Exploring The factor affecting contraception use of eligible couple in Ri Bhoi, Meghalaya

Study Report

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Submitted to: The Hans Foundation

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Executive Summary

This study explores the knowledge, attitudes, and practices surrounding contraceptive use among men and women in rural areas of Meghalaya, focusing on four villages—Amphreng, Amjong, Panbari, and Lum Nongthymmai—under the Amjong Subcentre in Ri Bhoi district. The primary objective is to understand the reasons behind the persistently low contraceptive use in these areas, despite existing awareness, and to identify the socio-cultural and systemic barriers affecting access and acceptance. According to the National Family Health Survey (NFHS), 73% of the population in Meghalaya does not use any form of contraception, one of the highest non-usage rates in the country. This concerning figure served as the basis for our study, which seeks to explore why individuals in these rural communities choose not to adopt contraceptive methods and what factors influence their decisions.

The study employed a cross-sectional quantitative approach, utilizing three distinct structured questionnaires—separately designed for male and female respondents of reproductive age, and a third for health workers, including ASHAs, MLHP, GNMs, ANMs, Lab Technician and Data Entry Operator. The interviews conducted with health workers were treated as key informant interviews to gain detailed perspectives on service-level challenges and systemic gaps related to family planning outreach. The findings reveal that while a basic level of awareness exists regarding modern contraceptive methods, actual use remains significantly low. Key barriers identified among community members include cultural taboos, gender norms, lack of spousal communication, and fears related to side effects or infertility. Among women, social stigma and health concerns are notable deterrents. Health workers, on the other hand, pointed to challenges such as limited outreach capacity, insufficient counselling or community support as constraints in promoting family planning effectively.

The study highlights the urgent need for interventions focused on increasing male involvement in reproductive health discussions, ensuring a consistent supply of contraceptives, and delivering culturally sensitive education through trusted local channels. Furthermore, strengthening the capabilities and support systems for frontline health workers is essential for improving outreach and service delivery. By addressing both demand-side and supply-side factors, this research underscores the importance of a holistic, community-based approach to enhancing contraceptive use. Bridging these gaps is key to achieving improved reproductive health outcomes in Meghalaya's underserved rural regions.

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Chapter-I

1.1 Introduction

Meghalaya, a predominantly tribal and matrilineal state in the northeastern region of India, is home to diverse ethnic communities such as the Khasis, Garos, and Jaintias. The state's socio-cultural fabric is deeply rooted in tradition, where lineage and inheritance are passed through women. However, despite this matrilineal structure, women's autonomy over reproductive health decisions remains limited due to entrenched societal norms, religious beliefs, and gender expectations. With a largely rural population and challenging geographical terrain, access to health services—including reproductive health—is uneven across the state.

A key demographic concern in Meghalaya is its persistently high fertility rate. According to data from the National Family Health Survey (NFHS-5), the Total Fertility Rate (TFR) in Meghalaya is 2.91 children per woman, significantly higher than the national average of 2.1, which marks the replacement level. This places Meghalaya among the top five Indian states with the highest fertility rates, suggesting a lag in demographic transition despite visible improvements in education and awareness in other parts of the country.Further NFHS-5 data indicate that only about 27% of the state's population uses any form of contraception, leaving approximately 73% without contraceptive protection. Contraceptive use is a vital aspect of reproductive health and family planning, particularly in regions where cultural beliefs, social norms, and access to healthcare services intersect in complex ways. In the context of Meghalaya, the use of contraception remains relatively low despite the availability of various methods and government-led awareness programs. The reasons behind this low uptake are multifaceted. Traditional and religious beliefs often discourage the use of modern contraceptive methods. Many individuals, both men and women, fear the side effects of contraceptives such as pills or injectables, often based on misinformation. In several communities, there is a sense of shame or embarrassment associated with discussing or accessing contraception. Additionally, in rural and remote areas, contraceptive supplies may be irregular, and trained health personnel may be insufficient, further deterring consistent usage.Even though women in Meghalaya are household heads in many cases, decision-making around family planning is often influenced by male partners, which can undermine women's reproductive agency. The stigma around contraception also leads to underreporting or secretive usage, further compounding the problem of limited access and awareness.

This study focuses on Ri-Bhoi, a district located in northern Meghalaya that reflects many of these contraceptive use challenges. The research is specifically centered on the Amjong Sub Centre and the surrounding villages under its jurisdiction: Amphreng, Amjong, Panbari, Amdubighat, Lymphuid, and Lum Nongthymmai. These villages are primarily inhabited by rural, agrarian communities with limited access to consistent healthcare services. The study aims to explore not only the knowledge, attitudes, and practices related to contraception among both male and female populations, but also to understand the underlying reasons why many individuals choose not to adopt or consistently use contraceptive methods.

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In addition to direct responses from community members, the research incorporates perspectives from frontline healthcare workers such as MLHP, ASHAs, ANMs, GNMs, Lab Technician & Data Entry Operator. These insights provide valuable information about both the systemic barriers (like supply shortages, workload, and training gaps) and perceptual barriers (such as stigma, fear, and religious or cultural opposition) that influence contraceptive behaviours in the area.

Using a cross-sectional design and mixed-methods approach, the research draws upon both primary data collected through surveys and interviews, and secondary data from official sources such as the NFHS and monthly reports from the Amjong Sub Centre. By bringing together the voices of both users and providers, this study offers a comprehensive understanding of the local challenges and attitudes surrounding contraception in Amjong, Meghalaya. The ultimate goal is to uncover the socio-cultural, infrastructural, and psychological barriers that hinder effective contraceptive use in these communities, and to provide recommendations for culturally appropriate, community-based interventions to improve reproductive health outcomes in rural Meghalaya.

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1.2 Internship Goals and Expectations

As a Monitoring, Evaluation, and Learning (MEL) intern under the Summer Internship Programme 2025 of The Hans Foundation, this internship provided an opportunity to explore the multifaceted dimensions of reproductive health in rural Meghalaya. The primary focus of the internship was to investigate the knowledge, attitudes, and practices surrounding family planning among both men and women of reproductive age in the Amjong Subcentre area of Ri Bhoi district.

One of our core goals was to assess the level of awareness and knowledge of different contraceptive methods among the local population. In addition, we sought to examine the availability, accessibility, and outreach of family planning services in the region, especially in hard-to-reach villages. This was crucial for identifying gaps in both demand and supply that hinder contraceptive uptake. A significant part of our learning involved understanding the socio-cultural and systemic barriers that impact contraceptive use—ranging from myths, gender norms, and stigma to logistical challenges such as limited healthcare personnel and irregular supply chains. By interacting with frontline health workers such as ASHAs, ANMs, and GNMs through key informant interviews, we were able to gain service-level perspectives and ground-level insights into the challenges of family planning implementation.

We also aimed to enhance our skills in field-based data collection, questionnaire design, community engagement, and documentation, using three structured tools tailored for males, females, and health workers. This experience deepened our understanding of rural public health systems, particularly in the context of reproductive health services in Northeast India.

Ultimately, the internship aimed to generate evidence-based recommendations that could support more effective, culturally appropriate, and community-based strategies to improve family planning service delivery and contraceptive acceptance in the region.

1.3 Study Area Overview

Location map

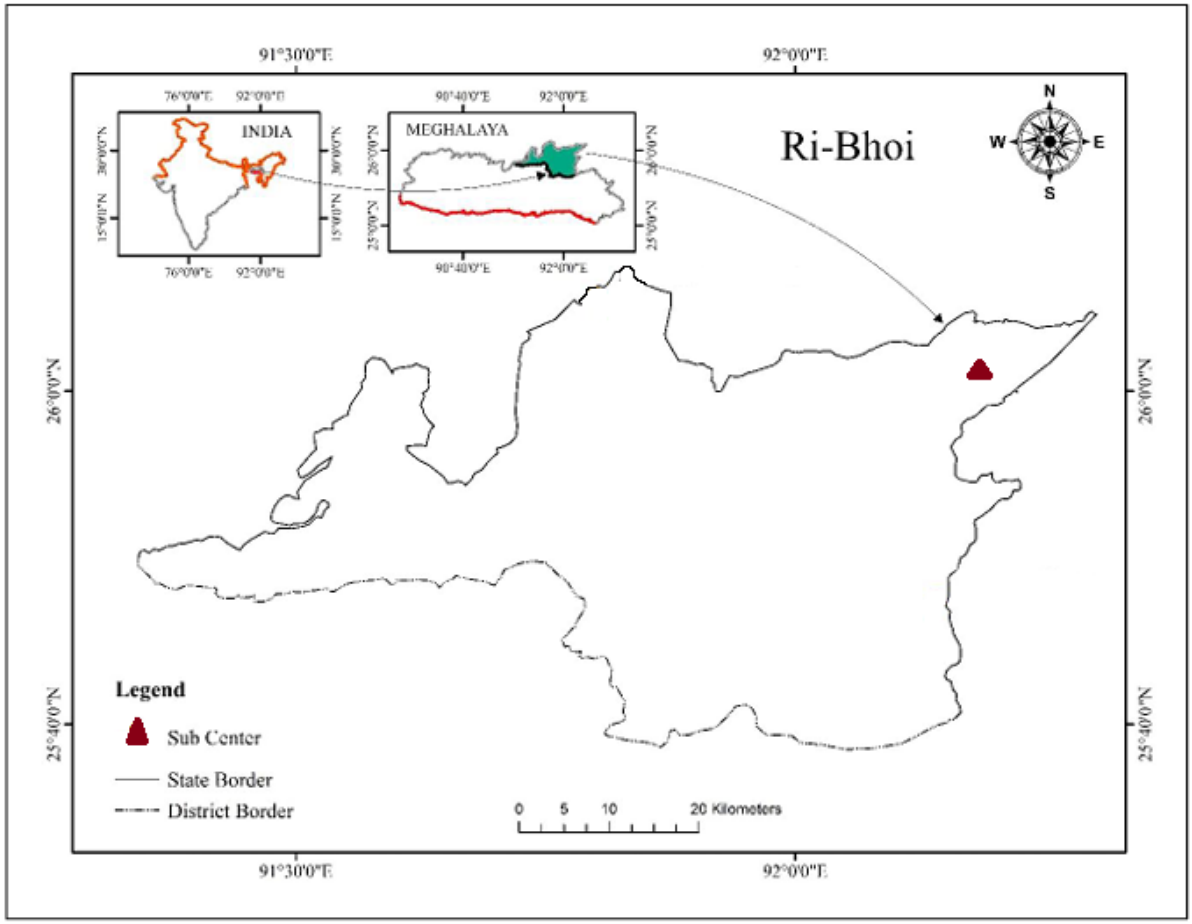

Figure 1: Location Map of the study area

The map highlights the geographical location of the Amjong Sub-centre in Ri-Bhoi district, Meghalaya, which served as the focal point for this study. A total of 13 villages associated with this sub-centre — including Mawpdeng, Umsiang Kraikolam, Nongthymmai Makdoh, Umsiang Maiong, Makdoh, Orlong Shadali, Maska, Amjong, Markhangduba, Panbari, Amdubighat, Amphreng, and Lymphuid — were selected to assess contraceptive use patterns and reproductive health perceptions among tribal populations. Insets show the location of Meghalaya within India and the position of Ri-Bhoi within Meghalaya.

1.4 Organization of the Report

This report is organized into seven chapters, each contributing to a comprehensive understanding of contraceptive use in rural Meghalaya. A brief overview is as follows:

I. Chapter I – Introduction

This chapter sets the foundation for the study by outlining the background and rationale behind choosing the topic. It explains the significance of studying contraceptive use within tribal communities in Meghalaya and defines the key objectives of the research. Additionally, it offers a detailed description of the study area, providing geographical, demographic, and socio-cultural context.

II. Chapter II – Review of Literature

This section explores existing academic and policy literature on contraceptive practices, particularly in rural and tribal settings. It discusses various socio-cultural, economic, and demographic determinants of contraceptive use and highlights previous studies conducted in the Northeast region of India. The review helps to position the current study within the broader research landscape and identifies knowledge gaps it aims to address.

