout the day** and are seen as primary health service providers in their villages. Key tasks noted in order of prioritization are –

- Care for pregnant women – FLWs have to ensure timely checkups of pregnant women in their area, ensuring their health, deliveries, and ANC.
- Service provision around child health - Immunization and vaccination of children in the community
- Involving the community to spread awareness about FP and service provision for contraceptives methods

It is notable here that FP is often not a program they mention spontaneously when discussing their job description.

A detailed account of the context of work of FLWs can be found in Appendix C.

Approach to FP Program

The FLWs acknowledge the need for an FP program in the face of increasing population. The FLWs talk about how living expenditures have increased so much in the past decade that it is not sustainable to have more than two children, they feel that **couples should have two kids and focus on giving them a good lifestyle** where the education, life, future of the kids and family are secured. Further, they believe that **once a couple's ideal family size is achieved (most cases in P2), the couple (especially women) should start adopting limiting methods like sterilization. Hence, for younger women, or those up till P2, spacing is focused. At the P2 stage, sterilization becomes the program focus.**

> *"If there is to gap of two years between two children, then we explain that the children and the mother will be healthy. Also, we tell them if you plan your family with two children, then you will be able to educate them well"*
> *- ASHA, Mirzapur*

ANM in Mirzapur talked about how she thinks that these days even couples want to focus on a smaller number of kids and provide them an opportunity to have better lives. Another ASHA in Saharanpur talked about how the rural areas are densely populated now. Since everyone wants a nuclear family, nobody prefers having more than two kids because there are a lot of expenses which are to be taken into consideration, they talk about how when families are smaller, parents can invest more time and resources in their children's education, leading to better employment opportunities and increased personal growth in terms of better way of life.

Further, FLW also talk about the need for a focus on maternal and child healthcare, closely related to FP. They emphasise the need for spacing between children so that the woman is healthy and does not face health issues of malnutrition, anaemia, etc. With reduced unwanted pregnancies, the risk to women's health can be tackled.

Envisioning of Role in The FP Program

Since their roles focus around advising, counselling, and recommending ways, they can help increase the use of FP services and make the FP program more effective. Having worked in the same community for years, FLWs have a thorough awareness of the regional context, cultural values, and social norms in their communities. They often utilise this information to address myths and misconceptions about contraceptive options and promote FP. At times, this also

means **resorting to advocating TM and validating women's choices to avoid community rejection**. The ANMs in Mirzapur, for instance, talked about how in a religiously populated area (in a dominantly Muslim populated region in her area of work), they would face a lot of resistance around modern methods of contraception, FLWs would talk then about TM like calendar method to advise them about FP.

> *"Using something (even TM) is better than not using anything at all"*
> *– ANM, Mirzapur*

While this example is a display of flexibility and on-ground adaption, a certain bias to underserved/ vulnerable communities is also noted, whereby, the 'ability' of comprehension of individuals is put in doubt by the FLWs.

According to ASHAs, they have **built personal connections with their clients – seen as a friend or family member**. Participants (CMW) shared anecdotes about how ASHA provided support during times of stress and health-related issues. A few husbands in Jhansi also knew the work ASHA does and appreciated her work, they report relying on her expertise to support their wives' health during pregnancy. However, this stands in **sharp contrast with some other narratives noted about ASHA-client relationship, especially in Saharanpur and Gonda**. Here, FLWs are not seen as trustworthy figures of health-related information. This comes about due to a perception of 'lower' education and caste of the ASHAs.

> *"I asked the ASHA but she doesn't tell much. She is less educated than me"*
> ***– CMW, Consistent TM user, Older, Saharanpur***
>
> *"There are no doctors here, only quacks. The PHC is nearby but there are no doctors there"*
> ***– CMW, Consistent TM user, Older, Gonda***
>
> *"ASHA is from scheduled caste category...I don't meet her separately, only for vaccination when my children were born. I never talked with her about these things (contraception)"*
> ***– CMW, Current TM User, Older, Gonda***

Prioritization of FP Program Work Within Larger Scope of Work

ANMs and ASHAs play a crucial role in promoting FP services to women in communities in all the four districts. However, they acknowledge that competing priorities like immunization drives, and antenatal care take precedence over FP. **FP is largely discussed when ASHAs visit the homes of pregnant women during the 42 days of postnatal care (starting from the P1 stage), and they seldom find time to counsel women on FP beyond these visits.**

The FLWs' role in spreading awareness about FP methods, their advantages and disadvantages, and the significance of delaying and spacing pregnancies is crucial for maternal and child health. **However, with the amount of work they have to do, FP sometimes becomes a secondary priority.**

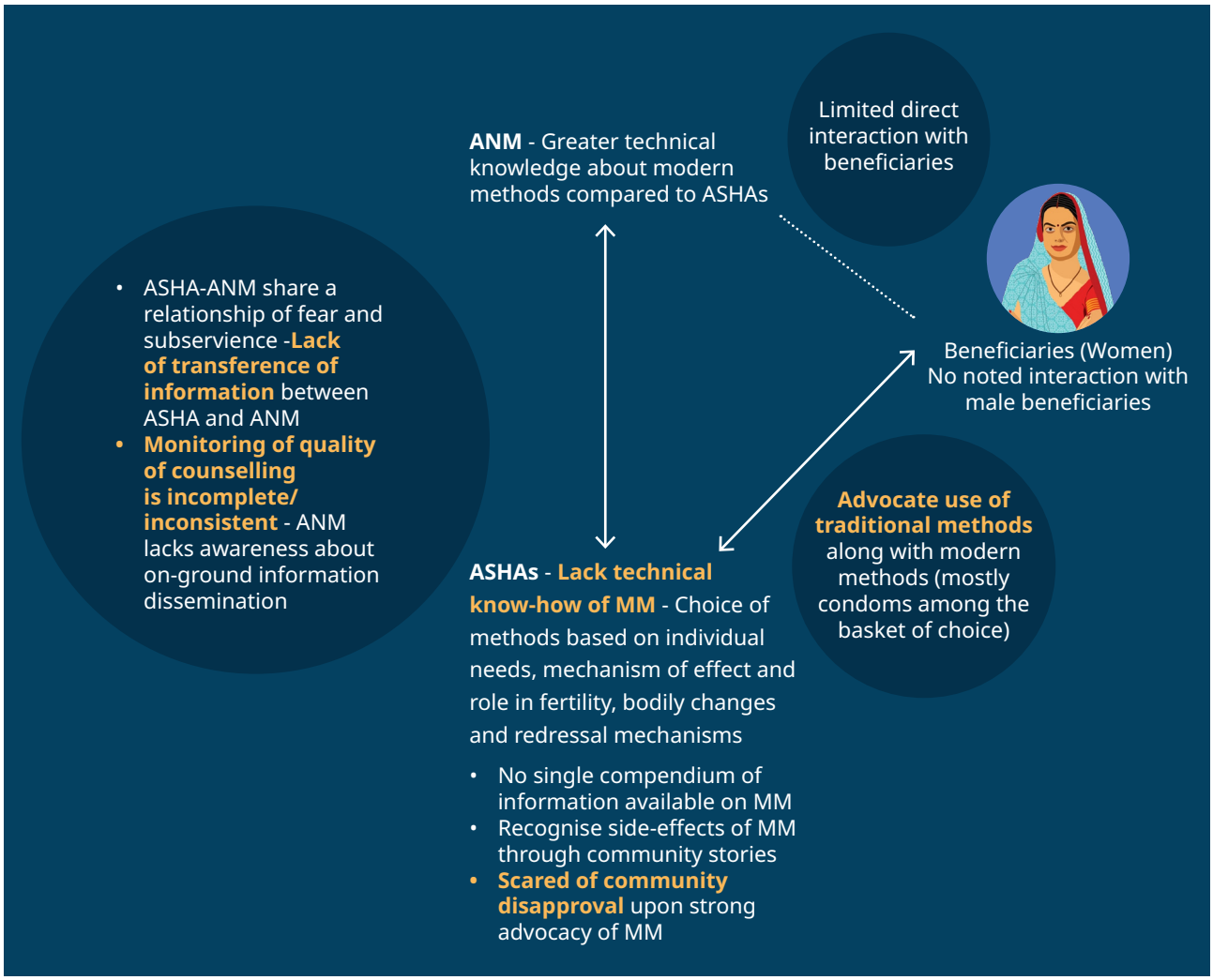
Approach to Traditional and Modern Methods: Knowledge Gaps in MM

ASHAs and ANMs have different perspectives on modern contraceptive methods. ANMs recommend non-hormonal methods like condoms or Chhaya to women, while **ASHAs focus more on condom distribution (as they have targets to meet, reportedly in Saharanpur and Jhansi) and more openly admit to suggesting TM more**. There is a general trend of gap of information and knowledge between the ASHA and the ANM, where the ASHA-ANM relationship is mostly noted to be one of subservience (with a few exceptions in Jhansi). Here, there is limited transference of information and transparency between ASHA and ANM. **While ASHAs have correct knowledge about TM[25] and scattered information on MM, ANMs display greater technical know-how about MM.** ANMs also present the need to visibly promote MM.

For instance, in Saharanpur, ASHAs narrate instances of TM counselling with clients, while the ANM denied the use of TM in her area of work. Hence, **monitoring and feedback mechanisms of the quality of counselling are inconsistent and incomplete.**

> *"Actually most ladies say that they are using home remedies for it and they do not listen to us, so they create their own ideas"*
> ***- ASHA, Jhansi***

Figure 3. ASHA-ANM-Client Praxis of Information Exchange



[25] ASHAs also reported receiving information on TM in their training, from 'higher-up' supervisors, but refused to provide further details

In Mirzapur, both the ASHA and the ANM encourage and promote the use of modern contraceptive methods. If some women face cultural or religious barriers in adopting modern methods, frontline workers also promote TM – but they reportedly do it only as a last resort. However, the ASHA in Mirzapur, promotes the traditional calendar method as the best way to avoid unwanted pregnancies. In her opinion, it involves no foreign body entering the body and is safe. Further, it helps make couples more disciplined about intercourse. **ASHAs frequently speak to women about the benefits of TM, disseminating technical information about the use of the calendar method.** It can be said that there is a lack of an active attempt to 'convert' TM users into modern method users. **ASHAs also shed light on the side effects of modern methods. While this is part of her counselling process to explain FP methods to clients with transparency, in an overall conversation, it highlights the benefits of TM and the downsides of modern ones.**

> *"We can't eat tablets, in our religion we can't use any other method. Because we can't eat medicine it affects our body and we can't go for operation. We can only use condom."*
> ***- CMW, Current MM User, Younger, Gonda***

Reportedly, ASHAs also receive a small compensation for condom distribution (Rs. 1-2 for per pack from the clients) – a factor that might contribute to their emphasise on this method as a spacing mechanism . In Jhansi, for instance, the target for each ASHA stands at distribution of 120-160 condoms, where they get Rs. 1-2 for one box from the clients – containing 3 condoms). Similarly, the also receive incentives for the 'conversion' of women to adopt Antara injection (Rs. 100 per 1 injection). Other incentives from the Government to enable FP include -

- Spacing for two years after the first child: Rs. 500.
- Spacing for three years after the second child: Rs. 500
- Sterilization: Rs. 1000
- Sterilization after the third child: Rs. 300

By way of incentives, ASHAs tend to focus on spacing at the P1 stage using condoms and Antara, and sterilization at the P2 and P3 stages.