III. Chapter III – Methodology

This chapter describes the research design and methodological approach adopted for the study. It details the sampling framework, tools and techniques used for data collection (quantitative and qualitative), ethical considerations undertaken, and limitations faced during the fieldwork. This chapter ensures transparency and reliability of the study.

IV. Chapter IV – Data Analysis and Interpretation

This chapter presents the core findings of the study using descriptive and inferential statistics. It includes an analysis of the survey responses, highlighting patterns in contraceptive awareness, preferences, and usage among the respondents. The data is interpreted in line with the research objectives to provide meaningful insights.

V. Chapter V – Discussion

Building on the previous chapter, this section critically discusses the major findings by comparing them with existing literature and national data (e.g., NFHS-5). It identifies recurring themes such as gender roles, cultural beliefs, service delivery issues, and male involvement. The discussion emphasizes the contextual realities influencing reproductive behaviour in the study area.

VI. Chapter VI – Recommendations

Drawing from the findings, this chapter proposes actionable recommendations aimed at policymakers, healthcare providers, and community stakeholders. These include strategies for improving contraceptive education, enhancing service delivery at the grassroots level, increasing male participation, and addressing sociocultural barriers to contraception.

VII. Chapter VII – Conclusion

The final chapter synthesizes the key insights from the research, reaffirming the importance of culturally sensitive and community-based approaches to family planning. It reflects on the broader implications for public health interventions and suggests directions for future research in similar rural and tribal contexts.

Chapter- II

2.1 Literature Review

Family planning has long been recognized as a critical component of reproductive health and population control, yet cultural barriers often impede its successful adoption in various societies. In the context of the Khasi society in Meghalaya, Erica Kharsyntiew presents a compelling case of how deep-rooted cultural and religious values influence family planning decisions, resulting in one of the highest fertility rates in India.

The Khasi society presents a vivid example of how cultural and social structures can override even religious or governmental initiatives in shaping reproductive behavior. Kharsyntiew's study adds to a growing body of literature emphasizing the need for culturally sensitive, community-based interventions that go beyond healthcare delivery to engage with deep-seated societal beliefs and practices. Future policy and programmatic efforts must acknowledge and address these cultural dimensions to make meaningful progress in reproductive health and family planning.

The Article **Socio-Economic Determinants of Family Planning Acceptance among Slum Dwellers of Shillong City, Meghalaya—A Multivariate Analysis Using Logistic Regression Model** by Sanku Dey and Enayetur Raheem highlights that family planning acceptance is influenced by multiple socio-demographic factors including education, income, gender preference, and spousal communication. In the slums of Shillong, contraceptive use Key determinants include husband's education, early marriage, number of living children, and women's employment. Despite high awareness, actual usage remains low due to cultural beliefs, limited male involvement, and fear of side effects. The findings underscore the need for region-specific, education-based interventions and improved access to contraceptive services.

A short article **A study on family planning acceptance among slum dwellers in Shillong, Meghalaya** by Sanku Dey reveals a persistent gap between knowledge, attitude, and practice (KAP) regarding contraception, particularly among slum dwellers. Despite increased awareness, uptake remains low due to factors like lack of education, religious beliefs, and fear of side effects. Education, especially among women, significantly influences contraceptive adoption, with higher usage among educated, younger, and lower-income groups. Female sterilization is the most preferred method, and women are the primary users, highlighting the need for male involvement. To improve contraceptive prevalence rates, targeted educational interventions and accessible, free family planning services are essential.

According to NFHS-5 (2019–21), Meghalaya continues to report lower contraceptive prevalence (29.9%) than the national average (66.7%), indicating persistent barriers in uptake (International Institute for Population Sciences [IIPS] & MoHFW, 2021). The unmet need for family planning remains high, especially among tribal and rural populations. This trend is

also seen in other tribal regions across India, such as Chhattisgarh and Odisha, where socio-cultural beliefs, limited access, and low male involvement hinder contraceptive adoption.

Evidence from successful interventions in tribal belts of Madhya Pradesh and Jharkhand suggests that community mobilization through male peer educators, culturally-tailored IEC (Information, Education, Communication) campaigns, and engaging local health workers like ASHAs have significantly improved contraceptive use and reduced unmet need (Population Council, 2017; UNFPA India, 2020). These practices highlight the importance of integrating community perspectives and culturally sensitive messaging into policy and program design.

In summary, the literature consistently underscores that while awareness of family planning has increased in Meghalaya and other tribal regions, actual contraceptive use remains low due to persistent cultural, social, and informational barriers. Studies emphasize the importance of region-specific and culturally sensitive interventions that address gender norms, male involvement, and community beliefs. The gap between knowledge and practice, especially among marginalized populations, highlights the urgent need for integrated health education, improved service delivery, and community engagement strategies. Insights from NFHS-5 and successful interventions in other tribal belts reinforce that localized, participatory approaches are key to improving reproductive health outcomes in such contexts.

Chapter- III

3.1 Methodology

3.1.1 Study Design

This study employed a cross-sectional research design, which involves collecting data from participants at a single point in time. The aim was to assess the current levels of knowledge, attitudes, and practices related to contraceptive use among rural populations. This approach is particularly suited for public health research where a broad overview of behaviors and perceptions is needed to inform program planning or intervention design.

The study was conducted in some villages—Amphreng, Amjong, Panbari, and Lum Nongthymmai etc—located under the Amjong Sub Centre in the Ri Bhoi district of Meghalaya. These villages were selected to represent a mix of rural populations with varying levels of accessibility to healthcare services and exposure to family planning interventions.

Both male and female respondents of reproductive age were included to capture gender-specific perspectives and usage patterns of contraceptive methods. The cross-sectional design enabled the research team to document existing contraceptive practices, socio-cultural influences, service-level barriers, and perceived challenges without attempting to track changes over time.

Additionally, the design allowed for the integration of quantitative data via structured questionnaires offering a comprehensive understanding of contraceptive behavior in the study area.

3.1.2 Rationale of the Study

Sexual and reproductive health remains a significant concern in the Ri-Bhoi district of Meghalaya, particularly due to the low uptake of modern contraceptive methods among eligible couples. A large number of couples either do not use any contraception or rely predominantly on traditional methods such as withdrawal and the calendar method. This pattern contributes to a range of issues, including unintended pregnancies, unsafe abortions, larger family sizes, and inadequate birth spacing.

Understanding the underlying reasons why eligible couples prefer traditional methods over modern contraceptives is essential. Such insights can inform more culturally appropriate and effective interventions to promote the adoption of modern contraception and improve reproductive health outcomes in the region.

3.1.3 Sampling Design:

The study primarily employed **Simple Random Sampling** to select respondents from the eligible couple lists available at the Amjong Sub-centre. This method ensured that every individual within the defined population had an equal chance of being selected, which strengthens the representativeness of the data.

However, in certain instances, **purposive sampling** was also used to ensure coverage of diverse contraceptive experiences and family planning histories. For example, purposive sampling was applied to include participants who had undergone sterilization or had used Copper-T—most of whom had already had five to six children. Including such cases helped the research team explore patterns and decision-making processes around permanent and long-term contraceptive methods, especially among high-parity couples.

3.1.3.1 Sample Size:

The study population included 712 eligible couples under the Amjong Sub-centre. Efforts were made to cover at least 10% of this population to ensure adequate representation. A total of 75 respondents participated in the study, comprising 48 married women, 12 married men, and 15 health workers. The relatively lower number of male respondents was due to their limited availability during data collection, as many were occupied with work outside the villages. This sample size was considered sufficient to gather diverse insights on contraceptive knowledge, attitudes, and practices in the community.

3.1.3.2 Tool Pre-testing:

Although the questionnaire was not formally pilot tested, an initial basic version was developed comprising both quantitative and qualitative questions. This draft questionnaire was used during preliminary visits to the Amjong Sub-centre, where information was gathered from health workers including ASHAs, MLHPs, ANMs, GNMs, DEOs, and laboratory technicians. Based on their feedback and insights, the questionnaire was refined and transformed into a fully quantitative tool to facilitate easier data collection and subsequent analysis.

3.1.3.3 Language and Translation:

The questionnaire was originally developed in English. Many respondents were comfortable with either English or Hindi, which made data collection straightforward in those cases. Additionally, as both interns conducting the study were Bengalis, data collection in the Bengali-speaking village of Panbari was smooth and comfortable. For respondents who were not conversant in English, Hindi, or Bengali, the ANM, GNM, and laboratory technician—who developed a friendly rapport with us—accompanied us during all the interviews. They

assisted by translating the questionnaire into the local languages (Khasi and Garo) and helped communicate the responses effectively.

3.1.4 Identification of Factors:

The most important thing to do is identifying the factors that are causing the non-use of any family planning methods. Without finding the factors why couples prefer Traditional Method over Modern Method would make our research incomplete. By identifying the factors, it becomes possible to determine how to address these issues to achieve favourable results.

Study Objectives:
The primary objectives of our study are as follows:

3.1.4.1 Geographical coverage and targeted population:

The study was conducted across 13 villages of Ri Bhoi district, Meghalaya. Those 13 villages were associated with one of the health sub centres named Amjong Sub-centre. The selected villages are listed below:

1. Mawpdeng
2. Umsiang kraikolam
3. Nongthymmai makdoh
4. Umsiang maiong
5. Makdoh
6. Orlong shadali
7. Maska
8. Amjong
9. Markhangduba
10. Panbari
11. Amdubighat
12. Amphreng
13. Lymphuid

The target population selected for this study are:

The study engaged three primary focus groups: Married Male Respondents**,** Married Female Respondents**,** and Health Care Providers involved in reproductive health services across the six selected villages under the Amjong Subcentre, Meghalaya.

- **Male Respondents:**
  Men aged 18 to 54 years who were currently married and part of eligible couples were included. Their participation helped capture perceptions, involvement, and decision-making roles related to contraceptive use and reproductive health.

- **Female Respondents:**
  Women aged 18 to 49 years, also currently married and part of eligible couples, were selected. The focus was on understanding their knowledge, attitudes, and practices concerning contraception, as well as identifying barriers to access and continued use.

- **Health Workers:**
  The health worker group included ASHAs (Accredited Social Health Activists), ANMs (Auxiliary Nurse Midwives), GNMs (General Nurse Midwives), MLHPs (Mid-Level Health Providers), and Laboratory Technicians. These professionals were actively engaged in outreach, counselling, and service delivery related to reproductive and family planning services within the six villages. Their insights were crucial in assessing supply-side challenges, counselling approaches, and community-level engagement strategies.

3.1.4.2 Field Process and its Challenges

The fieldwork process began with taking prior permissions from THF head office in Gurugram and THF regional office in Guwahati. Amjong Sub-centre were informed about the field visit plan earlier to determine the optimal time for the both parties.

The stakeholder or the target population could only speak Khasi, Garo or other regional languages. To address this issue, THF staff from the sub-centres joined the field visit and helped conducting the survey. The initial field visit was made to Amjong sub-centre. The purpose of the research was explained to the staff of Amjong SC and also get the information about beneficiaries.

While primary data collection the purpose of the research was explained to the respondents, and ask for their permission before collecting the data. Each questionnaire took approximately 20 minutes to complete. During this visit, Focus Group Discussion (FGD) were conducted with ASHAs associated with Amjong Sub centre. Also attended VHND visit with health workers to Nongthymmai makdoh. During this visit and also the other visits to different villages was a little bit difficult due to the roadways. Also language barrier was there, but Amjong SC staffs really help us a lot in this issue. Another major challenge was male respondents were too shy to communicate with us about family planning methods.

Moreover, due to time constraints, we had to conclude the fieldwork earlier than expected. Collecting more data would have potentially strengthened the analysis and provided deeper insights into the contraceptive practices in the region.