> *"She (ASHA) said get yourself operated now you have both son and daughter."*
> *-CMW, Current TM User, Older, Jhansi*

Cognitive Complexity of MM

FLWs do not necessarily segregate between MM and TM when speaking about FP. At times, they themselves **feel confused between mechanism of different methods and find them complex themes of conversation**. These complexities include:

1. **Lack of information about mechanisms of action of different methods, or simply, 'how do modern methods work'?** For instance, the key difference between OCP and Chhaya – that one is hormonal and the other is non-hormonal, is not yet understood by ASHAs till date
2. **Lack of clear understanding of basket of choice, and which method is best suited to whom** (based on demographic and health-related factors like migraine, etc.)
3. **Difficulty finding a language for speaking about 'modern' methods**, since there is no clear Hindi term for it, while TM can be simply called 'Ghar ke tareeke'
4. **Lack of a single source of information about modern methods**, whereby ASHAs often makes notes based on their trainings but are hardly ever able to refer to them
5. Further, there is limited priority given to FP training. Discussions on modern methods are ad hoc (low on priority compared to immunization and ANC work) and usually take place during the monthly meetings. Hence, **spaces for monitoring and feedback of on-ground counselling are also limited**.

In the face of such cognitive complexity, there is a **tendency to advocate for methods which are 'simple' to understand and tangibly effective – TM and condoms.**

These complexities are also projected on to the imagined TM and MM user by ASHAs.

Table 12. User Imagery of a Typical TM and MM User Reported by FLWs

Factor	 Traditional Method User	 Modern Method User
Lifestyle based on choice of method (TM or MM)	FLWs believe that this woman would be educated, since she can easily keep track of her menstrual cycles and remember her safe and unsafe days for calendar method	This woman would be more 'urbanized', but may or may not be less educated since she requires 'external' interventions to avoid unwanted pregnancies
Attitude towards and knowledge of FP	She would be **smarter and would know about her 'options' of FP well** - she would also be more 'disciplined' ('in control of her sex drive')	She would have limited understanding of contraceptives and their effectiveness. She **might have chosen to use a method without gathering complete information about it**
Relationship with husband	She would have a great understanding of her husband; they would **engage in communication of their method choice and would trust each other** (Both the TM methods require some form of communication among couples)	Marked with lack of communication, she **needs to rely on modern methods** to avoid unwanted pregnancies (especially OCP and ECP)
Expected parity	2-3 children – She would have planned them in advance as she and her husband would have agreed on it	3-4 children – As there are **higher chances of modern contraceptives failing and causing health issues**, leading to higher fertility risk

Hence, a **typical TM user is seen as a more informed decision maker**. An observation in focus here is that a few ASHAs themselves use TM, after experiencing failure or other issues with MM (condoms and OCPs).

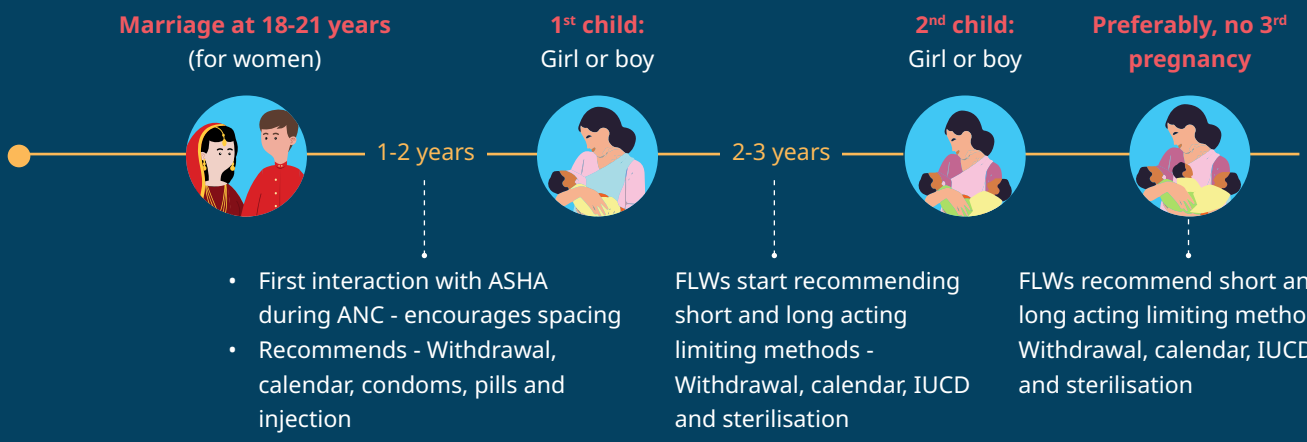
Fear of Rejection from the Community with Use of MM

While FLWs want to believe in the efficiency and effectiveness of modern methods, when it comes to advocating them in real time, they get hesitant about taking decisions for other's women's reproductive systems. They **fear ostracization from the community in the face of failure of and adverse health effects of suggested modern methods** – cases of which they have experienced and heard throughout their careers as ASHAs. For instance, community members widely speak about the side-effects of Antara and Copper-T (dizziness, excessive bleeding, fluctuations in menstrual cycles and weight). They also express that OCP leads to weakness and dizziness.

> *"Sometimes it happens that some beliefs are continuing from ancestral times that we won't do this, we are against this method. So that causes the problem. We always tell them that if one thing is not possible, they can follow some other method. This will be helpful. But that doesn't always help us and we face such situations."*
> ***- ANM, Mirzapur***
>
> *"ASHA doesn't give good condoms, she gives bad ones, we buy expensive ones from the shop, those are good."*
> ***- Mother-in-law, Gonda.***

Based on the above findings, the counselling practices by ASHA's are noted as follows –

Figure 4. Key Insights About Parity-Based Counseling by ASHAs



Note on lack of counselling of men

FLWs narrate how men do not come to them for any FP related counselling. A **disparity in gendered comfort is noted here**, whereby ASHA's feel that men are reserved when it comes to talking about FP, it being an 'intimate' topic of conversation. They hypothesize that men usually must discuss this subject matter with their friends or other male members in the family. The health system in this way hardly reaches males – who are both enablers and clients of the FP program.

A **few women also reported feeling shy speaking to an outsider** about an intimate and personal theme like FP. Hence, clients are also hesitant to approach ASHAs about health-related information.

Key takeaways

- **FP is not a priority for FLWs** – Other tasks including ANC and immunization take precedence
- **Key intervention is made at the P1 stage** at the time of ANC – Newly-wed couples are seldom approached for conversations on delaying
- **Lack of outreach to men** for FP – discomfort in speaking with men about an 'intimate' subject matter and view of FP as a woman's responsibility

Key triggers for promotion of TM	Key barriers for promotion of MM
• Cognitively simpler to explain to clients – visuals of the mechanism of efficacy can be built on their existing knowledge of conceiving and relationship between the menstrual cycle and fertility • No cases or stories of adverse impacts on health and fertility – marker of community acceptance of TM and its effectiveness • Wide community acceptance of TM – avoiding ostracization by repeating the larger social narrative • Can be utilized by vulnerable/underserved populations (in this research, Muslim community), where invasive/chemical methods are religiously unsanctioned	• **Lack of complete cognitive, technical and mechanism-based knowledge** about MM – under-confident in speaking about them (How do MM work? Which method should be used when by whom? What is the difference between OCP and Chhaya in terms of its action mechanism?) • **Lack of opportunities for community mobilization** for intervening into the widespread negative WOM about MM. Ideas of *saas-bahu-pati sammelans* and *nayi pehel* kits are not widely known by (or only known by some) FLWs yet • **Fear of ostracization**/rejection from community members upon failure of MM recommended by them

SECTION F

Role of Mothers-In-Law

Hypothesised as a key influencer at the time of conception of this study, the present sub-section explores the relationship mothers-in-law share with their sons and daughters-in-law, and their role or lack thereof in couples' decision making of contraceptives.

Relationship Shared with Son and Daughter-in-Law: Source of Information, Limits on Influence

The relationship shared between a mother-in-law and daughter-in-law has a significant impact on the family dynamics within a household. In many cases, the **mother-in-law plays an essential role in educating the daughter-in-law about family traditions and important information related to FP, including contraception.** MILs have conversations about finances and other day-to-day household decisions with son, advice about their 'personal lives' is limited, compared to DILs. **While MILs comfortably speak with DILs about contraceptives, they seldom talk to their sons about this subject matter.**

Through establishing a comfortable and trusting bond with her daughter-in-law, the mother-in-law can be a valuable source of information, offering advice and guidance as needed. There are instances of exchange of knowledge from both ends and helps the development of mutual understanding. The daughter-in-law can also be a valuable source of knowledge and teach the MIL, for instance, about how to access technology.

> *"I put purdah when in front of elders, because I have seen my mother-in-law do that, I never asked her why. I also don't go out, never really thought about it, just saw how it works here (sasural)"*
> ***– CMW, Consistent TM User, Younger, Jhansi***
>
> *"I take my daughter-in-laws' help to make a call. Sometimes, I do it myself. I don't use mobile phone a lot"*
> ***– Mother-in-law, Mirzapur***
>
> *"My mother-in-law helps me and takes care of me. And she never puts me down in front of others. She considers me as her daughter."*
> ***– CMW, Current TM User, Older, Mirzapur***

The mother-in-law 'allows' the couple the freedom to make their own choices regarding FP – taking into account their choice and agency. **While she actively expresses her desire for grandchildren (especially at P0 stage), she may not speak openly about contraceptives.** MILs discuss the topic separately with their daughter-in-law, **sharing her own experiences and knowledge** while also highlighting the potential risks of different methods.

Conveys Societal Norms of Childbearing

MILs have a strong comprehension of the **significance of appropriate spacing between children**. They suggest proper spacing between children (around 2-3 years or more), enabling the first-born child to have grown up a bit and become easier for the mother to manage. Childbearing impacts/weakens a woman's body - which needs replenishment before being able to bear another child.

"When the daughter was born, I told her that you should not have another child for five years at least."
– Mother-in-law, Gonda

"Yes we talk about this when 3-4 neighbors sit together, that there should be gap between children. It is good to have space between children, you could use some tablets, condom etc., it helps in family planning"
– Mother-in-law, Jhansi.

In terms of method of contraception, the mother-in-law shares her experiences with the daughter-in-law. She highlights the problems she faced and provides her inputs regarding unplanned pregnancies with her daughter-in-law.

"One can use condom, medicines can make you ill, that's why I tell her not to eat tablets. Nobody does it daily, whenever both do it, they can use condoms, we also did the same."
– Mother-in-law, Gonda

"Whenever we talk about family and all, then I tell her that you should keep at least one-three years gap in children, and have only two kids."
– Mother-in-law, Jhansi

Here, it is notable that **most MILs advocate for condoms in combination with TM to their DILs** (with the exception of Saharanpur, where the MIL narrated her own experience of condom tearing and unplanned pregnancy).

"I tell her that she should not be with her husband for 20 days, then within seven days, she can meet him, and can do whatever they want, and if the husband doesn't listen, then use condom."
- Mother-in-law, Saharanpur.

While MILs, within the interview setting proudly speak about their desire for 2 grandchildren only, hints of a varied gender composition are found in the CMW interviews, where they speak about the **pressure from MILs to give birth to a 'complete' family, with 'at least' one son and one daughter, and sometimes only sons. In this way, the MIL becomes a symbol of 'societal expectations' from married women**. She frequently conveys the social norms around childbearing and protection of her 'pride' as the MIL of her family – which comes from having grandchildren.

"No, my daughter-in-law does not work. We have to think about our Brahmin society, she is educated, and she does the household chores, but she will have to conduct herself considering the society and her mother-in-law."
– Mother-in-law, Mirzapur

"In our family, they think like one should make a whole team. Mother-in-law is also nagging a lot, that both me and my sister-in-law should have one more child each. My sister-in-law has two girls and one boy, I said that the family is complete now, but she is saying one more."
– CMW, Consistent TM User, Younger, Gonda

"Having a boy is very necessary, sister-in-law and MIL want that"
- CMW, Current MM User, Younger, Saharanpur

"Husband thinks that there should be one boy, mother-in-law also says this."
- CMW, Consistent TM user, Younger, Mirzapur

At the same time, it is notable that **DILs often negotiate with their MIL for freedom and agency** to choose themselves. This conversation takes place through the husband, where women convey their needs and choices to their husbands, who then speak to the MILs on their behalf. It is also notable that the ideas regarding FP remain largely the same for both DILs and daughters for elder women. However, the **MIL shares limited interaction with her own daughter**, and enjoys greater proximal nearness and 'control' over the DIL, as noted in MIL as well as CMW interviews. After marriage, women in the *sasural* (Bhabhi, Jethani, MIL) and husbands become important sources of information and influence for women.

> *"Me and my husband have sex, but we don't want kids. My husband also knows that. My MIL also tells me to have kids, I am not ready for them yet"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***
>
> *"I tell them (MIL and husband) that it is our age to enjoy, if we have children at this young age it's not right"*
> ***– CMW, Consistent TM User, Younger, Saharanpur***
>
> *"My MIL and FIL have the most say in household decisions. But everyone has a right to have a say when it comes to their children. I have to think about my children"*
> ***– CMW, Consistent TM User, Older, Gonda***

Hence, while MILs are a key source of information on contraceptives and FP, their role as an influencer is somewhat limited.

Key takeaways

- MILs across districts show an **inclination towards the use of condoms in combination with TM** (with the exception of Saharanpur, where the MIL narrates user experience of condom tearing and unplanned pregnancy).
- MILs tend to share their user experience with DILs, becoming a source of information – however, their **role as a direct influencer is limited**. The sister-in-law presents a key source of influence in one's in-law's home.

Summarizing Key Associations for Modern Methods

Throughout interviews, as noted above, some method-wise associations and barriers are observed. This final sub-section of analysis and findings provides a summary of these understandings attached with modern methods.

Table 13. Understanding and Associations for Each MM Across Cohorts

Method	Associations and understanding
Condom (most tried method across cohorts)	• **Barrier to pleasure for both men and women:** A few couples from the current TM user cohort who tried using condoms reported lack of pleasure, especially for the husband, but also for the women. • **Fear of failure:** Widespread examples of condoms tearing in the immediate vicinity, at times resulting in unplanned pregnancy for the participant themselves • **Additional task of procurement:** Such an encounter with chemists[27] can invite judgement, and add additional costs compared to TM that do not require any payment. Further, the question of 'what will happen if a condom is not available at the nearby pharmacy' looms large on participants • **Difficulty disposing of condoms:** A discomforting experience given the presence of children and men (*Devar* and father-in-law) in the house • **Hearsay of impact on health:** Impact on the uterus reducing one's fertility, ejaculated semen might contain bacteria.
Antara (less known method)	• **Fear and WOM of negative impact on health:** Change in woman's menstrual cycle, weight fluctuation, excessive bleeding, dizziness. What one can or should do in such situations is not known to many – mechanisms of follow-ups and redressal remain limited • **Fear of injections:** An external material put inside evokes visual and tactile fear • **Incentives not known:** Most participants are not aware of possible monetary incentives offered upon use of Antara
OCP and Chhaya ('pills' are known but not differentiated between)	• **Experience and fear of impact on health:** Abdominal pain and dizziness after consumption of Mala-D • **Selective awareness of usage, difference in mechanism not known:** Participants have heard the name 'Chhaya', but don't know how it works, or how it is different from the daily pill. Hence, why should one opt for Chhaya[28] is not known. • **Additional task of procurement:** Participants do not know from where they can collect or buy such pills and how much they would cost-free distribution of pills remains not known to many
ECP	• **Fear of failure:** A few consistent TM users (especially in the younger cohort) have heard from friends who got pregnant even after taking ECP • **Fear of impact on health:** Like all other contraceptive methods, ECP is talked about with regards to its possible impact on fertility, or fear of loss of a child in the near future • **Association of a 'dirty' image with ECP:** Participants believe that ECP promotes promiscuity and frequent intercourse through its promise of emergency contraception in the face of fear of pregnancy immediately after intercourse
IUCD or Copper-T	• Experience and fear of negative impact on health: Participants have heard stories about increased weight, vaginal irritation, and chest pain after insertion of copper-T. • Further, instances of IUCD insertion without their knowledge are also fresh in their minds

[27] Only known source for procurement for current TM users
[28] That is, it's non-hormonal mechanism of impact

Method	Associations and understanding
Sterilization	• **Fear of failure of sterilization:** ANM in Saharanpur corroborated that there have been few cases of unwanted pregnancies after sterilization procedures in the past, resulting in negative word of mouth about this method • **Fear of an invasive method** (*"loha lagna"*): Communal sentiments, especially noted in Muslim interviews, around invasive methods discourage couples from choosing sterilization. The visual and tactile image of such a procedure is also fear-provoking for women

The above associations can be visualised using the following heat map –

Table 14. Heat Map of Associations with Each FP Method

Method	Awareness	Understanding of role & usage	Understanding of mechanism of action	Belief in effectiveness	Known source for procurement	Community acceptance
Withdrawal	**Yes**	**Yes** Pulling out at the time of ejaculation	**Yes** Semen do not enter a woman's body	**Yes**	NA	**Yes**
Calendar	**Yes**	**Yes** Intercourse on safe days only	**Yes** Semen does not enter the body when conceiving is possible	**Yes**	NA	**Yes**
Condom	**Yes**	**Yes**	**Yes** Creates a physical barrier – ensures semes does not enter a woman's body	**Yes**	**Sometimes** Users buy it from local chemists. Free delivery by ASHAs is not known by most TM women users	**Yes** MILs and FLWs advocate for condoms
Antara	**Sometimes** Recognised as 'sui' by some participants across cohorts	**Sometimes** helps in avoiding unwanted pregnancy for three months. BUT technical know-how about when to inject is unknown	**No** Effect of chemicals not understood	**Sometimes**	**Sometimes** Imagined to be available with ASHAs	**No** Fear of adverse health impacts

Method	Awareness	Understanding of role & usage	Understanding of mechanism of action	Belief in effectiveness	Known source for procurement	Community acceptance
OCP	**Yes** Known as pills by some participants across cohorts	**Yes** Has to be taken daily	**No** Effect of chemical not understood	**Sometimes** Especially for users of OCP themselves	**No** Imagined to be available at chemists', users buy from chemists	**No** Fear of infertility and side-effects
Chhaya	**Rarely**	**No** When to be taken remains a question	**No** Effect of chemical and comparison with OCP not understood	**No**	**No** Imagined to be available at chemists'	**No** Fear of infertility and side-effects
ECP	**Sometimes** Known as '72 hour pill' across cohorts	**Yes** Kills the egg inside a woman's body	**No** Effect of chemical not understood	**No** Stories of getting pregnant despite ECP consumption, especially in current TM users	**Yes** *(In the select cases where knowledge or use of ECP was mentioned)*	**No** Fear of infertility & promiscuity
IUCD or Copper-T	**Yes**	**Sometimes** Device inserted to 'block uterus'	**Yes** Physical barrier between semen & uterus	**Yes**	**Yes**	**No** Fear of excessive bleeding & infertility
Female sterilization	**Yes** Known as nasbandi across cohorts	**Yes** Surgical procedure 'tying tubes'	**Yes** Physical barrier between semen & eggs	**Sometimes** Stories of failure heard across cohorts	**Yes**	**Sometimes** Widely accepted in Jhansi, rejected in Saharanpur
Male sterilization	**No** Only a very few husbands are aware of this method	**No** Surgical procedure for those who have heard about it	**No**	**No**	**No**	**No**

Hence, the common themes noted for modern methods are – **(a) fear of failure, (b) fear of negative impact on health, (c) lack of understanding of source of procurement, and (d) limited depth of knowledge even in cases where awareness of various methods is found.**

India's FP policy and program have been focused on enhancing access to an expanding basket of choice of contraceptives. Still, it is found that the susceptibility of clients, of the community and to a great extent of the FLWs to experiencing doubtfulness, lack of adequate or accurate knowledge, fear, and subsequent rejection of modern methods continues to persist. On the other hand, the above findings showcase a relative ease of acceptance when it comes to trusting, understanding, and administering TM.

Here, a key question arises – **What leads to the above misconceptions, why is there a knowledge gap when it comes to modern methods? And what is the reason that TM seems to enjoy acceptance and adherence with such ease?**

KEY PROGRAMMATIC IMPLICATIONS AND RECOMMENDED ACTION FRAMEWORK

This section maps the potential interventions for the state's FP program that could be looked upon by GoUP– focused on planning, IEC programmes, monitoring, and training of resources.

Institutional Mechanisms

This sub-section sheds light on study implications noted with respect to the managing and monitoring of FP programs at the FLW level of the health system in Uttar Pradesh.

Table 15. Summary Table of Institutional Mechanisms Noted

Mechanism Noted	Outcome
ASHA-ANM relationship of limited communication	• **Infrequent touchpoints for reinforcement of information of FP methods** (mechanisms, benefits, side-effects) **between ASHA and ANM.** • The ANMs often do not know that at times ASHAs tend to reinforce use of TM in addition to MM counselling and advocacy • **Overall, the absence of a regular mechanism to monitor the quality of on-ground counselling by ASHA is noted**
Lack of a consistent compendium of information available with ASHAs interviewed to counsel clients on Modern Methods	• **Limited retention and retrieval of vital technical information** related to FP methods[29]. • This often leads to PARTIAL or INCORRECT knowledge dissemination during client counselling
Lack of priority given to FP training. Discussions are ad hoc and usually during the monthly meetings	• **Limited opportunity for feedback and monitoring** of on-ground processes and FP implementation during monthly review meetings – where the focus on FP is scarce and inconsistent

Based on the interviews with FLWs, it can be said that the ASHA–ANM share a relationship of limited communication. While ANMs are more 'educated' and trained by the program itself, dissemination of this knowledge to ASHA is limited, who are the first health system touch points for the clients. This also results in limited transparency between ASHAs and ANMs about on-ground counselling. For instance, in Saharanpur, ASHA validate the use of TM to clients while ANM denies the use of TM in the district, or any knowledge pertaining to TM within the universe of FP methods. Out of all the districts covered in this research, the only exception remains Jhansi, where ASHAs and the ANM frequently sit and talk at the Anganwadi about their daily work. However, FP is not a priority in such discussions.

There is a lack of standard/consistent information on modern methods for ASHAs to refer to while counselling clients in the districts visited. ASHA training is erratic (especially since COVID) – and FP is not a priority of such discussions, especially the monthly meetings. Further, tools like ICE posters, medical eligibility criteria wheel, etc. have not yet reached the ASHAs interviewed in this research. They often make notes in their diaries during trainings, but have limited chances to refer back to them. Through time, ASHAs knowledge also starts building on hearsay from the community – noted in their focus on side-effects of modern methods while speaking about them with clients. Transition of knowledge is also based on a fear of rejection from the community upon strong advocacy of modern methods. A number of gaps in the knowledge of ASHAs are hence noted – for instance, the mechanical and medical difference between OCP and Chhaya (hormonal v/s non-hormonal) is not known by FLWs.