3.1.4.3 Ethical Considerations

The highest ethical and participant protection standards were followed in conducting this study. Informed consent was obtained from all participants, including Health workers, eligible couples means married men and women. Participants were given clear and thorough information about the aims, procedures, and possible outcomes of the study so that they fully understood the study before participating. It was ensured that participants had the right to choose whether or not to participate in the study. Maintaining the privacy and confidentiality of the participants was extremely important. All data collected, including responses, interviews, and all identifiable information, was treated with strict confidentiality. The name of respondents was anonymized, and information was kept secure in Kobo Toolbox and accessible only to authorized researchers and THF staff. Measures were taken to prevent unauthorized access to secure storage and processing of sensitive data. Participation in this study was completely voluntary, and participants had the independent right to withdraw at any time without any consequences. The study was designed in such a way that the well-being of the participants was top priority, and an attempt was made to minimize any potential harm, inconvenience, or stress experienced by the participants. As researchers, the highest ethical standards of transparency, honesty, and integrity were adhered to throughout the research process. This approach ensured the credibility and trustworthiness of the research findings.

Chapter- IV

4.1 Data Analysis and Interpretation

This section presents the findings from the cross-sectional study conducted among married men, married women, and health workers across six villages under the Amjong Sub centre, Meghalaya. The aim was to understand the knowledge, attitudes, practices, and challenges related to contraceptive use and reproductive health service delivery.
To reflect the unique perspectives and roles of each group, the results are organized and analysed separately for male respondents, female respondents, and health care providers. The analysis highlights key trends in contraceptive awareness and usage, decision-making dynamics within couples, barriers to access, and the involvement of frontline health workers in outreach and counselling.

4.1.1 Male Respondents

4.1.1.1 Demographic Profile:

Here we'll discuss the demographic overview of the Male respondents. Those are -

- Age group: 20–45 years
- Primarily engaged in agriculture or manual labour
- High representation from ST communities (mainly Khasi or Tiwa tribe)
- Married
- Majority reported residing long-term in the villages.

4.1.1.2 Relationship between Number of Children and Years of Marriage:

This section explores the relationship between the number of children fathered and the years of marriage among male respondents. Understanding this relationship is crucial for examining male fertility patterns and the timing of family formation in rural Meghalaya. The number of children typically increases with the duration of marriage, but this trend may vary based on factors such as contraceptive use, fertility preferences, and socio-cultural influences.

By analysing this relationship, the study aims to assess whether a longer duration of marriage corresponds with higher parity among men, and to what extent family planning practices are adopted as men transition through different stages of marital life. These insights can help in understanding male perspectives on reproductive health and their role in decision-making around contraception and family size.

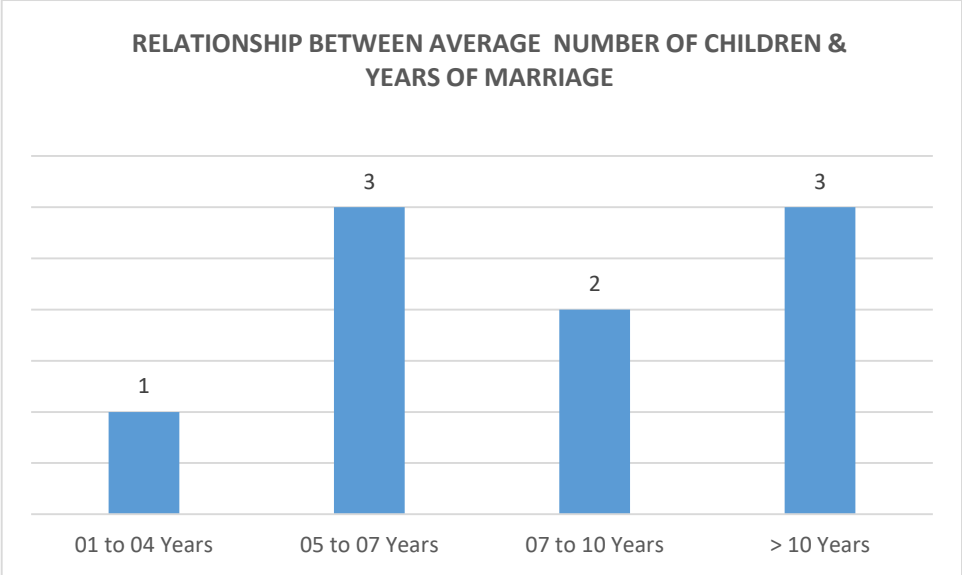

Figure 2: *Average Number of Children by Duration of Marriage*

This bar chart shows how the average number of children varies with the number of years couples have been married. A general increase in fertility is observed with longer marital duration, although the pattern is not strictly linear. This trend may reflect the combined effects of biological, behavioural, and socio-economic factors influencing fertility over time.

Analysis:

For couples married 1 to 4 years, the number of children remained consistently low, typically 1 child.

A notable rise appears at year 5, where 3 children were reported, followed by a return to 1 child for the next few years (6–7).

Beyond 9 years of marriage, the number of children begins to rise again:

- 2 children were reported at 9 and 16 years.
- The highest reported number, 4 children, was associated with 19 years of marriage.

This pattern reflects expected fertility progression, where childbearing typically increases with marital duration. However, slight variations (e.g., plateau at 6–7 years or drop after 5 years) may indicate the influence of factors like contraceptive use, fertility preferences, or spacing decisions.

Interpretation:

The observed pattern reflects a gradual accumulation of children as marital duration increases, which is consistent with typical fertility progression in rural settings. However, fluctuations—such as the early peak at year 5 and the plateau in the mid-years—indicate that

childbearing decisions are not strictly linear and may be influenced by factors such as contraceptive adoption, personal or economic circumstances, fertility preferences, or even child mortality**.**

According to **NFHS-5 (India, 2019–21)**, the total fertility rate (TFR) among currently married women aged 15–49 in rural Meghalaya is approximately **2.7**, slightly above the national average of **2.0**. The observed average of 3 children among respondents married over 10 years is aligned with these rural fertility levels, suggesting that despite some use of family planning, large family norms may persist.

This interpretation aligns with the study's broader aim to explore contraceptive use and reproductive behaviour, suggesting that while longer marriages are associated with higher fertility, spacing and limiting practices may be present among some couples. These findings also point to the need for targeted family planning interventions that address fertility expectations and encourage informed reproductive choices across all stages of marital life.

4.1.1.3 Knowledge about Contraception:

Understanding male knowledge about contraception is essential in assessing their role in family planning and reproductive health decisions. In many rural settings, men often influence or directly make decisions regarding contraceptive use, yet their awareness and understanding of available methods are frequently limited or overlooked in public health interventions. This section aims to explore the level of knowledge male respondents have regarding various contraceptive methods, including both temporary and permanent options. Assessing this knowledge helps identify existing information gaps and highlights the need for targeted awareness programs to promote shared responsibility in contraception and improve reproductive health outcomes for couples.

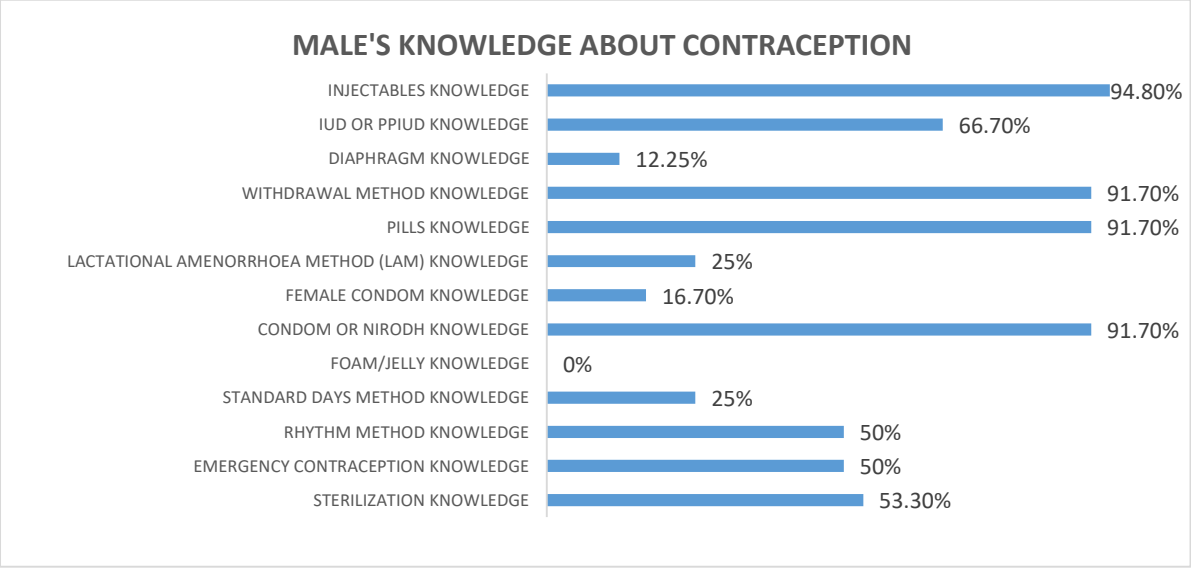

Figure 3: *Male Respondents' Awareness of Various Contraceptive Methods*

This horizontal bar chart illustrates the percentage of male respondents who reported awareness of different contraceptive methods. High levels of awareness are seen for male-centric and commonly promoted methods (e.g., condoms, withdrawal, injectables), while awareness of female-initiated and natural methods remains comparatively low.

- **Analysis:**

Highly Known Methods (Above 90%)

Injectable Knowledge: 94.8% of males are aware of injectable contraceptives, indicating strong knowledge in this area.

Withdrawal Method, Pills, Condom or Nirodh Knowledge: Each of these methods is known by 91.7% of males, showing a high level of awareness of commonly used or discussed methods.

Moderately Known Methods (50% – 70%)

IUD or PPIUD Knowledge: Known by 66.7% of males, indicating moderate awareness of intrauterine devices.

Sterilization Knowledge: 53.3% awareness shows moderate understanding of permanent contraception.

Emergency Contraception and Rhythm Method Knowledge: Each known by 50% of males, suggesting that half the population has basic awareness of these options.

Low Knowledge Methods (Below 50%)

Standard Days Method and LAM (Lactational Amenorrhoea Method): Known by only 25% of males, indicating limited understanding of natural family planning techniques.

Female Condom Knowledge: Known by 16.7%, highlighting gender-specific gaps in knowledge.

Diaphragm Knowledge: Very low awareness at 12.25%.

Foam/Jelly Knowledge: 0% awareness suggests a complete lack of familiarity with this method.

Interpretation:

The data shows that most male respondents are well-informed about short-term and male-controlled contraceptive methods such as injectables (94.8%), condoms (91.7%), pills (91.7%), and the withdrawal method (91.7%). This trend aligns with findings from **NFHS-5**, which indicate that public awareness of condoms and oral pills is relatively widespread due to their inclusion in national family planning programs and targeted IEC campaigns. However,

awareness is significantly lower for female-controlled or less publicly emphasized methods, such as the diaphragm (12.25%), female condom (16.7%), and foam/jelly (0%). This gap reflects a gendered asymmetry in reproductive knowledge, where men are largely unaware of methods that require female initiation or clinical interaction. Awareness of long-term or permanent methods, like sterilization (53.3%) and IUDs (66.7%), also falls into the moderate range. Comparatively, NFHS-5 data shows that while female sterilization is the most widely used method nationally, it remains under-discussed among men, particularly in rural settings.

Additionally, knowledge of natural methods like LAM (25%) and the Standard Days Method (25%) is limited, suggesting a lack of awareness about fertility-based planning approaches. This is consistent with national observations that natural methods are often underrepresented in mainstream reproductive health education.

4.1.1.4 Perception of Male Involvement in Family Planning Decisions:

Male involvement in family planning is a critical yet often under examined aspect of reproductive health, particularly in rural and traditional communities. While women are typically the focus of contraceptive use, men play a significant role as decision-makers, influencers, and partners in the process. Understanding how men perceive their involvement in family planning decisions offers valuable insights into the dynamics of couple communication, gender roles, and shared responsibility in reproductive choices. This section aims to explore male respondents' attitudes toward their role in contraceptive decision-making, their level of participation, and the extent to which they feel included or responsible in planning family size and spacing.

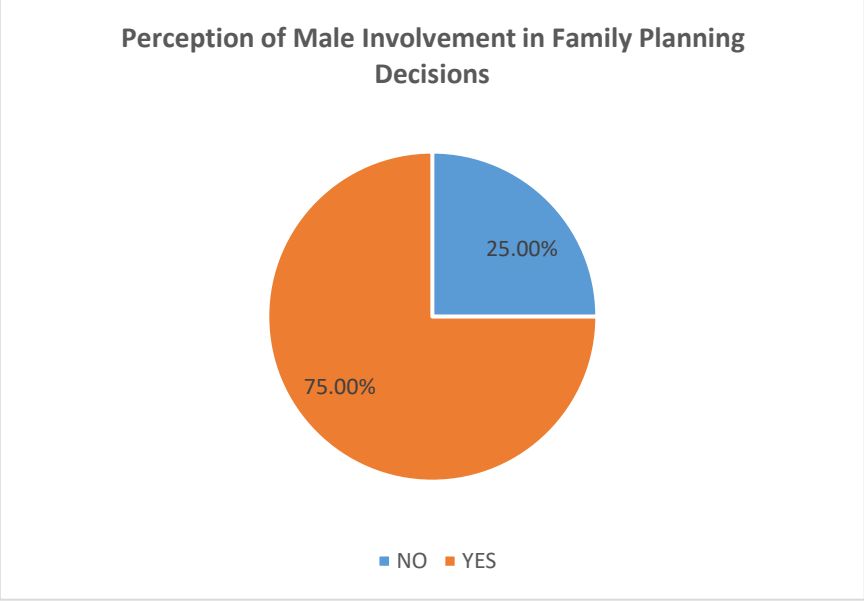

Figure 4: Perception of Male Involvement in Family Planning Decisions

This pie chart illustrates the proportion of respondents who perceive men as being actively involved in family planning decisions. The majority (75%) indicated "Yes," suggesting male engagement, while 25% reported "No," reflecting areas where involvement is lacking.

- **Analysis:**

75% of respondents perceive that males are involved in family planning decisions. This suggests a significant degree of male participation in reproductive health choices, which is crucial for shared responsibility and effective contraceptive use &

25% of respondents believe males are not involved, indicating that a quarter of the population still perceives family planning as primarily a woman's responsibility or believes that male participation is lacking.

- **Interpretation:**

The perception that 75% of men are involved in family planning decisions is encouraging and reflects a positive shift toward shared reproductive responsibilities. This aligns with increasing efforts by public health programs in India to engage men through community-based interventions, especially in tribal and rural areas. However, **NFHS-5 data** suggests that male involvement in actual contraceptive use and counselling remains relatively low, especially in North-Eastern states like Meghalaya, where female sterilization and female-centric methods dominate the method mix. Thus, while perceptions of involvement may be high, they may not always translate into active participation in method choice, uptake, or sustained support. The remaining 25% who perceive men as uninvolved reflect persistent socio-cultural norms that position contraception as a woman's sole responsibility. This aligns with national and regional findings indicating that gender norms, low male-targeted messaging, and limited access to male contraceptive services can all hinder men's proactive engagement. It is also important to note that the number of male respondents in this study was relatively low**,** which may have influenced the perception data. A small sample size can lead to over- or under-representation of certain views, and future research with a larger male respondent base would provide more robust insights into male engagement in family planning decisions.

4.1.1.4 Conclusion:

The analysis of male respondents highlights key insights into their reproductive health knowledge, behavior, and involvement in family planning decisions. Overall, male respondents demonstrated high awareness of commonly used contraceptive methods such as injectable, condoms, pills, and withdrawal. However, their knowledge of less commonly promoted or female-controlled methods—like diaphragms, foam/jelly, and natural fertility-awareness-based techniques—remains limited, indicating the need for more inclusive and comprehensive contraceptive education. In terms of fertility behavior, the number of children generally increased with the duration of marriage, reflecting expected reproductive patterns. Yet, variations in parity across certain years suggest the possible influence of contraceptive use, fertility intentions, and individual circumstances, emphasizing the

importance of understanding male reproductive decision-making more deeply. Encouragingly, three-fourths of the respondents perceive men as actively involved in family planning decisions, signaling a shift toward shared responsibility in reproductive health. Nonetheless, the 25% who still view family planning as primarily a woman's responsibility point to ongoing gender gaps in participation and perception. These findings underscore the importance of targeting men in family planning programs not only as users but as informed and supportive partners. Promoting couple-based communication and increasing male awareness of the full range of contraceptive options will be essential for achieving equitable and effective reproductive health outcomes

In the next section**,** the report will present the analysis of female respondents, offering a comparative perspective on knowledge, practices, and attitudes toward contraception and family planning in the same rural context.

4.1.2 Female Respondents

4.1.2.1 Demographic Profile:

Here we'll discuss the demographic overview of the Female respondents. Those are –

- Age group: 18–49 years
- Married
- Mixed literacy levels
- Occupations: mostly homemakers.

4.1.2.2 Knowledge of Contraception:

Women's knowledge of contraception plays a critical role in reproductive health outcomes, particularly in rural areas where access to information and services may be limited. As the primary users of most contraceptive methods, women's awareness and understanding directly influence their ability to make informed choices about family planning, fertility control, and maternal well-being. This section examines the level of knowledge among female respondents regarding various contraceptive methods—both modern and traditional—and identifies which methods are most and least known. Understanding these knowledge patterns is essential for recognizing information gaps, addressing misconceptions, and designing effective reproductive health interventions tailored to women's needs.

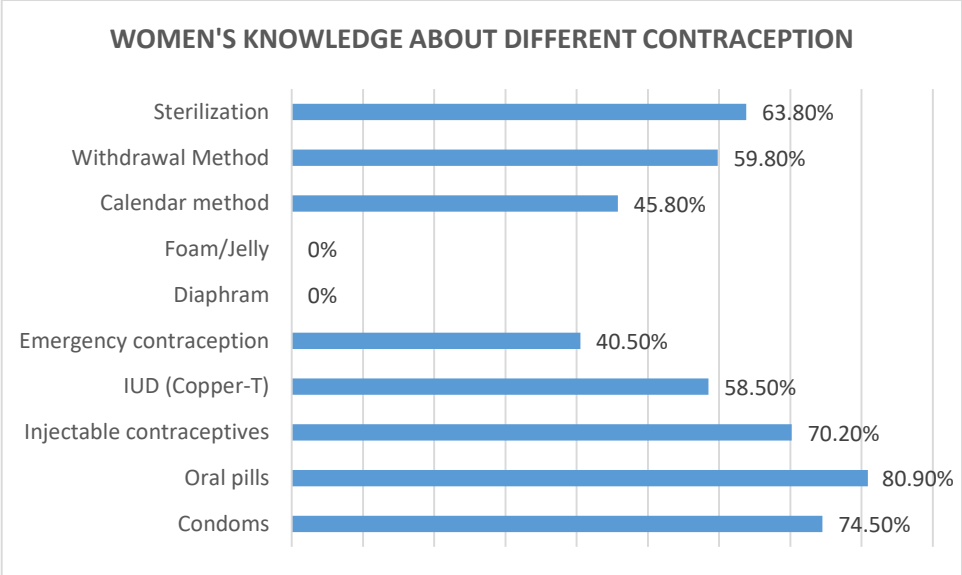

Figure 5: WOMEN'S KNOWLEDGE ABOUT DIFFERENT CONTRACEPTION

This bar chart illustrates the percentage distribution of awareness among married women regarding various family planning methods, highlighting disparities in knowledge across different contraceptive options within the study population.

- **Analysis:**

The chart reveals significant variations in women's awareness of different contraceptive methods:

High Awareness Methods: Oral pills (80.90%); Condoms (74.50%); Injectable contraceptives (70.20%)

Moderate Awareness Methods: Sterilization (63.80%); IUD (Copper-T) (58.50%); Withdrawal Method (59.80%)

Low Awareness Methods: Emergency contraception (40.50%); Calendar method (45.80%)

Very Low/No Awareness Methods: Diaphragm (0%); Foam/Jelly (0%)

- **Interpretation:**

The data suggests a disparity in knowledge levels across different contraceptive methods. Some methods are widely recognized, while others have very low awareness among women. This can be attributed to several factors:

- **Promotion and Availability:** Methods like oral pills, condoms, and injectables are often more heavily promoted through public health campaigns, media, and healthcare providers. Their widespread availability also contributes to higher awareness.

- **Traditional vs. Modern Methods:** Some of the less well-known methods, like the diaphragm and foam/jelly, may be considered "older" methods and are not as actively promoted or readily available in many settings.
- **Method Complexity:** Methods like the calendar method require a good understanding of the menstrual cycle, which may contribute to lower awareness and use.
- **Cultural Factors:** In some cultures, certain methods may be preferred or promoted over others due to social or religious beliefs.

The data reveals a significant disparity in women's knowledge of contraceptive methods; while common methods like oral pills, condoms, and injectables are widely recognized, awareness for methods such as sterilization, IUDs, and particularly for less common options like diaphragm and foam/jelly (0% awareness) is considerably lower. This uneven knowledge largely stems from differences in promotional efforts and availability, with widely campaigned methods gaining higher recognition, and declining emphasis on others, like diaphragms, contributing to their lower awareness. This pattern, characterized by high awareness for short-term methods and lower awareness for long-acting reversible contraceptives (LARCs) and permanent methods, **is** consistent with national trends observed in India, as frequently reported by the NFHS**.** The NFHS data often indicates that despite general awareness of family planning, knowledge about the full range of modern methods remains limited. This alignment with national findings suggests a systemic need to diversify public health campaigns beyond conventional methods, aiming to bridge the knowledge gap and empower women with comprehensive information for informed contraceptive choices, thereby addressing the prevalent 'unmet need' in rural settings.

Women's knowledge of contraceptive methods is uneven, with some methods being widely known and others poorly understood. Addressing this disparity through targeted education, healthcare provider training, and public awareness campaigns is crucial for promoting informed decision-making and improving women's reproductive health.

4.1.2.3 Impact of Accessibility on Contraceptive Use:

Accessibility plays a pivotal role in determining the uptake and consistent use of contraceptive methods, especially in rural and remote areas. Physical access to health facilities, availability of contraceptive supplies, presence of trained health workers, and reliable transportation significantly influence whether individuals can obtain and use contraception when needed. In the context of rural Meghalaya, where infrastructure and service delivery may be uneven, these barriers can hinder effective family planning practices. This section explores how geographical, infrastructural, and service-level accessibility affects the use of contraceptives among the study population, shedding light on the practical challenges that limit reproductive autonomy and informed choice.

FIGURE 6: *Relationship between Distance to Infrastructure (Roadways & Health Sub-centres) and Contraceptive Use Among Women*

This dual-axis chart, generated using Power BI, illustrates the inverse relationship between proximity to key infrastructure—roadways and health sub-centres—and the percentage of women using contraception, highlighting the influence of geographical accessibility.

- **Analysis:**

Contraceptive Users: They reside significantly closer to both roads and subcentres & the average distance to the roadway and sub centre for this group is visibly lower.

Non-users: They tend to live further away from both access points & the distance rises, implying accessibility challenges.

- The pattern is consistent for both types of infrastructure, with almost parallel downward trends for **distance to roadways** (green line) and **distance to subcentres** (blue line).

- **Interpretation:**

The analysis indicates a strong correlation between proximity to infrastructure and contraceptive use. Women who use contraceptives tend to live closer to both roads and health sub-centres, suggesting that ease of access to health facilities and transportation networks significantly facilitates contraceptive uptake. In contrast, non-users are more likely to reside at greater distances from these access points, highlighting how physical barriers can hinder access to family planning services. The parallel downward trends in both distance to

roadways and sub-centres reinforce the idea that geographical isolation poses a dual challenge: not only does it limit mobility, but it also reduces regular contact with health workers and available contraceptive supplies.