Hence, **training of FLW needs to be technical in nature, but also beyond that to ensure quality of care:**

- Training on **community mobilisation** (Saas-Bahu-Pati Sammelans[30], under MPV; other ways can also be explored for such mobilisation, for instance, during ANC vaccination gatherings at Anganwadi's)
- **Counselling techniques for contraceptives** (for instance, how to remember days of Chhaya pills, differentiating between mechanism of Chhaya and OCP for clients, etc.)
- **Addressing myths and misconceptions** (especially on-going health and quality related fears attached to modern methods)
- Consistency in technical knowledge through refresher trainings using alternative means of information dissemination for ASHAs

[29] For instance, most ASHAs interviewed did not know that Chhaya is a non-hormonal pill, compared to OCP

[30] In Pakistan, for instance, female and male community male mobilisers were trained raise awareness about IUD services, using door-to-door visits and voucher distribution for incentivization under the Suraj Project. For further reading, refer to Azmat et. al (2016)

Service Delivery – Counselling and Service Provision from the System's End

This sub-section elucidates how service providers disseminate FP service delivery; their perceptions around various contraceptive methods (a factor possibly impacting choice-based services). It taps into the challenges surrounding service delivery, based on motivational, capability and opportunity-based factors.

Table 16. Summary Table of Key Service Delivery Factors Noted

Factor	Mechanism	Outcome
Motivation	Propensity of ASHA to give information that will be acceptable to community	**Tendency to promote TM when facing resistance to MM**
	Resistance of the ASHA to provide solutions with KNOWN or POSSIBLE negative health outcomes	Tendency to **AVOID promoting complex MM or not provide complete information about side effects** - MM which have known side effects related to physical distress or hampered menstrual cycle (causing either health issues or messing with fertility)
	ASHA's resistance to approach and engage with communities different than hers	Instances of selective counselling on FP, where **vulnerable communities often get left out** – some of these communities being Muslims, Tribal communities, and Lower castes.
Capability	ASHA will be more familiar with method which she has personal experience with	**Proposition of TM or condoms only** (among the basket of modern methods) for all women, but especially those at P0 and P1
	Limited understanding of new methods, to be able to pass on information	Motivated to share information known with surety – Antara and Chhaya counselling take a backseat
	No intervention at P0. ASHA pushes for first pregnancy. First exposure to women at the time of ANC	Newly married couples often do not enjoy health system's touchpoint for gaining information on modern methods
	High emphasis on spacing, not on delaying at the P0 stage	At P1, ASHAs disseminate information about the importance of spacing – advocating for condoms, OCPs and IUCD more, Antara and Chhaya less
Opportunity	Community resistance to ASHA from 'lower' sociocultural background and education	**Limited trust on information and methods given/ recommended by ASHA.**

From ASHA and client interviews it can be said that ASHAs display some motivational and capability biases during FP counselling. They display a propensity to give information that will be acceptable to the community for fear of rejection. This translates into validation, or at times promotion of TM – ways they have personally used and have not heard negative reviews about. Further, 'complex' modern methods and those with known side-effects take a backseat – including Antara, Chhaya, OCP and IUCD. For instance, Antara is associated with on-going heavy bleeding, amenorrhoea, alteration in menstrual cycle and weight fluctuation – only a very few ASHAs are able to advocate this method with confidence and complete knowledge of its mechanisms.

Further, ASHAs are only able to penetrate information about MM in communities to which they belong – 'other' communities including Muslims, tribals and lower castes often remain distant, marked by difficulty in penetration and lack of communication platforms. This is also true for the clients, who at times do not trust ASHAs as figures of health-related information, based on their education level and 'lower' socio-cultural background.

Finally, ASHAs carry limited knowledge about MM. For instance, the chemical mechanisms of OCP, Chhaya and Antara are not known to ASHAs. Questions including, how do they work, which body area does the chemical impact, etc. remain unanswered. Such technical information becomes especially important in the face of a learned and educated population[31].

Client Attitudes and Motivations

When understanding the perspective and decision-making undertaken by clients, it is critical to have an overview of –

- The priorities of clients at various stages (in this case seen to differ by parity),
- The comprehension and experiences of the 'basket' of choice' for participants,
- The triggers and barriers for traditional and modern methods of contraception, and
- A comparative understanding of the choice-making between the two.

Within the basket of modern contraceptives, sterilization[32], condoms and OCPs are the most known and used[33] by participants. Let's look at this section through beliefs and modern methods and TM separately, then bring them together for a comparative understanding.

[31] This is to say that clients are able to trust TM because they understand the 'scientific' mechanism behind them. Parallel mechanisms of modern methods remain a mystery – hence rendered as untrustworthy

[32] While users were excluded in this research, most participants are aware of this method. This especially reflects in the difficulty faced in recruiting modern method users in Jhansi – a high sterilization zone. According to Eweling et. Al (2021), this follows our historical legacy of promoted and forces sterilization to control population growth

[33] Current modern user cohort participants only

Exploring points of intervention – Where and how do client priorities vary?

One key question that emerges from this research is, **when can clients be approached?** To answer this question, let's look at the various factors at play at different parity stages –

Table 17. Mapping Interplay of Individual, Social and Systemic Factors at Different Parity Levels

Parity	Fear of risk of pregnancy for couples	Normative pressure of pregnancy	Programmatic intervention	Implication
During P0	**Least** • Couples want to delay for the first 1-2 years of marriage with limited or no avenues to seek information on FP, despite wanting to delay • Unplanned pregnancy is acceptable • Difficulty communicating wish to delay to MIL and elders	**Highest** Mothers-in-law and 'society at large' encourage conceiving	**Least** • No interaction with ASHA/ ANM about FP methods at this stage • Rather, sometimes ASHAs encourage pregnancy, asking for 'good news' Absence of nayi pehel or shagun kits, and saas-bahu-pati sammelans noted across interviews	Limited knowledge about modern methods due to lack of sufficient touch-points– tendency to rely on TM and condoms (among the basket of modern methods)
At P1	**Moderate** • Spacing becomes an important goal based on the financial and health capacity of the couple • Women can communicate that they do not want another child soon	**Moderate to high** • MCH prioritized up to 1-2 years • MILs suggest TM for spacing, some also encourage use of condom	**Moderate to high** • First interaction with ASHA at the time of ANC – here the focus is mother and child care • Sometimes ASHA provides information about spacing at this point in time, encouraging women to use condoms, pills, or copper-T. • She explains in detail the options available, the mechanism, benefits and side effects of methods, based on her understanding of the prioritization of methods. However, clients do not report in-depth conversations with ASHAs about FP when pregnant – they remember traces of such themes in their limited interaction with ASHAs	Since the risk of next child is at the peak at this point – information about modern methods may prove to be encouraging[34] However, 'engagement' with technical knowledge of a given methods remains limited, only surface information on how to use a method is provided

[34] Noted in a few current modern method user stories, who were previously using TM

Parity	Fear of risk of pregnancy for couples	Normative pressure of pregnancy	Programmatic intervention	Implication
At P2	**High** • Fear of a third pregnancy, since it is not cost effective for many couples • BUT avoid abortion – seen as a sin (God's will) Opportunities for intercourse reduce with increased child responsibilities and limited space in joint families	**Moderate to high** • Gender skew of children & achievement of family 'completion' becomes the focus (preference of 1 daughter-1 son, or 2 sons). This pressure is mostly noted from some MILs and husbands • Further, in a few cases, a family competitive environment is noted, where the *jethani* has 2 sons	• Sterilization is focused more than any other methods, since limiting becomes the aim of the health-system	Couples display a tendency to continue using their current method of choice in the future – largely TM and condoms. Some of them express decision of undergoing sterilization
At P3	**High** • Fear of fourth pregnancy – sterilization preferred (in Jhansi, Mirzapur) • Reduced frequency of intercourse – busy raising children • EXCEPTION: Muslim population – where ideal family size is 3-4 children	• MIL and Bhabhi become an example of successful sterilization in Jhansi • In Saharanpur, widespread negative word of mouth about sterilization exists. Hence, on-going method of choice is continued	• Same as P1, the priority focus here is mother-child health and nutrition • At this stage, ASHAs inquire if clients want to use spacing or limiting – sterilization is advocated in later cases	Same as P1, engagement with modern methods remains low.

From the findings of this study hence, **<u>two key points of intervention emerge</u>**:

- **P1 stage, where clients carry a fear of pregnancy** during the two-three years that follow the first pregnancy, **and ASHAs interact with clients of ANC** and are able to speak about the needs and means for spacing
- **P2 stage, where especially older, female clients tend to be certain about having achieved family completion,** but engage in inconsistent use of contraceptives, due to lower perceived risk of fertility, and the desire to delay sterilization in case there is a need to bear more children (i.e. if they lose an existing child)

This understanding brings us to the specific challenges to the uptake of modern methods, and enablers to the uptake of TM noted in client attitudes, motivations, awareness, and in-depth knowledge.

Barriers to Adoption of Modern Methods - Why are these methods not being adopted?

Participants display on-going lack of in-depth awareness and fear of side effects and health issues with different short and long-acting contraceptive methods[35]. Commonly held fears include bleeding, alteration of menstrual cycle, infertility, pains, weight fluctuations, dizziness.

Table 18. Key Client Barriers to Uptake of MM

Factor	Mechanism	Outcome
Motivation	• No effort or interest was made to gather knowledge about MM • No external nudge to encourage exposure and/or exploration	Lack of knowledge of benefits associated with system – for instance, free condoms, incentives for injectables, etc. not known by most participants[36]
Opportunity	**Limited touchpoints for exposure to MM information**, resulting in a lack of knowledge of effectiveness/efficacy	**High dependence on ASHA who is selective in information dissemination**, as noted above. Even lesser opportunity to absorb information related to MM and engage with their mechanisms, benefits, procurement, and incentives
	Environmental clutter about MM - **negative experiences and word of mouth**, bodily changes, etc.	Absence of trust on MM – easier to write them off as 'external' and adulterated methods.
	General conception of chemicals as harmful – **Distrust on quality**	Based on negative word of mouth, distrust on the quality of products and services
	Lack of understanding and no contextual understanding of rationale for 'basket of choice'	There is **no schema/framework to evaluate appropriateness of MM to respective life stages, needs, bodily requirements, and other conditions** (for instance while the medical eligibility criteria wheel has been adapted from WHO, its use remains absent, as found in the interviews). A cognitive load is noted whereby it becomes difficult to map and articulate all methods for oneself[37]
	Lack of mechanisms for redressal and resolution in the face of bodily changes due to intake of modern methods	Easier to write MM off as 'external' and adulterated methods.
	External locus of control with the use of MM – seen as outsider intervention	**Clear attribution of unwanted pregnancy with MM failure** – sign for couples to reject MM completely
Capability	**MM associated with high procurement costs**	Involvement of money and physical labour in procurement and use of MM – makes it a less attractive proposition than TM that is usable free of cost
	Condom as an additional layer of protection from possibility of unwanted pregnancy	**Larger basket of choice of MM remains unexplored**
	Inadequate or inconsistent or incomplete knowledge of MM	**Decision-making is undertaken based on limited knowledge** and therefore an inaccurate comparison

[35] Also reported by Eweling et al. (2021)
[36] Especially those who are currently using TM
[37] This load hence, remains true for both clients and ASHAs, as noted above. We will unpack this further in the coming sections of this report

Triggers for Adoption of TM - What is the reason for choosing TM?

The following table encapsulates, yet again, the key reasons why couples are adopting TM of contraception over modern methods – providing an explanation for the rising TM uptake in Uttar Pradesh.