This finding aligns strongly with established public health literature that consistently identifies geographical accessibility as a critical determinant of health service utilization, particularly in rural and underserved areas. For example, studies from various low- and middle-income countries often demonstrate that women living further from health facilities face higher unmet needs for family planning due to increased travel time, cost, and reduced interaction with health providers. National data, such as that from the NFHS, also frequently highlights disparities in contraceptive prevalence based on rural-urban residence and access to health infrastructure. This underscores the importance of improving last-mile connectivity and community-based distribution mechanisms, especially in rural and remote areas, to ensure that contraceptive services are within physical and practical reach for all, thereby reducing health inequities.

4.1.2.4 Women's Intent to Use Contraception in the Future:

Understanding women's intentions regarding future contraceptive use provides valuable insight into unmet need, reproductive planning, and potential shifts in behaviour. While current use reflects access and knowledge, intention to use indicates a woman's readiness, willingness, and perceived barriers to adopting contraception later. This is particularly important in rural settings, where socio-cultural norms, partner influence, fertility desires, and service availability play a critical role in shaping reproductive decisions. This section explores the attitudes and intentions of female respondents toward future contraceptive use, helping to identify opportunities for targeted counselling, education, and service delivery to support informed and voluntary family planning choices.

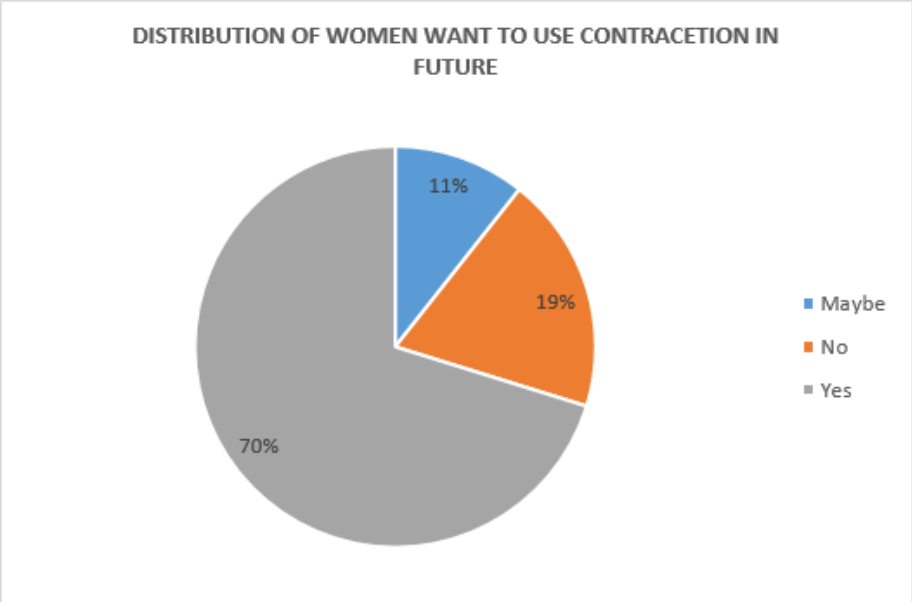

Figure 7: *Distribution of Women's Future Intent to Use Contraception in Rural Meghalaya*

This pie chart illustrates the percentage distribution of female respondents' future intentions regarding contraceptive use, categorized into 'Yes,' 'No,' and 'Maybe' responses.

- **Analysis:**

The pie chart suggests that a significant majority of the women surveyed express an intention to use contraception in the future.

Majority Intend to Use Contraception: The largest segment of the pie chart, representing 70% of the respondents, indicates that these women do intend to use contraception in the future.

Small Proportion Say No: A smaller proportion, 19%, of the women responded that they do not intend to use contraception in the future.

Uncertainty Exists: 11% of the women are uncertain, responding “Maybe” to the question about future contraception use.

- **Interpretation:**

The findings reflect a strong positive outlook toward contraceptive use among female respondents, with 70% expressing a clear intent to use contraception in the future**.** This suggests a growing awareness and acceptance of family planning, and highlights a promising opportunity for health systems to support these women through access, counselling, and method choice. However, the 19% who do not intend to use contraception represent a segment that may face cultural, personal, or partner-related barriers**,** or may hold concerns about side effects, religious beliefs, or fertility desires. Additionally, the 11% who are uncertain (“Maybe”) point to an important group that could be influenced with targeted information and counselling**,** especially if their hesitation stems from limited knowledge or fear of judgment. Overall, this distribution emphasizes the importance of individualized, context-sensitive outreach, as many women are open to family planning, but sustained efforts are needed to convert intent into actual use and address the underlying concerns of those who are hesitant or opposed.

The high proportion of women expressing intent to use contraception (70%) in this rural setting is particularly encouraging and reflects a significant potential for increasing contraceptive prevalence, often termed 'unmet need for family planning'**.** This figure can be contextualized against national data from surveys like the National Family Health Survey (NFHS), which consistently identifies a notable percentage of women with an unmet need – meaning they wish to space or limit births but are not currently using any contraceptive method. While specific unmet need figures vary, this study's high 'intent' aligns with the broader NFHS finding that a substantial portion of women desire fertility regulation. The combined 30% who are either certain not to use or are undecided ('No' and 'Maybe') is also a critical group. Similar to findings in other studies on contraceptive discontinuation and non-use, these groups are often influenced by concerns about side effects, misconceptions, socio-cultural pressures (including partner opposition), and a desire for more children**.** For instance,

reasons for non-use articulated in other regional studies or even within this study's 'reasons for not using' section (e.g., fear of side effects) corroborate the barriers these women might face. This underscores that converting intent into practice, and addressing hesitation, requires overcoming deeply rooted concerns and providing personalized counselling.

4.1.2.5 Women's Reasons for Not Using Contraception:

While awareness and access to contraception are essential components of reproductive health, many women still choose not to use contraceptives for a variety of reasons. Understanding these reasons is crucial for identifying barriers to uptake and designing effective, targeted interventions**.** In rural areas, non-use may be influenced by social norms, fertility desires, partner opposition, fear of side effects, or lack of information and access**.** This section explores the self-reported reasons among female respondents who are not currently using contraception, shedding light on the complex personal, cultural, and structural factors that shape contraceptive behaviour.

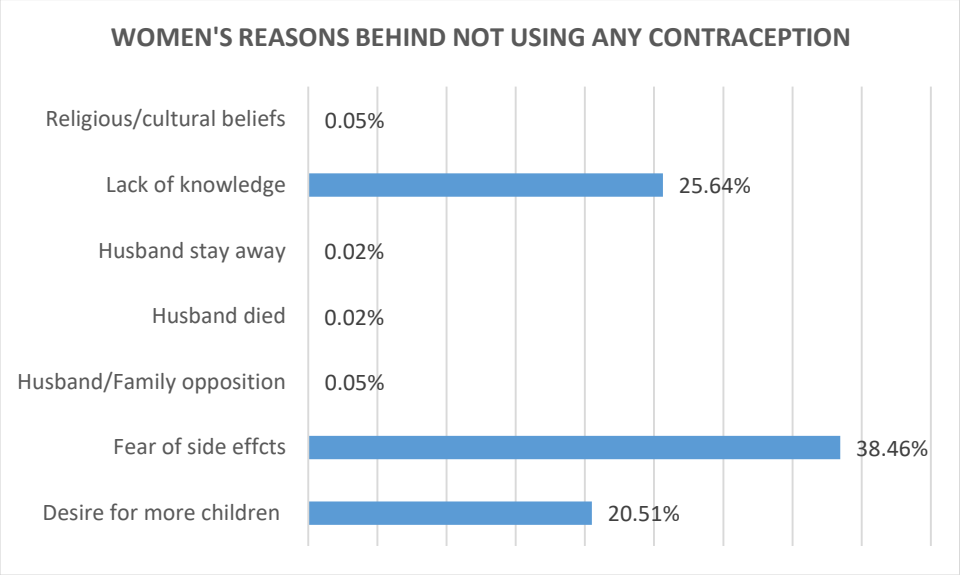

Figure 8: *Women's Stated Reasons for Not Using Contraception in Rural Meghalaya*

The bar chart illustrates the distribution of reasons given by women for not using any contraception. The reasons are categorized and displayed along with the percentage of women who cited each reason.

- **Analysis:**

The bar chart reveals that the decision not to use contraception is influenced by a variety of factors, with health-related concerns and knowledge gaps being the most prominent.

Fear of Side Effects is the Primary Reason: The most frequently cited reason for not using contraception is "Fear of side effects," accounting for 38.46% of the responses.

Lack of Knowledge is a Significant Factor: "Lack of knowledge" is the second most common reason, with 25.64% of women reporting this as a barrier to contraception use.

Desire for More Children is a Major Reason: Approximately 20.51% of women indicated that their "Desire for more children" is the reason they do not use contraception.

Other Factors Play a Minor Role: Several other factors were cited by a small percentage of women, including "Religious/cultural beliefs" (0.05%), "Husband stay away" (0.02%), "Husband died" (0.02%), and "Husband/Family opposition" (0.05%).

- **Interpretation:**

The findings reveal that health-related fears and informational gaps are the most significant barriers preventing women from using contraception. The findings reveal that health-related fears and informational gaps are the most significant barriers preventing women from using contraception. The leading concern—fear of side effects (38.46%)—indicates a need for better counselling and education around the safety and management of contraceptive methods. This highlights a lack of trust or clarity regarding method-specific risks, which can discourage even those who are otherwise willing to adopt contraception. This finding is highly consistent with national and global trends; for instance, the National Family Health Survey (NFHS) in India consistently identifies fear of side effects as a primary reason for non-use or discontinuation across various states, mirroring its prominence in many other developing country contexts.

The second most common reason, lack of knowledge (25.64%), further underscores the need for comprehensive, community-level education and outreach, particularly in rural areas where access to accurate information may be limited. This gap in awareness not only affects decision-making but also limits women's autonomy in reproductive choices.

The desire for more children (20.51%) reflects natural fertility preferences among a subset of respondents, emphasizing that not all non-use stems from barriers—some are based on personal or family goals. This is a common and legitimate reason for non-use in any population, and policy should differentiate between this and other barriers to 'unmet need'.

The remaining reasons, though reported by a smaller proportion of respondents, shed light on context-specific challenges such as partner absence, bereavement, cultural norms, or opposition from family members. While less frequent in this study, cultural/religious beliefs and partner opposition are well-documented barriers to family planning in diverse socio-cultural settings, including various regions of India. These reasons, despite being less prevalent here, are crucial for tailoring individualized counselling approaches and sensitive community interventions.

Overall, the data suggests that addressing misinformation, building trust in contraceptive methods, and involving male partners and families in educational efforts are key steps toward reducing unmet need and empowering women to make informed reproductive health decisions.

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4.1.2.6 Women Who Stopped Using Contraception:

While much attention is given to current users and non-users of contraception, understanding the experiences of women who have discontinued contraceptive use provides important insights into method dissatisfaction, side effects, and shifting reproductive intentions. Discontinuation may reflect personal, medical, or social challenges that impact long-term contraceptive use and can contribute to unintended pregnancies. This section examines the reasons why some women in the study stopped using contraception, highlighting key barriers to sustained use and areas where improved counselling, follow-up, and method options may enhance continuity and satisfaction.

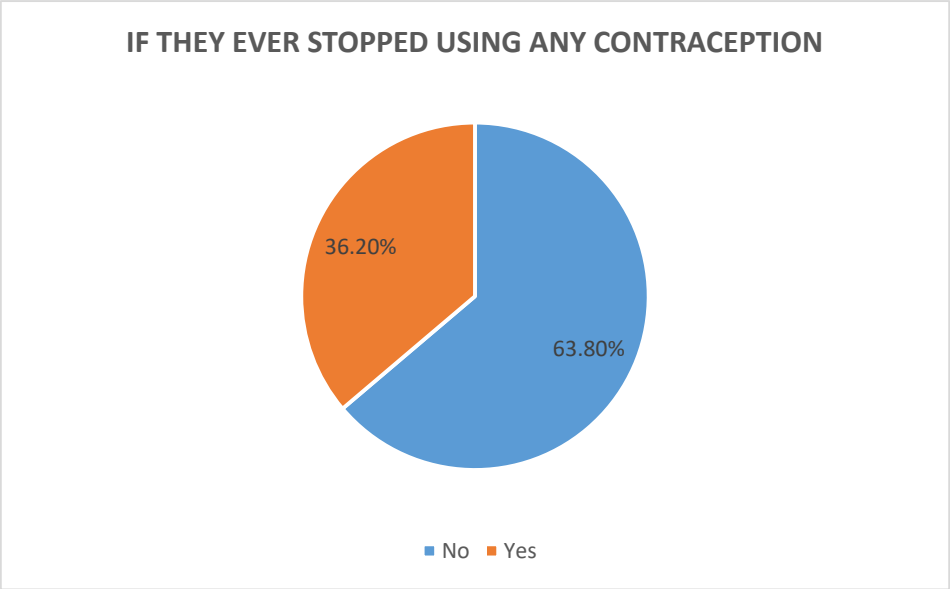

Figure 9: *Proportion of Women Who Have Ever Stopped Using Contraception*

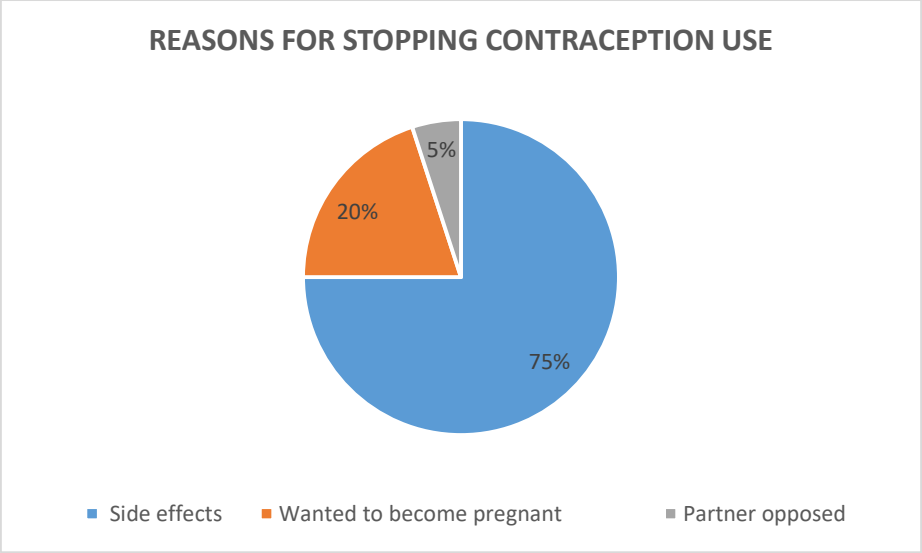

Figure 10: *Primary Reasons for Contraception Discontinuation among Women*

This report analyses two pie charts related to women's contraception use: the first illustrates the percentage distribution of married women based on whether they have ever discontinued contraceptive use at any point, and the second outlining the specific reasons cited by women who have discontinued contraceptive use, showing the proportion attributed to each factor.

- **Analysis:**

I. **Prevalence of Stopping Contraception:**

The first pie chart, "IF THEY EVER STOPPED USING ANY CONTRACEPTION," shows that a significant proportion of women have, at some point, discontinued the use of contraception. Specifically, 36.20% of women have stopped using contraception, while 63.80% have never stopped.

The data reveals that a notable portion of women have discontinued using contraception at some point. Specifically, 36.20% of women reported that they have stopped using contraception, whereas the majority, 63.80%, have continuously used contraception without stopping.

II. **Reasons for Stopping Contraception:**

The second pie chart, "REASONS FOR STOPPING CONTRACEPTION USE," identifies the primary reasons why women discontinue contraception.

- The most common reason is wanting to become pregnant, cited by 75% of women.
- Side effects account for 20% of women stopping contraception.
- Partner opposition is a factor for 5% of women.

Among the women who stopped using contraception, the primary reason was the desire to become pregnant, accounting for 75% of the cases. Side effects of contraception led to 20% of women discontinuing use, indicating that adverse health or discomfort issues play a significant role. Partner opposition was a less common reason, reported by 5% of women, suggesting that partner influence has a smaller but still notable impact on contraceptive discontinuation.

- **Interpretation:**

The analysis of contraceptive discontinuation reveals two key aspects of women's reproductive journeys in rural Meghalaya. Firstly, a notable 36.20% of women in the study have, at some point, discontinued contraception, indicating that discontinuation is a common experience, even if not necessarily a negative one. Secondly, and crucially, the overwhelming majority of these discontinuations (75%) are intentional, driven by the desire to become pregnant. This finding is highly significant as it reflects planned family formation and informed reproductive choices, where contraception is used for spacing rather than solely for limiting births. This pattern is widely observed in national family planning surveys, such as the National Family Health Survey (NFHS) in India, where the desire for pregnancy is consistently the leading reason for contraceptive discontinuation. This positive alignment suggests effective utilization of family planning for fertility regulation rather than abandonment due to dissatisfaction. However, a significant minority of women (20%) discontinue due to experiencing side effects. This highlights a persistent challenge in family planning programs, as concerns about side effects are a well-documented global barrier to contraceptive continuation and a major reason for method switching. This proportion is comparable to or slightly lower than figures seen in some national contexts, but it still underscores the critical need for comprehensive counselling on potential side effects, their management, and the availability of diverse contraceptive options to ensure method satisfaction and continuity. Finally, 5% of women discontinued due to partner opposition. While a smaller percentage in this study, partner influence, including opposition, is a recognized barrier to contraceptive use and continuation in various socio-cultural settings, including parts of India. This finding emphasizes the importance of involving male partners in family planning discussions and addressing interpersonal dynamics to support women's reproductive health decisions.

Overall, the data underscores that while most discontinuations are intentional for pregnancy, addressing side effect management and considering interpersonal factors remain vital for improving contraceptive continuity and ensuring women can make informed choices throughout their reproductive lives.

4.1.2.7 Conclusion:

The findings from this section highlight important aspects of contraceptive use among women in the study area. While a majority of women have access to and actively use contraception, a considerable proportion have discontinued its use at some point. The primary driver behind discontinuation is the desire to conceive, followed by concerns related to side effects and, to a lesser extent, partner opposition. These insights underscore the importance of addressing both informational and interpersonal barriers to consistent contraceptive use. Understanding women’s knowledge, accessibility, usage patterns, and reasons for discontinuation provides a comprehensive view of reproductive health behaviour in the

community. This information is crucial for designing targeted interventions that support informed and sustained contraceptive use.

In the next section, we shift focus to the perspectives of frontline health workers, including ASHAs, ANMs, and GNMs. Their insights are essential in understanding service-level challenges, the support mechanisms in place, and their role in shaping contraceptive practices in the community.

4.1.3 Health Workers Respondents

4.1.3.1 Demographic Profile:

Here we'll discuss the demographic overview of the respondents. Those are –

- ASHAs, MLHP, ANMs, GNMs and Lab Technician serving the six villages
- Involved in outreach, counselling, and service delivery related to reproductive health
- Experience ranged from 2 to over 10 years

4.1.3.2 Training received by The Health Workers:

Training plays a crucial role in enhancing the knowledge, skills, and confidence of frontline health workers, enabling them to effectively deliver reproductive health services, including family planning. In this section, we explore the nature and extent of training received by health workers such as ASHAs, ANMs, and GNMs in the study area. Understanding the type, frequency, and relevance of the training programs helps assess how well-equipped these workers are to counsel individuals, address community concerns, and manage contraceptive service delivery. This analysis also sheds light on existing gaps in capacity-building efforts that may impact the quality of care and outreach.

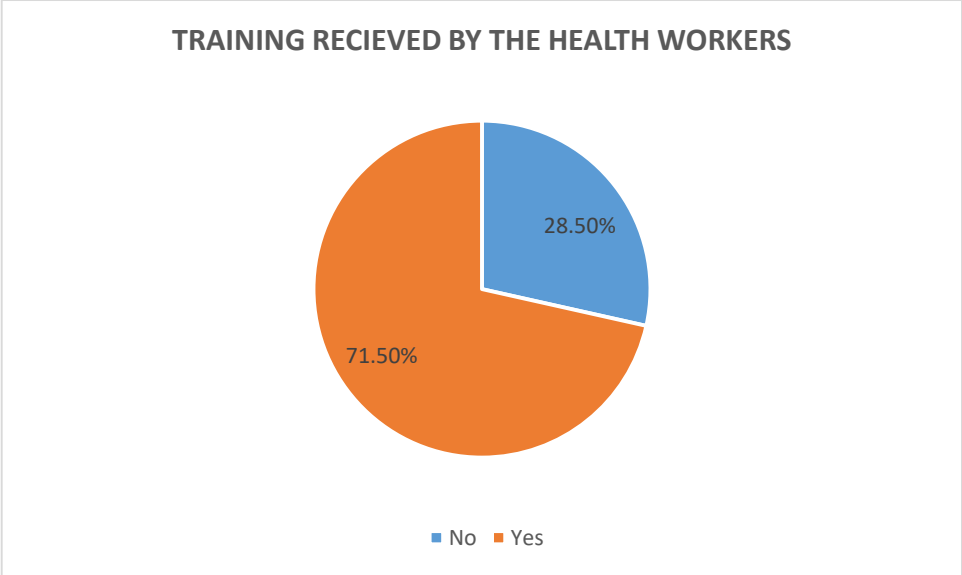

Figure 11: *Distribution of Training Received by Health Workers on Contraception*

This chart illustrates the percentage of frontline health workers who have received specific training related to contraception, highlighting a key factor in the quality and effectiveness of family planning service provision within the study area.

- **Analysis:**

1. **71.5%** of health workers have received training.
2. **28.5%** of health workers have not received training.

This indicates that while the majority of health workers have been trained, there is still a significant portion (over a quarter) who have not undergone any formal training. Efforts should be made to ensure that all health workers receive adequate training to improve healthcare service delivery.

- **Interpretation:**

The data indicates that 71.5% of health workers have received training, while 28.5% have not undergone any formal training. Although the majority of health workers are trained, the fact that over a quarter remain untrained highlights a critical gap in capacity-building efforts. This disparity can directly impact the quality and consistency of healthcare service delivery, particularly in areas related to reproductive health and contraception. To strengthen the healthcare system at the grassroots level, it is essential to ensure that all health workers are equipped with standardized, up-to-date training. This would not only enhance their ability to effectively communicate with community members but also improve overall service outreach and health outcomes.

4.1.3.3. Common Side Effects Reported By The Users To The Health Workers:

Understanding user experiences with contraception is essential for ensuring continued and informed use. One of the critical factors influencing contraceptive discontinuation or hesitation is the experience of side effects. In this section, we examine the common side effects reported by contraceptive users to health workers such as ASHAs, ANMs, and GNMs. These frontline workers serve as the first point of contact for addressing concerns and providing guidance. By documenting the side effects most frequently reported to them, we gain insight into the challenges faced by users and the areas where additional support, counselling, or method-switching options may be needed. This information is vital for tailoring health communication strategies and improving the overall quality of contraceptive care.

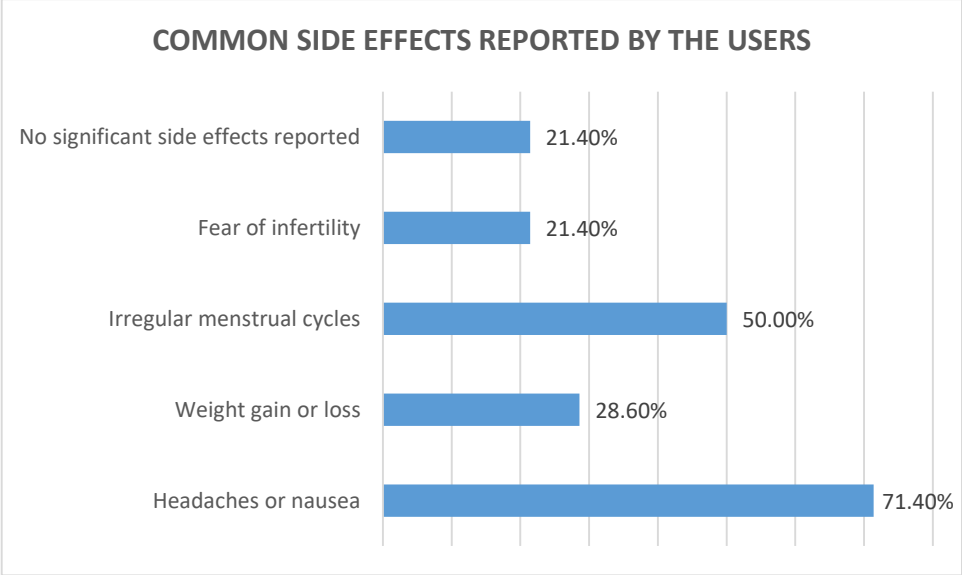

Figure 11: Common Side Effects reported by the Users to the Health Workers

This chart illustrates the frequency of various side effects experienced by contraceptive users, as reported to and observed by frontline health workers, highlighting the primary health-related concerns impacting method continuation.