Table 19. Key Client Enablers for Uptake of TM

Factor	Mechanism	Outcome
Capability	**High technical know-how of how fertility works.** That is sperm x ovum interaction, implantation, and relationship with menstrual days.	High technical knowledge of TM mechanisms – they are easier to visualise, hereby the mechanism of effect and action makes sense
Opportunity	**Positive word of mouth** about use of TM in the immediate vicinity	TM becomes a trustworthy method – wherein women in the social network become a role model for FP behaviour
	No financial or labour costs are involved in TM	This makes TM a more attractive proposition than MM
Motivation	Involvement of inter-spousal communication and understanding for the use of TM	Sense of *'apnapann'* with TM – offering women a **sense of achievement and control over contraception and her relationship with the husband**
	Internal locus of control for use of TM - greater familiarity with own role and actions in implementing	High trust in effectiveness of method Becomes **shameful to admit failure** in cases of unwanted pregnancies – reducing the possibility of communication about TM negative use case. Further, couples blame themselves for failure – having **scope for using TM 'right' the next time** – with more caution, care and discipline
	Established success stories of effective use – through own experience or experience of a trusted individual	No reason to explore or invest efforts into any other method if the current one is working effectively.

These findings bring us to a comparative cost model of TM and MM, elaborated below.

'Cost' Comparison between Traditional and Modern Methods – What is the 'investment' attached to choosing traditional vs modern methods?

The following table compares the cost of engaging with, trying, using and adopting traditional and method methods of contraception. Here, cost is defined as all possible trade-offs, advantages and disadvantages a given method promises to provide

Table 20. TM V/s MM: A User Cost Comparison

Cost type	Understanding of TM	Understanding of MM
Financial	**Free of cost** • A home remedy, no money need be paid for TM use	**Procurement cost** • Absent to low awareness about free condoms and pills, incentives on Antara, etc. • MM is seen as a 'costly' affair for contraceptive practices – that can be easily accessed for free through TM use
Medical and knowledge-related	**Non-hormonal** • Since TM intervene before the semen reaches the eggs, no exchange of chemicals is required • Non-invasive methods • Cognitive ease whereby TM make sense biologically and are easy to understand – they can be simply connected with the concept of conceiving already known (role of semen, eggs, connection with menstrual cycle, etc.)	**Invasive methods possibly negatively impact health** • As noted above for each method • Apprehension about product quality (especially condoms, which are heard of and known to some limited to tear during sex) • Lack of knowledge about processes of MM – where feedback and redressal mechanisms are often absent for bursting myths about MM • Difficult to understand cognitive methods – seen as 'complex' and hence 'unnecessary'. Become cognitively costly– there are no Hindi alternatives for the terms 'Modern methods', or 'Basket of choice'
Locus of control	**Internal – Ghar ke tareeke** • Sense of control on body and fertility for both women and men • Communication with partner in TM usage providing women an attempt to display agency • Exercising discipline and control in withdrawal and calendar metod is spoken about with pride by couples • HOWEVER, some report interference with sexual life – constraints on the frequency of sex (calendar method), 'complete' satisfaction/-pleasure (pull-out method). These couples at times use condoms as an alternative to TM (especially during unsafe days)	**External – *Bahar ke tareeke*** • Since the quality of product and service is not in one's hand, a sense of out-of-control is experienced with MM. This is also attached with limited knowledge about their mechanisms
Social	**Personal matter** • Shame and hesitation in discussing failure of TM because of internal locus of control, hence positive use case become dominant narratives	**Discomfort** • Procurement of MM is associated with promiscuity and fear of judgement • Further, there is low privacy at home for usage/storage of MM. For instance, participants ask – 'how to dispose of a used condom?' • Easy to talk about failure ('external') of MM, hence negative use cases spread quicker compared to TM

From above, it can be inferred that **the information, education and communications on FP and modern methods need simplification**, for both (a) clients – who struggle to understand the mechanisms of the process of MM and report feeling overwhelmed by the amount of information there is to know, and (b) ASHAs – who struggle to clearly disseminate information about modern methods – them becoming a seemingly complex idea to comprehend and remember. Comparatively, TM are 'easier to understand', presenting for lower cognitive load. It is notable that **while the touchpoints and means to engage with modern methods remain scarce and limited for participants, they do not lack the capability to understand technical knowledge. Their elaborate awareness about menstrual cycles, its connection with pregnancy, role of semen and eggs, etc is a testament for the same**. This insight brings us to the final sub-section of this report, answering the question, **HOW SHOULD THE FP PROGRAM DISSEMINATE INFORMATION ABOUT MODERN METHODS?**

[38] Here, no user is a non-user (a term used during quantitative assessment of FP uptake). For the purposes of the following suggestions, every eligible woman and man is a user of some form of contraception and is hence a client of the FP program

OUR STANCE – THE ROLE OF COGNITIVE LOAD IN CONSIDERATION OF TRADITIONAL VS. MODERN METHODS

Cognitive load simply refers to the amount of information that working memory can hold at a given point of time. The **cognitive load theory states that the amount of mental effort required to process information affects cognitive performance.** Helpful in understanding perceptions and individual attitudes towards a given subject matter, for the present research, this theory is identified as a key stepping stone to behavioural change in uptake of modern methods – whereby, the cognitive complexity of modern methods is associated with its limited engagement reported by participants.

Through the analysis of data for this study, it has repeatedly emerged that **it is critical to build the right foundation for Modern Methods as a whole as in the 'basket of choice' available to the client, as well as the distinct role played by each method.**

The process of adopting a method includes distinct steps, **each one impacted by the nature and content of exposure to the methods available,** and the corresponding perception linked to it. These are:

- Exposure to method
- Comprehension of method – name, mechanism of action, efficacy
- Choice-making – assessment of risks/benefits compared with other methods
- Adoption of desired method
- Adherence to chosen method

In an ideal programmatic scenario, it would be expected that each of these stages requires substantial information processing about each available method, the ability to weigh options, and the capability to assess methods against the client's own needs. That is, if the cognitive load attached to MM, and individual methods within the basket is high; there comes an inherent resistance to **consider the basket of choice or specific methods within it. This resistance is likely to be exacerbated if an option with relatively lower cognitive load is available for the client; as seems to be the case with TM.**

Figure 5. A Snapshot of Study Findings Leading to the Understanding of Cognitive Load for MM vs TM

The same is emerging to be true for FLWs who are expected to navigate the cognitive load associated with MM basket of choice and various methods, when involved in the process of transferring information, motivating clients and supplying FP products/assisting in the service provision of facility-based methods.

Thus, a framework is required for actions or interventions that can enable clients to engage with the information around MM through each of the stages listed above that is – to map different methods for themselves, based on their needs and the benefits a method has to offer; encourage consideration and active information seeking around MM; and finally choose and adhere to a method of their own free will. Simply put, the conversion of (accurate and correct) information related to the MM basket of choice, and information about the various options into long term memory is required. Mapping the key parameters to impact the different types of cognitive load can help create such a framework for positioning the information, education, and communication of modern methods.

Let's look at the various **parameters leading to high or low intrinsic, extraneous or germane cognitive load**, and the underlying implications that can be drawn from them. This is followed by specific actions that can be taken to reduce this load for MM, in some cases based on the manner in which it happens by default for TM.

Part A: Intrinsic Load

Intrinsic cognitive load is the **inherent level of difficulty associated with a given subject matter.** This inherent difficulty may not be altered by an instructor. However, many schemas can be broken into individual 'subschemas' and taught in isolation, to be later brought back together and described as a combined whole.

Table 21. Intrinsic Cognitive Load Factors & Outcomes

Factors	Finding(s)
Perceived efficacy and safety	• While MM are seen as possibly effective methods, the lack of knowledge about their mechanism of action makes TM appear more trustworthy and efficacious. • Widespread notions about the negative impacts of MM on health make them seem as unsafe. • This is furthered by **a low expectation of their quality (product and service both)**
Perceived side effects	• Participants display **on-going lack of in-depth awareness and fear of side effects and health issues with different short and long-acting contraceptive methods.** Commonly held fears include excessive bleeding, alteration of menstrual cycle, amenorrhea infertility, pains, weight fluctuations, and dizziness • Invasive (or chemical) methods are also believed to adversely impact a woman's fertility
Perceived ease of use	• While condoms are easy to use, other methods including **OCP, Chhaya pills and Antara injections are found difficult to use** • Fear around missing one's date of pill/injection looms large since the mechanism of action of these methods is not clear to respondents • Specifically, for Chhaya, users find it difficult to remember and calculate their days of intake • Other methods (IUCD and sterilization) while found easy to use, enjoy limited trust with respect to quality of service. For instance, failure of contraception, excessive bleeding, etc. are feared
Familiarity	• With limited touchpoints to engage with modern methods, participants **feel more familiar with home-based remedies that are within their locus of control** • This is **true even for FLWs,** who are noted to validate and at times promote the method they themselves use because of familiarity and experience with that method. At times, this method is TM

Part B: Extraneous Load

This refers to the **portion of memory taken by processes which are not related to the subject matter at all.**

Table 22. Extraneous Cognitive Load Factors & Outcomes

Factors	Finding(s)
Access to methods	• Participants (especially current TM users) are **unaware about procurement ways of MM.** Most guess that condom and pills will be available at their local chemist shops, but will be costly
Social norms, stigma and cultural-religious beliefs	• TM are believed to require discipline and control which lies within one's hand. There is shame attached in talking about its failure – evident in the way women speak about unplanned pregnancies with the use of TM (taking the blame on themselves). Positive use cases of TM are widely known among participants • On the other hand, MM is an 'external' method – it becomes easier to blame it in case of unwanted pregnancy. Further, certain **elders and communities discourage the use of 'invasive' methods.** • Overall, TM seems to be the more socially accepted method

Factors	Finding(s)
Role of provider	There are notable **gaps in the knowledge ASHAs have about MM**. For instance, the core difference between OCP and Chhaya (hormonal v/s non-hormonal mechanism) is not known by ASHAs. • A **local dictionary of modern methods is missing** which can be used by ASHAs to understand MM in their entirety and explain the same to their clients. For instance, **what is the Hindi translation for 'hormonal'?**

Part C: Germane Load

This is the **portion of the memory devoted to integrating new information**, and the creation and modification of **already existing knowledge and schemas.**

Table 23. Germane Cognitive Load Factors and Outcomes

Factors	Finding(s)
Classification of Modern Methods	• The terms used by both clients and FLWs to distinguish **MM from TM** have distinct imagery associated with them. • **TM is referred to and processed as** *gharelu* or homemade, whilst **there is no equivalent terminology for MM in Hindi**. It is simply referred to as *"baahari"* or "external" methods, inherently placing the methods. • **Further the rationale for the basket of choice is not clearly understood by clients**
Health literacy	• Participants are aware about the relationship between menstrual cycles and pregnancy, the role of semen reaching inside a woman's body, etc. Hence, **a basic biological understanding of pregnancy is carried by most participants**
Decision-making ability	• While inter-spousal communication on intercourse, pleasure and FP is noted across cohorts, the final decision regarding contraceptive usage and intercourse rest with the husbands in most cases
Support systems	• **Women interact with other women** in their immediate proximity (Bhabhi, Jethani, MIL, neighbourhood friends, etc.) to exchange knowledge on contraceptive methods • Health-care providers or **FLWs interact with women at the P1 stage** of their reproductive timeline • **Interaction with technology to gain knowledge on FP methods remains limited** among women • Men interact with their friends about contraception and engage with media (YouTube, Television ads) for information on FP methods

Way Forward and Actionability

From all the findings, insights and learnings of the study, this final sub-section focuses on building a framework of actionabilities to further improve the uptake of MM among married couples in Uttar Pradesh.

The understanding of efficacy, process of usage, and definition of risk are also referred to in idiosyncratic ways, indicating that the method descriptions are rooted in vernacular, colloquial communication between clients and their sources of information. When speaking of adherence to the Rhythm or Calendar method, women often refer to unsafe days as days *jab bachchedaani ka muh khula hota hai, toh beej andar ja sakta hai* (when the mouth of the uterus is open, there is a chance the seed can enter); whilst the cycle itself is described as "*periods/mahina hone ke 6-7 din baad tak nahin karna hota hai* (one is not supposed to "do it" for 6-7 days after the period).