- **Analysis:**

The chart displays the common side effects experienced by users. The findings are as follows:

1. 71.4% reported experiencing headaches or nausea.
2. 50% reported irregular menstrual cycles.
3. 28.6% reported weight gain or loss.
4. 21.4% reported fear of infertility.
5. 21.4% reported no significant side effects.

The data shows that headaches or nausea are the most frequently reported side effects, followed by irregular menstrual cycles. A smaller percentage of users reported weight changes, fear of infertility, or no side effects at all. These insights highlight the need for addressing user concerns and providing proper counselling regarding potential side effects.

- **Interpretation:**

The findings reveal that side effects are a significant concern among contraceptive users in rural Meghalaya, playing a crucial role in their experience and potentially influencing continuation. The prominence of headaches or nausea (71.4%) and irregular menstrual cycles (50%) aligns directly with well-documented side effect profiles of hormonal contraceptive methods, such as oral pills and injectables, which are widely available and commonly used in India. These are among the most frequently reported adverse effects globally, often leading to discomfort and discontinuation if not adequately managed or counseled upon. The reported occurrence of weight changes (28.6%) also reflects a commonly perceived, though often less directly causally linked, side effect of hormonal contraception, indicating areas where user concerns might stem from. More significantly, the fact that 21.4% of users expressed fear of infertility as a side effect highlights a persistent misconception that is widely prevalent in many developing countries, including India, and frequently acts as a major barrier to contraceptive uptake and sustained use, irrespective of method type. This aligns with broader public health challenges in dispelling myths.

Conversely, the 21.4% who reported no significant side effects underscores that contraceptive experiences can vary widely among individuals. However, the overall prevalence of reported side effects, especially those commonly associated with hormonal methods, emphasizes a critical need for comprehensive and proactive counseling by health workers. This counseling should not only inform users about potential side effects but also guide them on management strategies, address their concerns, and clarify misconceptions, particularly around fertility, to improve user confidence and reduce method discontinuation rates. Addressing these side effects and associated fears is crucial for improving family planning outcomes and ensuring user satisfaction, a challenge frequently highlighted in national family planning program evaluations and research.

4.1.3.4 Openness in Counselling: Addressing Contraceptive Side Effects

Effective counselling plays a pivotal role in helping contraceptive users understand and manage potential side effects, thereby improving satisfaction and continuation rates. This section explores the degree of openness and communication between health workers and users regarding side effects of contraception. By examining how openly health workers discuss these concerns and how comfortable users feel in sharing their experiences, we gain valuable insights into the quality of counselling services. Addressing side effects through transparent and empathetic counselling is crucial for building trust, alleviating fears, and empowering users to make informed reproductive health choices.

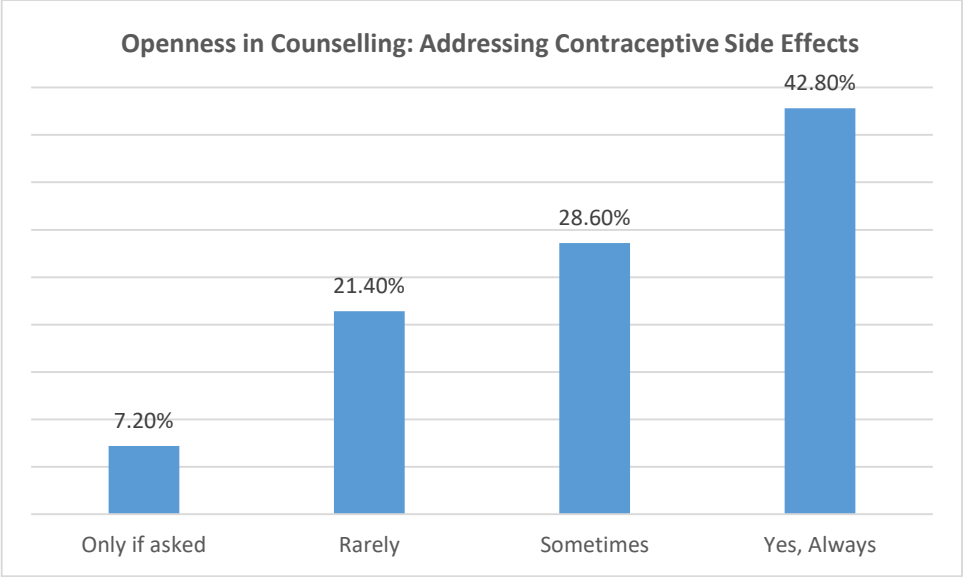

Figure 13: *Health Workers' Openness in Counselling Regarding Contraceptive Side Effects*

This chart illustrates the reported frequency with which health workers proactively discuss and address potential contraceptive side effects during client counselling, a crucial factor influencing user confidence and method adherence within the study area's family planning services.

- **Analysis:**

The diagram illustrates the level of openness in counselling regarding contraceptive side effects. The findings are as follows:

1. 42.8% of counsellors always address side effects.
2. 28.6% sometimes address side effects.
3. 21.4% rarely address them.
4. 7.2% address side effects only if asked.

The data suggests that while a significant proportion of counsellors (42.8%) consistently provide information on side effects, a considerable number either do so inconsistently or only upon request. This highlights an opportunity to improve counselling practices to ensure all users receive comprehensive information proactively.

- **Interpretation:**

The data on health workers' counselling practices regarding contraceptive side effects reveals a critical area for improving the quality of family planning services. While a commendable 42.8% of counsellors consistently address side effects proactively, a significant proportion either do so inconsistently (28.6% 'sometimes') or only upon direct inquiry (7.2% 'only if asked'). A concerning 21.4% rarely address these crucial concerns.

This variability in counselling directly impacts user experience and trust. Best practices in family planning counseling, emphasized by national guidelines and global health organizations, advocate for a proactive and comprehensive discussion of potential side effects for all methods. This is crucial for informed choice, managing expectations, and preventing

unnecessary discontinuation due to unanticipated discomfort or misconceptions. The current findings suggest a gap where many users might not be receiving adequate upfront information. This inconsistency likely contributes to the widespread 'fear of side effects' identified as a primary barrier to contraceptive use in earlier findings within this study. Similar challenges in the quality of counselling, particularly regarding side effect management, are frequently cited in national health surveys like the NFHS and in program evaluations across India and other developing countries. Such reports often highlight that inadequate counselling leads to increased discontinuation rates, even among individuals otherwise willing to use contraception. Therefore, while there is a strong foundation of proactive counsellors, enhancing consistent and comprehensive side effect counselling across all health workers presents a significant opportunity. Targeted training programs focusing on communication skills, empathetic responses to client concerns, and accurate information dissemination about side effect management are essential. Ensuring all users receive clear, upfront information can significantly build trust, empower users to make informed choices, and ultimately improve contraceptive continuation rates and overall reproductive health outcomes in rural Meghalaya.

4.1.3.5 Awareness of Contraceptive Misconceptions:

Misconceptions surrounding contraception remain a significant barrier to its acceptance and continued use, particularly in rural and underserved communities. These myths—ranging from fears of infertility to long-term health issues—can discourage individuals from adopting or continuing contraceptive methods. This section explores the extent to which health workers are aware of the common misconceptions prevalent among the population they serve. Understanding their level of awareness is crucial, as it directly influences their ability to address misinformation, provide accurate guidance, and foster trust in family planning services.

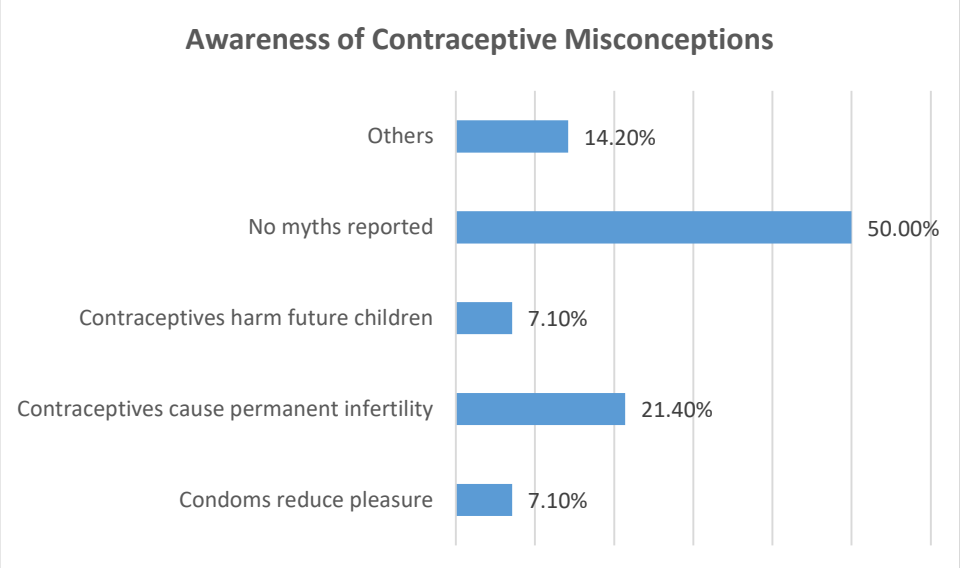

Figure 14: **Awareness of Contraceptive Misconceptions reported to the health workers**

This chart illustrates the common contraceptive misconceptions that are reported to the health workers from beneficiaries, highlighting the specific areas where misinformation acts as a barrier to family planning uptake and continuation.

The provided bar chart illustrates the prevalence of various misconceptions regarding contraceptives.

Analysis:

The findings are as follows:

1. A significant portion (50%) of the respondents reported having no misconceptions about contraceptives.
2. The most common misconception is that contraceptives cause permanent infertility (21.4%).
3. Other misconceptions include the belief that contraceptives harm future children (7.1%) and that condoms reduce pleasure (7.1%).
4. A small percentage (14.2%) held other unspecified misconceptions.

Interpretation:

The findings indicate a mixed landscape regarding contraceptive misconceptions, with both areas of accurate understanding and persistent misinformation. While a significant portion of respondents (50%) reportedly hold no misconceptions about contraceptives, a considerable segment remains affected by false beliefs. The most prevalent misconception, reported by 21.4% of health workers as cited by beneficiaries, is that contraceptives cause permanent infertility. This finding is particularly critical as this specific myth is one of the most persistent and widespread barriers to contraceptive uptake and continuation globally, consistently appearing in national surveys like India's National Family Health Survey (NFHS) and numerous studies across low- and middle-income countries. It significantly undermines trust in family planning methods despite scientific evidence to the contrary. Other misconceptions, such as the belief that contraceptives harm future children (7.1%) and that condoms reduce pleasure (7.1%), though less frequent, also reflect common informational gaps that can deter effective use. The presence of 'other unspecified misconceptions' (14.2%) suggests a diverse range of unique concerns that require personalized attention.

Overall, the data underscores that even where general awareness exists, these deeply entrenched misconceptions can severely hinder contraceptive use, contributing to unmet needs and unintended pregnancies. Addressing these specific myths, especially the fear of infertility, through targeted, repeated, and culturally sensitive counselling by health workers, supported by comprehensive public health campaigns, is paramount. Empowering beneficiaries with accurate information is essential for building confidence, dispelling fears, and enabling informed reproductive health decisions.