Cumulative Action for Managing Cognitive Load of FP & MM

Finally, this section maps the various points of action suggested for improving the uptake of MM in Uttar Pradesh, highlighting key insights based on current based on institutional mechanisms, service delivery and client attitudes and motivations looked at through the lens of cognitive load theory.

Before diving into some suggestions for managing cognitive load of various MM for clients and FLWs, a key aspect of programmatic intent needs to be addressed. From a policy perspective, "informed choice" is about giving access to information about a variety of contraceptive methods. As per FP2030 commitment, India has committed to **further expand the contraceptive basket of choice; with** progestogen-only pill **being piloted in 2016 and sub-cutaneous injectables and implants already making their way into the private sector.** This implies that FLWs are likely to have a wider range of FP products and services to provide and counsel clients about; whilst clients will have yet more variety to choose from.

Currently, most FP programs around the world and in India, deem the adoption of MM to be successful when unmet need for FP is met by any modern method. However, FLWs have reported making recommendations based on a number of variables like parity, age of the couple, and desired unmet need in terms of delaying, limiting or spacing; and the client's own past experience with using FP methods. Meanwhile, clients seek to understand suitability based on these variables along with potential risks, contraindications, and the nature of decision-making (collaborative or unilateral) between the couple. From a behavioural perspective, when making a decision, clients and FLWs both seek a **framework** within which to evaluate **suitability of a method for themselves.**

In a rights-based context, Senderowicz (Studies in FP, 2020)[39] writes that contraceptive autonomy is not limited to **'informed choice'** alone. It extends to decision-making with sufficient access to a wide range of methods **(full choice)** and taking the decision to use a method voluntarily without barriers or coercion.

From Contraceptive Choice to Contraceptive Autonomy

The question that thus arises in terms of programmatic intent, is not only how to manage cognitive load for individual modern methods of FP, but also to determine **if the program can take a variable approach to cater to clients based on their existing interactions with contraceptive methods**. Part of managing the cognitive load for modern methods includes providing **relevant, accurate, and sufficient knowledge to make an informed decision.** That is over and above providing access to information about one or more methods, to provide for a framework that helps ascertain the minimum basic choice available to a client considering uptake of contraceptive methods. This need emerges in the face of the basket of choice expanding, and each method coming with its own cognitive load.

THE MANAGEMENT OF COGNITIVE LOAD NEEDS TO BE UNDERTAKEN AT THREE KEY LEVELS:

[39] In Contraceptive Autonomy: Conceptions and Measurements of a Novel Family Planning Indicator (2020) by L. Senderowicz. https://onlinelibrary.wiley.com/doi/full/10.1111/sifp.12114

1 **Cognitive load for the 'Need for FP' –** to cater to non-users of any modern methods. That is, to reduce the load by leading with the significance and implication of **both, use and non-use of ALL KINDS of CONTRACEPTIVE METHODS** – modern and traditional.

2 **Cognitive load for sensemaking of the MM choice architecture**
A framework of variables that helps create a minimum basic set of choices that can be made available to a client based on:
- **INFORMED CHOICE – Unbiased information about** multiple options to choose from, and knowledge of benefits and risks of use and non-use
- **FULL CHOICE – Combination of methods** that are accessible to the client, with and without provider intervention; short-term and long-term
- **FREE CHOICE – Combination of methods** from which the client chooses a method without coercion, reversible and irreversible; can be used by the man or the woman, hormonal or non-hormonal and varying possibility of bodily changes after use

3 **Cognitive load for individual MM methods**

Table 24. Recommended Actions for Each Cognitive Load Identified

Suggestions for Intrinsic factors	Suggestions for Extraneous factors	Suggestions for Germane Load
Need to SIMPLIFY To **lower the complexity of modern methods,** different hooks can be used to help clients understand the mechanisms of different modern methods – • **Visual aids** can be utilized to simplify complex jargon attached with MM – • For instance, use symbols for calculation of Chhaya days, use of a simple body diagram to explain which area of the body is impacted by a given MM • **Use of colloquial terms** to speak about modern methods (Antara – sui, for example)	Need to **MODERATE** To reduce **impact of barriers to access and uptake of MM** • **Rebranding of 'adverse' health impacts of MM as 'bodily changes'** that can be tackled by clients. • **Establishment of redressal mechanisms** in case of 'complaints' of adverse health effects, through **education of ASHAs on counselling about effects at the time of method introduction** Focused efforts on **community mobilisation –** for both women and men to initiate conversations on MM in social forums	Need to **MAXIMIZE** It would be necessary to **enable classification of MM** based on an existing understanding of FP methods. The meaning needs to shift from 'external' to another salient feature that **makes for a positive identifier.** It would also be necessary to communicate the basket of choice concept succinctly and clearly **with a key USP** – to help integrate the understanding of 'choice' and how various options cater to different needs. **This would especially need to be done through FLW training and counseling.** It will be helpful to **build on the existing knowledge participants hold about pregnancy and fertility** to bust myths around modern methods and provide focused technical knowledge on the mechanism of effect of MM • For instance, the uptake of Antara injections noted by a few participants took place because of their **comfortable experience of vaccination-based injections with ASHAs**. These experiences can be banked upon to encourage trust in Antara injections. **Hook mechanisms for OCP and Chhaya can be built around women's menstrual cycles** – building connections between menstrual and mechanism of effect of these pills.

What's Next: Action Steps

The findings of this study suggest following potential interventions that could be looked upon by the GoUP to further improve the uptake of modern methods in the state- (a) ASHAs' training should focus around community mobilizing and technical counselling on FP, (b) intervention efforts to be heightened at the P1 stage, (c) informing couples about modern method choices, their effectiveness, side-effects, place of access along with the risks and effectiveness of TM, (d) make modern methods' mechanisms of action simpler for both clients and ASHAs, (e) simpler ICE materials, frequent touch points for eligible couples and multiple opportunities for counselling on FP methods would be helpful for the clients to have a better understanding of their own requirements (f) lessen the impact of barriers to access and uptake of MM by enhancing provider knowledge of MM.

The following actions describe specific approaches wherein cognitive load can be reduced for MM, by leveraging the ecosystem of the client as well as the reach of the FLW:

1. Building on the Role Models from the community – Leveraging the critical source of trusted information

ASHAs can look for role models in the community and cite their references while counselling the eligible women. They can also explore any role models within the women's family or peers who can be of great influence while counselling women on FP about types, use, mechanism of action, benefits, cautions, and user experience of effectiveness and ineffectiveness. Women often share their desires and aspirations about families, health, and well-being with their peers in their social network. The tools of relatability and comfort in connection can be utilised in this manner.

From interviews in the present research with clients, some common figures can be avoided for this reference.
For instance, conversations with mothers-in-law, though present, remain limited to exchange of anecdotal information. They are not seen as relatable figures evoking comfort and trust. ASHAs are seen as 'outsiders' – though sources of information but with limited information and time for discussions on FP. Women (especially young and low parity) also experience hesitation and shyness in approaching ASHAs for an intimate subject matter like intercourse. Further, nurses, doctors and surgeons are associated with fear-provoking visuals and tactile sensations. They are pictured in seemingly complex procedures of IUCD insertion and female sterilization. Examples of forced IUCD insertion adds to their perception as outsiders.

The identification of relatable figures within one's surroundings can **emerge as the key credible source of information for married women. Future IEC programs on FP can utilise these figures as the touchpoint of information dissemination – building comfort, familiarity and relatability with the character.**

2. Improving Male Participation in the FP Program

From a service delivery perspective, **FP is largely seen as a 'woman's issue.'** In some neighbouring countries (Bangladesh, Bhutan, Sri Lanka, Nepal), a more balanced approach to FP promotion is taken, resulting in higher mCPR rates[40].

From FLW and husband interviews, it is clear that the **interaction between female health workers and male clients is limited – marked with hesitancy and lack of relatability**[41]. There is a need for greater male participants – as both enablers and clients planning program. For instance, while MPV advocates for *saas-bahu-pati sammelans*, such community mobilisation activities have not reached the villages of Uttar Pradesh (indicated by its lack of mention by both, clients and FLWs). For instance, female and male community male mobilisers were trained to raise awareness about IUD services, using door-to-door visits and voucher distribution for incentivization[42]. Further, most men interviewed in this study had limited depth of awareness of modern contraceptive methods, even in cases where they were aware of the options available. **Male mobilisers** can be engaged and trained to conduct community meetings on FP. In the context of

[40]For more information, read Muttreja & Singh (2018)
[41]The maximum interaction noted is about procurement of condom, where male clients call ASHAs for 'medicine' and ASHAs are able to understand what is being asked for
[42]Called the 'Suraj' intervention. For further reading, refer to Azmat et. al (2016)

the present study where it was found that **husbands often speak to their friends about contraception, sometimes in pairs, sometimes in groups. Such settings can encourage positive communication on modern methods.**

3. Providing In-depth Information on MM along with Risks Involved in Usage of TM

It has been seen that even users who switch from TM to MM continue to use MM and TM in combination. To cater to the programmatic intent of encouraging users to switch from TM to MM, it **would make sense to** inform couples about MM choices, their effectiveness, side-effects, and place of access along with the risks and effectiveness of TM.

This will help clients critically question the emerging 'user imagery' of the TM user being 'wise, in control, having better collaboration with their spouse, and having the ability to be self-sufficient in finding simple solutions to the pertinent need of FP'. A greater penetration of information of MM will then be possible.

4. Lessons to be taken from TM: Simpler ICE Materials, Frequent Touch Points for Eligible Couples and Multiple Opportunities for FP Counselling

Whilst the cognitive load has been ascertained to be high for MM; it is critical for the program to learn from TM, which showcases an evidently low cognitive load. These lessons can be utilised to prepare easier to comprehend ICE materials for the promotion and advocacy of MM among eligible couples.

- **Articulation and language**
  - Comprehension of effect/mechanism of action
  - Easy to recommend
  - Easy nomenclature – contextually relevant
  - Easy to remember – piggybacked on monthly cycle or process of intercourse
- **Adoption, Implementation and Adherence**
  - Easy to implement – no paraphernalia/equipment/tools
  - Discrete to implement – no external influence to limit usage
- **Control and dependability**
  - Sense of self–confidence, greater agency, independence for women
  - No external intervention needed, less hassle for men
- **Impact on relationships – individual, familial, community**
  - Feeling of mutual control – happy to have a positive relationship
  - Socially validated and endorsed by **known sister-in-law, MIL, friend AND community members**

When speaking to clients who currently use TM, it was seen that men and women have accessible, vernacular references to TM. The methods are classified as *gharelu tareeke* which is "household methods" indicating comfort, trust, and familiarity akin to that placed in home remedies for illness and well-being. Individual methods too, are described by the process of carrying them out such as *paani baahar nikaal dena (expelling the water outside), or asurakshit dinon mein paas nahin aana (not coming close – to the spouse – on unsafe days).*

The understanding of efficacy, process of usage, and definition of risk are also referred to in idiosyncratic ways, indicating that the method descriptions are rooted in vernacular, colloquial communication between clients and their sources of information. When speaking of adherence to the Rhythm or Calendar method, women often refer to unsafe days as days *jab bachchedaani ka muh khula hota hai, toh beej andar ja sakta hai* (when the mouth of the uterus is open, there is a chance the seed can enter); whilst the cycle itself is described as *"periods/mahina hone ke 6-7 din baad tak nahin karna hota hai* (one is not supposed to "do it" for 6-7 days after the period).

This is indicative of the need for similar vernacular understanding of the method usage, effectiveness and any other bodily changes for modern methods. Future campaigns can consider leveraging experiences and comfort of clients when thinking of communication about the overall basket of choice, or individual methods. For instance, *goli* or medicine currently indicates Mala-N, Chhaya and ECP interchangeably. In vernacular, most clients and FLWs selectively refer to them as daily pill, weekly pill and 72-hour pill. Consistency in FP counselling using these mechanisms will allow clients to understand their needs better, assisting them in making informed contraceptive choices.

Table 25. Possible interventions: How can the program learn from TM's low cognitive load? How does it help reduce cognitive load for MM?

Insight	Learning	For client (Y/N)	For FLW (Y/N)
Basket of choice does not exist all at once for clients (or FLWs) - they do not have an easy term of reference. It expands and contracts depending on parity, ability to take FP decisions, recommendations from influencers and FLWs etc.	The *gharelu tareeke* basket makes TM simpler to comprehend and refer as equally viable alternatives. **Need for MM to have an easy term of reference, in order for clients to consider them as alternatives.**	Y	Y
Modern methods are referred to as *'baahar waale tareeke'* making them distant, unfamiliar and therefore less considered than TM	Need to adapt TM's familiarity and ease of reference and referral, both: E.g., *Bhabhi waala tareeka* **to extend a feeling of ownership with MM, rather than that of imposition of an external method.**	Y	Y
There is no clear visualization of the mechanism of action of various methods – leading to apprehension and scepticism.	TM clearly establishes – the inability of semen and egg to meet. **This clarity needs to be articulated and conveyed to clients** for ease of comprehension.	Y	Y

5. Extending Management of Cognitive Load of MM to Training of ASHAs

It emerges that the information disseminated by the ASHA is contingent on her own comfort and knowledge of various methods. Further, most ASHAs have been working in their regions for several years and tend to refer to their cumulative knowledge about FP methods – which includes dated information on the basket of choice.

When it comes to FP, there is a need to conduct more **method-focused** trainings on the various contraceptive choices. Further, the program may consider training on the positioning of TM based on the risks and effectiveness it poses for clients. This should be followed by competency assessments of the ASHA's ability to disseminate information, and assess client needs in a practical, interactive setting

FINALLY, the program could map action against **multiple inflection points** to create a greater positive impact for MM.

The objective should be to eventually create a **sustainable system where the use of MM will not solely depend on creating client conviction through human interactions** with FLWs or other stakeholders of the health system

ENHANCE EXPOSURE
and reduce cognitive load by making communication (advertisement/ packaging/ IEC/ digital medium) meaningful and easy to understand, make sense and describe

IMPROVE EXPERIENCE
by appropriate training to reduce cognitive load for the FLW and empowering them with tools to communicate better with the clients

ENCOURAGE ADHERENCE
by reducing cognitive load and creating conviction among the clients so that MM of future gains client pull

APPENDIX

All information found relevant that could not be included in the report in the interest of volume of information can be found in the appendix.

Appendix A: References

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Appendix B: Deep Dive into Participant Context(s)

Detailed information on the qualitative findings around education, employment, geographical placement, and access to health-care facilities is noted in this section. A short note on the community composition of various districts and villages visited is also provided.

Varied Education Profiles Based on Present Qualitative Study

A general trend of having **access to basic levels of education (primary education going up to 8th standard)** is seen across districts. People ranging from having a master's degree to illiterate people were interviewed. Graduation courses for women include home science, biology, integrated courses. **Some women are currently pursuing diplomas and vocational courses (for instance, beautician courses). This is particularly true for younger women (18-24 years).**

In GONDA, all women and men appeared to have received a basic level of education. Participants' education levels were between 8th standard to BA/ B.Sc. In many cases, the wife was better educated than the husband. There was a mix of women whose parental homes were nearby, or some were from Tier 1 cities like Lucknow, Delhi married in these villages.

In MIRZAPUR, both villages had school and colleges (government and private institutions), offering education up to graduate and post-graduate levels. Participants' education levels differ from having done Masters, to people pursuing B.Ed. to be teachers to husbands having studied till high school and then taking a local job. Most women had studied or had formal jobs (if any) when they were living with their parents, post marriage, most of them quit to take better care of the families.

In JHANSI, all persons in Ammargarh village of Jhansi had received a basic level of education-high school graduate (12th Grade education), given that it was widely available. Furthermore, it was observed that a prevalent trend among males is to attend Industrial Training Institutes (ITI) following the completion of their 12th standard education, or alternatively,

engage in skilled work[43]. **For women in particular, higher education is not easily accessible in one of the study areas in Jhansi, with primary school being available only till 8th standard and further education requiring long distance travel.** This could explain why many women in the village were unable to finish their education. However, despite these challenges, there is **no lack of ambition among the women**, and some have even managed to pursue higher education. It is also mentioned that husbands in the village are supportive of their wives' ambitions, which is a positive aspect for gender parity in education. In another study area of Jhansi, education levels vary, with most people having completed their schooling till the 10th or 12th standard. The **lack of access to quality education is evident, with people having to travel to nearby towns like Babina to continue their studies**. Women in the village particularly, have a lower level of education, with most only studying till 5th or 8th standard. Education till 12th grade is easily available in the villages, and many people have completed basic education, with some pursuing technical courses as well. One of the women, for instance, informed that her children take coaching classes from a teacher near the house at a certain charge.

> *"She (educator) takes Rs. 100 for the youngest daughter, and for my husband's brother's kid, Rs. 200 each"*
> ***- CMW, Current TM User, Younger, Jhansi***

Education levels in SAHARANPUR varied from class 5 to class 12. There was no such division wherein women received less education than men or vice versa. The education status of both men and women in the villages was mostly mixed. However, **no graduation records were observed in the participants from Saharanpur.**

Both Mirzapur and Jhansi present a picture of individuals being able to access a higher level of education compared to those in Gonda and Saharanpur.

Varied Employment Opportunities

Agriculture and allied activities are the primary source of income for the majority of the population in the villages. There are some small industrial sectors, and some people travel to nearby towns and cities in search of employment. Education and skill-building programs, such as ITI's, are helping individuals in some villages to diversify their sources of income and pursue different career opportunities. Migration to other districts or nearby towns is a common phenomenon among the villagers, especially for men in search of better job opportunities. In some villages, there are limitations to employment opportunities, which results in people engaging in farming or working in small shops.

Most women are full-time homemakers, while a very few are engaged in farming and occasional shopkeeping along with their husbands. Women face restrictions based due to the patriarchal set-up of some households, which limits their ability to engage in certain activities and pursue financial independence. However, there is a growing trend of women pursuing formal training in jobs such as parlour jobs and sewing, which gives them a sense of independence through their own earnings. Some women are involved in farming activities and pursuing financial independence through various avenues, such as running grocery stores from home.

> *"I learned the parlour work when I was in class 10th and after inter (class 12th) I learned sewing work"*
> ***– CMW, Consistent TM user, Younger, Saharanpur***

[43] As an illustration, one individual was reported to be employed at a gas agency.

In MIRZAPUR, agriculture and daily wage industries were the major sources of income, with a majority of the population engaged in farming and allied activities. However, there is also a small but significant industrial sector around these villages and a lot of times people travel to Mirzapur or Varanasi in search of employment. In one study area in Varanasi, 'marigold cultivation' and other flora farming was a common source of employment. For another study area in Mirzapur, farming on their own lands and contractual labour was keeping people occupied. **A few women were found to have had formal jobs but had to quit** after marriage as they were not allowed the same level of independence at their husbands' houses. However, they **continue to help in work in the fields**, especially in Varanasi, where flower vegetation is one of the main sources of income.

> *"Here are small shops and people have started small business for their livelihood"*
> ***– Husband, Current MM user, Younger, Mirzapur***
>
> *"Farming, it is hard work, here we have flower picking also, my wife does that"*
> ***– Husband, Consistent TM user, Younger, Mirzapur***

The predominant occupation of individuals residing in the villages of JHANSI was agriculture. However, in comparison to other regions such as Saharanpur or Mirzapur, the **number of farmlands observed was lesser.** It is hypothesized that over time, the villages have diversified their sources of income, including private and government jobs, and are not solely dependent on farming for their livelihood. Given the prevalence of a basic education level and the **focus on skill building and entrepreneurship training received in ITIs**, the profile of employment varied from individuals being employed in government jobs, to being a salesman in tractor shops, to working as a DJ, and many establishing panipuri stalls. Additionally, women were also observed to be actively participating in farming activities and were motivated to pursue financial independence, even after having children. Some participants cited that they are either running a grocery store from home or are planning to start a beauty parlor as a means of generating income or are keen on continuing studies or pursuing other career opportunities. These examples illustrate the resilience and determination of women in the community to explore various avenues for financial empowerment.

> *"Everybody in my area works into tiles, including me. Some people works in offices."*
> ***- Husband, Current MM user, Jhansi***

Employment profiles in SAHARANPUR also varied with husbands being engaged in jobs that they found according to their skillset. Jobs mostly belonged to the informal sector and were not restricted to specific sectors. A few women from Saharanpur said that their husbands had been migrating to other districts like Roorkee in search of jobs that they were not able to get in the villages. Formal training in parlour jobs and sewing were undertaken by currently married women of the district which gave them a sense of independence by way of their own earnings. Few women also had their husbands working in factories in the same district. Due to their jobs, it was difficult for them to find time for their families and the jobs required them to work for long hours.

In GONDA, both blocks Ithiathok and Colonelganj have sugarcane and wheat growing patches – most men were employed in farming. Other men were into skilled jobs like electricians, selling food like burgers and chow mein, some were into labour. Most women of the village are into stitching and knitting whereas some men are into skilled jobs like electrician, selling food etc. who go to nearby villages for jobs on daily basis and are back at home by evening 4pm.

> *"I work on the farms – wheat and mustard, for instance, I look after them. Currently, maize is sown. I get very less time for myself"*
> ***– CMW, Consistent TM user, Older, Gonda***

The prevalent occupation of farming and allied activities, is a primary source of income for the majority of the population in the villages. This may result in families having a larger number of children to help with farming activities and to ensure a secure future for the family. However, with the **increasing trend of women pursuing formal training in jobs such as parlour jobs and sewing, it could also lead to a growing desire among women for greater control over their reproductive choices and the size of their families, as we will note in this report.**

> *"Yes, I want to open a shop. I want to open a beauty parlour."*
> ***- CMW, Current MM User Younger, Jhansi***

Additionally, the limited employment opportunities in some villages and the need for people to migrate to nearby towns and cities in search of better job opportunities may also impact FP. This could result in families having **fewer children as they seek to provide better education and opportunities for their existing children.**

The patriarchal restrictions women face in some households may also impact FP decisions. Women who are not allowed to engage in certain activities or pursue financial independence may have less control over their reproductive choices and may have to rely on their husbands or other family members for support.

Overall, the adoption of modern methods for FP could be influenced by a range of economic, social, and cultural factors, and may vary across different villages and regions depending on the prevailing occupation, education level, and gender dynamics.

Geographical Placement and Access to Health-Care Services

Analysing the living conditions and access to basic amenities in various villages located in different districts of Uttar Pradesh, India, it can be observed that **while some villages have better access to facilities such as schools, water supply, electricity, and healthcare, others face challenges due to their remote locations and lack of public transport options. Women in these villages often face restrictions on their mobility and the lack of access to basic amenities and resources** has resulted in a restricted lifestyle for them.

In UP, it is common for the nearest sub-centre for a village to be at a distance of 5-6 kilometres, as these sub-centres cater to multiple 'panchayats' or gram sabhas. That is, it could take significant logistical investment to be able to visit the sub-centres, making communities all the more reliant on the outreach work undertaken by the ASHA.

Both villages in GONDA were far off from highways and in quite interiors. However, provisions of schools, water tanks, streetlights, cable, and 24*7 electricity were some of the facilities highlighted by the women. At times villages face electricity cuts and limited water supplies[44]. Both the villages had school facilities, for students up to 8th standard. However, women expressed that the **quality of schools, education and facilities is not up to the mark.** Many women sent their children to private schools outside the village premises for better quality of education. In Ahiraura, there was no PHC – the **nearest PHC being 5 kms away from the village.**

> *"Our village is good, the roads are better now, we have electricity, hand pumps in our home. Panchayat bhavan and government school have also been made"*
> ***– Husband, Consistent TM user, Younger, Gonda***
>
> *'In corona times I was sending my kids to government schools. No because that school was open at Corona time as it is nearby so they used to college students to teach and after Corona I just shifted my children to private. As a school was nearby whenever my kids used to have time they used to come home every time and they didn't even listen to the teachers because they also from our village only. Now, they have some fear.'*
> ***- CMW, Current MM user, Younger, Gonda***

In JHANSI, one of the village is located on a highway which connects it to Jhansi City (around 50 kilometers away). There seems to be a lack of public transport options in the village, which makes people dependent on private vehicles or other means of transport for commuting. The absence of auto, tempo and public conveyance in the village was also observed. Another village's geographical location and placement, along with its limited access to highways, healthcare facilities, and commercial establishments, suggest that it is an isolated and underdeveloped area. In comparison to the first study area, the village does have autos and tempo trucks that regularly ply every 5-10 minutes, which in turn helps in easing commuting issues. However, the lack of access to basic amenities and resources has resulted in a restricted lifestyle for women, with most of them being confined to the realm of the domestic. Further, mobility within the second village is considerably high, with people commuting alone within the village and using taxis to travel outside the village. However, **women face restrictions on their mobility, with most of them needing permission from their mother-in-law or husband to go out[45].** The primary health centre in first village is located 2-3 kilometres away from the villages and there are two community health centres (CHC) within a doable distance of 6-7 kilometres. Additionally, the presence of one hospital, CHC within 8-10 kilometers was noted. The presence of six ASHA workers in the village also ensures basic healthcare needs are met. It is also mentioned that the villages are spread out and the distance to the nearest township is around 50 kilometers. However, access to healthcare facilities is limited in the second village, with only one ANM and ASHA serving a population of 2222 people. There is one sub centre which is a health and wellness centre centre, and is centrally located in the village; however, here one ASHA position has been vacant for the past 8-10 years. Private doctors are available, and the CHC hospital is located 9kms away from the village in Babina.

> *"I think the government hospital is around 15 kms"*
> ***- CMW, Current MM user, Younger, Jhansi***
>
> *"We have a private doctor here. He is a private doctor so he takes fees. I do not know the name but all people called him Bengali. If anyone has serious problem then he will go to the block Babina. it is block government hospital"*
> ***- CMW, Current TM user, Younger***

[44] For instance, during our visit, one village had an electricity cut for 48 hours – this also impacted the water supply in the village
[45] During fieldwork, the researchers faced some catcalling from men in the village. This environment is deemed 'unsafe' for women, allowing MILs and husbands to further restrict their mobility.

The geographical locations of both villages in SAHARANPUR can be said to be well-connected to the road network, developed housing and access to commercial establishments. The first village is a fairly populated village with developed and semi-placement developed housing, small shops for daily needs, a developed sub-centre while the second village is farther from the central city compared to Asanwali and was more densely populated – with housing closer to each. Here as well, small shops and developed road connectivity within and outside the village was observed. In the first village, the sub-centre is a walking distance for the villagers. A private doctor sits right outside the village – within walking proximity. In the second village, the sub-centre is a new construction – which has come about in the tenure of the recent Pradhan (Sarpanch's husband) –a PWD worker. Here, healthcare access is a little far away, who have to either go to their block-level health facility (Behat), or to Saharanpur for consultation. For day-to-day issues, one local private doctor is present in the village.

> *"We have a PHC nearby, it is 5-6 km from my home. There is an ASHA from the village and an Anganwadi"*
> ***– CMW, Consistent TM user, Younger, Mirzapur***

In villages where healthcare facilities are far away, people may have to travel long distances to access medical care, which can be a major challenge during emergencies. The **lack of healthcare professionals in some villages may also affect the quality of care provided.** However, in villages where healthcare facilities are easily accessible and healthcare professionals are available, the quality of care is likely to be better.

Community Composition of Districts

The community composition of villages may have implications for selection and rejection of modern contraception methods. **In communities where religious and caste divides are prevalent, access to healthcare and reproductive services may be limited, and cultural norms may discourage the use of modern contraception methods.** In addition, gender norms and power dynamics within these communities may also play a role in shaping women's ability to access and use modern contraception.

GONDA's first village demonstrated a predominantly Hindu population with an all-pervasive observation of casteism[46], while the second village highlighted a dominant Muslim community. In the case of JHANSI, the first village has a religious composition that is predominantly Hindu, with a minority Muslim population. The second village too, has a dominant Hindu population, with a small tribal population. Religious diversity in SAHARANPUR signified Hindu dominance in the first village and Hindu-Muslim co-existence in the second village of Saharanpur. This village is divided into two parts, geographically – one where the Hindus reside, another where the Muslims reside. A dominance of the Hindu community is also noted in MIRZAPUR.

The presence of a dominant religious community, noted across districts, can have implications for access to healthcare services and FP methods. **Underserved and vulnerable communities, based on caste and religious divide experience inequalities in access to healthcare services.**

[46] For instance, the FLW in this village is seen as an untrustworthy source of health-related information because she belongs to a 'lower' caste.

Appendix C: Detailed Note on Work Context of FLWs

This section provides a detailed understanding of the background of the health system work FLW engages with on a daily basis.

Table 26. A Glimpse of Geography Covered by Each FLW

District	FLWs	Village size/population covered***
Saharanpur	ANM	1543 houses, where the population is approximately 10,000 people
	ASHA	227 houses
		245 houses, whereby the population is 1200
Mirzapur	ANM	7 to 8 villages in 4 village councils, whereby the population is around 13,000 people
	ASHA	135 houses
		Approximately a population of 840
Gonda	ANM	7981 population
	ASHA	102 houses
		261 houses- Approximately a population count of 1814 people
Jhansi	ANM	4 villages
	ASHA	Approximately a population count of 1145 people
		210 houses – Approximately a population count of 1100 population

*** As reported by participants

Proximity To Work

All the FLWs live within their community of work, a function of assignment keeping in mind their residence. Hence, they are close to the clients' houses, whereby the distance varies from 200 meters in some places (for instance villages in Jhansi) to 1 km (for instance in Saharanpur). They interact with women from their village to any or all issues their 'client' might be facing.

In Saharanpur, ASHA talked about travelling up to 18 kms for the monthly cluster meeting – it becomes an all-day task. Another ASHA in Mirzapur talked about being tired from the travel the job requires and how during summers, it is difficult to travel on foot to reach the sub-centre. In Gonda and Jhansi, however, it was noted that the distance was not too much and could be easily covered by autos (tempo) and that was their mode of transit available to visit the sub centres.

> *"We attend meetings and cluster meetings are conducted once a month and for that, we have to travel 18 km apart from where meetings are conducted, and immunization are."*
> ***- ASHA, Saharanpur***

General Understanding of Role in The Health System

The FLWs see their role as incredibly important in the community as they oversee crucial healthcare services, such as health education, preventive care, and the treatment of common ailments, and are frequently the first touch-points clients interact with from within the 'health system'. ASHAs are often involved in door-to-door services, helping them gather demographic and health data about all villagers. For instance, once a woman registers herself pregnant with the ASHA, their interaction and involvement increase in their client's life. Every aspect of the women's health - regular checkups, medicines, deficiencies, delivery, ANC are all taken care of by ASHA. ANMs are also involved in these interactions when clients inquire about methods of FP.

> *"We do everything about FP on sub-centre and there is an organisation named BHND in that also we do the FP related things. All FP things are available there"*
> ***- ANM, Gonda***

ASHA's are also very involved with child healthcare in the community and talk about how important it is to reach out and cover everyone's immunization[47]. They express how difficult it is for them to track people for their second doses but since it's their job, they try to do it as diligently as possible. It is notable here that **FP is often not a program they mention spontaneously when discussing their job description.**

[47] IMR and MMR becomes a key focus of the FLWs work in rural Uttar Pradesh, observed in a daily meeting between ANMs and ASHAs at the sub-centre in Ammargarh, Chirgaon, Jhansi


ओ.आर.एस.(ORS)- जिंक कार्नर
ओ.आर.एस.(ORS)- जिंक कार्नर
आइए जानें, दस्त में ओ.आर.एस. का महत्व
ओ.आर.एस. का घोल बनाना आसान, पिलाना आसान
दस्त के दौरान एवं दस्त के बाद माँ का दूध, तरल पदार्थ एवं ऊपरी आहार देना जारी रखें।
जन्म से लेकर 6 माह तक के बच्चे को सिर्फ माँ का दूध ही दें
खाना बनाने एवं खिलाने से पहले और मल त्याग करने के बाद साबुन से हाथ धोएं
दस्त के उपचार के लिए आशा या ए.एन.एम. दीदी से मिलें
1 गिलास = 200 मिलि.
याद रखें -
माँ को बताएं कि ओ.आर.एस. का घोल किस तरह से देना है - एक चम्च से बार-बार छोटे घूंट पिलाएं।
यदि बच्चा उल्टी करता है तो 10 मिनट रुककर पुनः फिर से धीरे-धीरे पिलाएं।
साथ में, बच्चा जब भी चाहे स्तनपान कराएं।
4 घंटे बाद :
पुनः बच्चे की निर्जलीकरण के लिए जांच करें।
बच्चे के इलाज के लिए पुनः सही प्लान का चयन करें।
बच्चे को पिलाना व खिलाना (स्तनपान/आहार) शुरू करें।
यदि माँ इलाज पूरा होने से पहले स्वास्थ्य केन्द्र छोड़ दे तो :
माँ को ओ.आर.एस. घोल बनाना सिखाएँ।
उसे याद भी दिलाएँ कि 4 घंटे के अन्तराल में कितनी मात्रा में ओ.आर.एस. घोल दिया जाना है।
उसे इलाज पूर्ण करने के लिए पर्याप्त मात्रा में ओ.आर.एस. के पैकेट दें। उसे 2 अतिरिक्त ओ.आर.एस. के पैकेट दें, जैसा कि "प्लान ए" में बताया गया है।
14 दिनों तक के लिए जिंक की गोली दें।
दस्त पीड़ित बच्चों के साथ निम्नलिखित करें :
अगर निर्जलीकरण हो तो बच्चे को स्वास्थ्य केन्द्र पर इलाज के लिए तुरन्त भेजें।
बच्चे को ओ.आर.एस. और जिंक की गोलियाँ दें। बच्चे को एक जिंक की गोली मितानिन/आंगनवाड़ी के सामने दी जानी चाहिए।
स्वास्थ्य केन्द्र पर जाते समय रास्ते भर ओ.आर.एस. का घोल पिलाते रहें।
माँ को दस्त से होने वाले खतरों के लक्षणों के बारे में परामर्श दें।
माँ जब स्वास्थ्य केन्द्र से वापस आती हैं तो फालोअप करें।
माँ को दस्त के लिए घर में इलाज के 4 नियम बताएँ -
1. ओ.आर.एस. अथवा तरल पदार्थ पिलाना जारी रखें।
2. बच्चे को भोजन या स्तनपान देना जारी रखें।
3. जिंक की गोली 14 दिनों तक देते रहें।
4. माँ को समझाएं कि बच्चे को तुरन्त स्वास्थ्य केन्द्र कब वापस करना है।
Bailley

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