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4.1.3.6 Involvement of Husbands in Counselling Sessions:

Male involvement in family planning is increasingly recognized as a key factor in improving reproductive health outcomes. Engaging husbands in counselling sessions not only promotes shared decision-making but also helps dispel myths, reduce opposition, and foster supportive environments for contraceptive use. This section examines the extent to which husbands are involved in counselling sessions conducted by health workers. Understanding their participation provides insight into gender dynamics in reproductive health communication and highlights opportunities to promote more inclusive and effective family planning strategies.

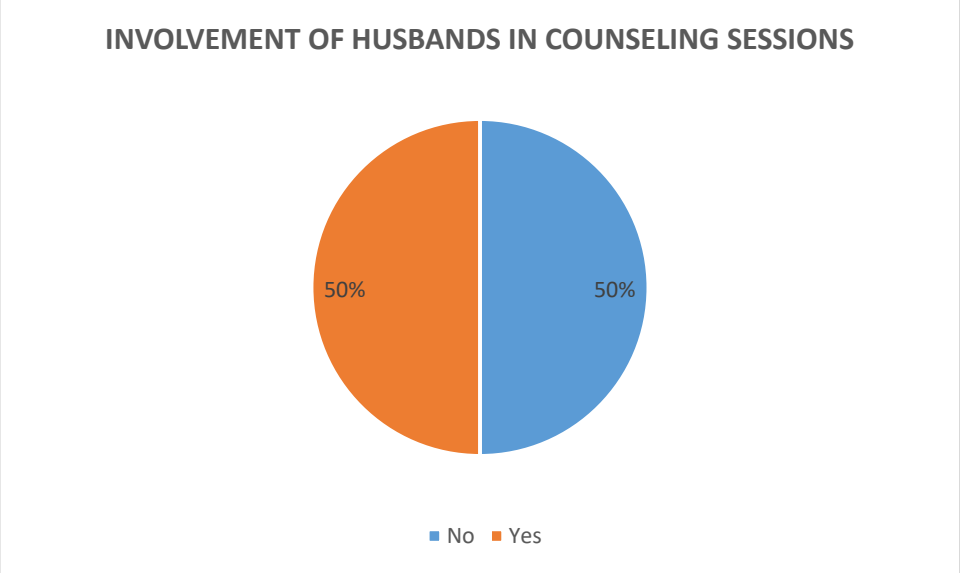

Figure 15: INVOLVEMENT OF HUSBANDS IN COUNSELING SESSIONS

This chart illustrates the reported frequency with which husbands are present and participate in contraceptive counselling sessions with their partners, as observed by health workers.

- **Analysis:**

The image presents a pie chart illustrating the involvement of husbands in counselling sessions. The chart is divided into two equal sections, each representing 50%. The findings are as follows:

1. 50% of the data indicates "No" involvement of husbands in counselling sessions.
2. 50% of the data indicates "Yes" involvement of husbands in counselling sessions.

Summary-
The data suggests an even split in husband involvement in counselling sessions. Half of the data indicates that husbands are involved, while the other half indicates they are not.

- **Interpretation:**

The findings reveal a balanced, yet mixed, scenario regarding male involvement in contraceptive counselling sessions in rural Meghalaya, with an even split of 50% indicating

'Yes' and 50% indicating 'No' involvement. While this suggests a significant level of male engagement, it also highlights a substantial gap where male partners are not participating in these crucial discussions. This 50% involvement, while not ideal for universal engagement, can be viewed as a positive indicator in a context where male involvement in family planning has historically been limited and remains a challenge in many parts of India, as noted in national health surveys like the NFHS. The increasing emphasis on men's roles in reproductive health decision-making by public health programs reflects a shift towards more equitable and effective family planning outcomes. Studies consistently show that active male involvement is associated with higher contraceptive uptake, better adherence, and shared responsibility in family planning decisions, ultimately leading to improved reproductive health outcomes for couples.

However, the equal proportion of non-involvement underscores the persistent barriers that may prevent men from participating. These could include traditional gender norms, lack of awareness about their crucial role, inconvenient clinic timings, or perceived irrelevance of their presence. Therefore, while half of the respondents show male engagement, there is a clear and pressing need for more consistent and targeted efforts to engage men. This involves designing specific male-friendly family planning services, conducting community awareness campaigns that highlight the benefits of male partnership, and training health workers to effectively invite and counsel couples, thereby transforming the current mixed scenario into a more consistently engaged male population.

4.1.3.7 Attitudes Toward Promoting Contraception to Newly Married Couples Without Children:

The promotion of contraception among newly married couples without children remains a sensitive yet crucial area in reproductive health. Cultural norms, societal expectations around early childbearing, and perceptions of fertility often influence whether family planning is discussed or recommended to this group. This section explores health workers' attitudes toward advocating contraceptive use among newly married couples who have not yet had children. Understanding these attitudes is essential for assessing the readiness of frontline providers to challenge traditional norms and support informed, voluntary spacing of pregnancies from the outset of marriage.

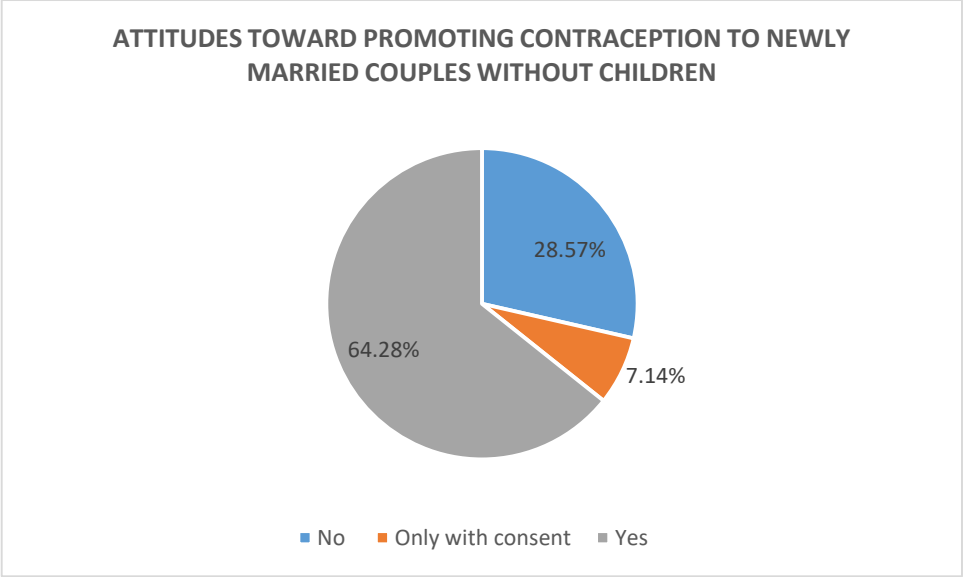

Figure 16: *Health Workers' Attitudes towards Promoting Contraception to Newly Married Couples without Children*

This pie chart illustrates the distribution of health workers' perspectives on the appropriateness of promoting contraception to newly married couples who do not yet have children.

- **Analysis:**

The data reveals the following distribution:

1. No: 28.57% of respondents do not support promoting contraception to this group.
2. Only with consent: A significant majority, 64.28%, believe contraception should only be promoted with the couple's consent.
3. Yes: A small percentage, 7.14%, are in favour of promoting contraception to newly married couples without children.

In summary, the data suggests that while there is some opposition to proactively promoting contraception to newly married couples without children, the prevailing view is that it should only be done with their explicit consent.

- **Interpretation:**

The findings reflect a thoughtful and culturally attuned perspective among health workers regarding the promotion of contraception to newly married couples without children. A clear majority believe that such interventions should only occur with the explicit consent of the couple, indicating a strong emphasis on respecting individual autonomy and informed decision-making. This cautious approach suggests that health workers are mindful of the societal and cultural expectations surrounding early marriage and childbearing, especially in rural settings where fertility is often closely linked with marital stability and social acceptance. By prioritizing consent, health workers demonstrate a commitment to client-

centred care that values personal agency and context-specific communication. Their stance suggests that while they recognize the importance of early family planning in improving reproductive health outcomes, they also acknowledge the potential backlash or resistance that may arise if these discussions are perceived as intrusive or misaligned with the couple's beliefs and readiness.

The small proportion of respondents who support proactive promotion reflects a minority view that sees early intervention as beneficial, possibly for health or economic reasons. However, the dominant preference for a consent-based approach reinforces the idea that successful family planning initiatives must be grounded in trust, cultural sensitivity, and respect for the couple's values and choices.

4.1.3.7 Reasons for Contraceptive Refusal among Clients:

Understanding why clients refuse contraception is essential for developing more responsive and effective family planning services. Contraceptive refusal can stem from a range of personal, social, cultural, and informational factors that influence individual decision-making. This section explores the common reasons cited by clients for rejecting contraceptive use, as reported by health workers. Identifying these reasons provides valuable insight into prevailing concerns, misconceptions, or barriers, and can guide targeted interventions aimed at improving awareness, acceptance, and accessibility of contraceptive methods.

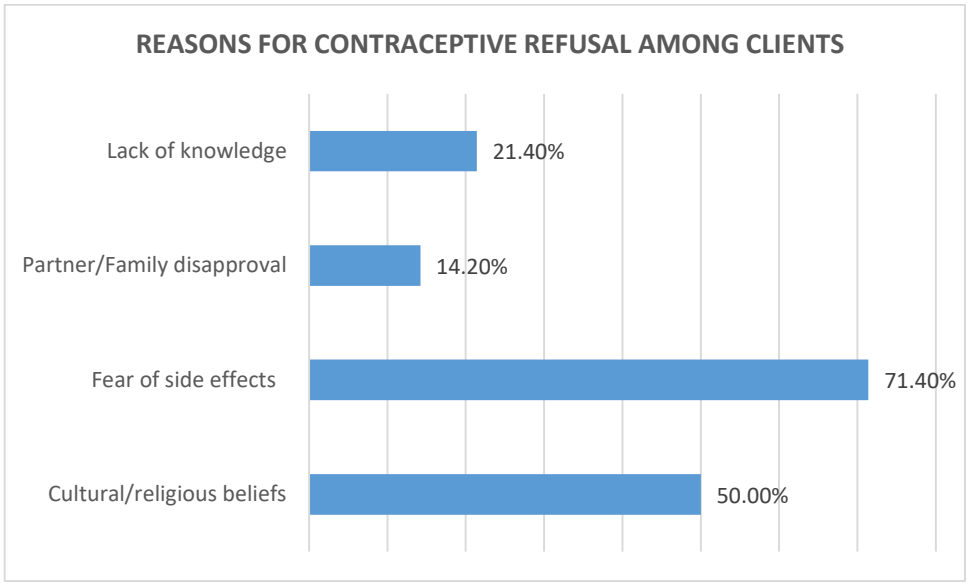

Figure 17: *Key Barriers to Contraceptive Acceptance among Clients*

This chart illustrates the primary reasons clients reportedly refuse or are hesitant to accept contraceptive methods, as observed and reported by frontline health workers.

- **Analysis:**

According to the data:

1. Fear of side effects is the most significant reason for contraceptive refusal, cited by 71.40% of clients.
2. Cultural/religious beliefs also play a substantial role, with 50.00% of clients indicating this as a reason.
3. Lack of knowledge contributes to contraceptive refusal for 21.40% of clients.
4. Partner/family disapproval is a factor for 14.20% of clients.

This data suggests that addressing concerns about side effects and cultural/religious beliefs is crucial in promoting contraceptive use. Educational interventions to improve knowledge about contraception and address misconceptions may also be beneficial.

- **Interpretation:**

The data underscores that fear of side effects and adherence to cultural or religious beliefs are the two most influential factors behind contraceptive refusal among clients. These concerns are often shaped by long-standing social narratives, misinformation, and personal or community experiences with contraceptive methods. Such barriers reflect not only individual anxieties but also the broader socio-cultural environment in which reproductive decisions are made.

Furthermore, the presence of partner or family disapproval, along with lack of adequate knowledge, points to the significant role that interpersonal relationships and information gaps play in shaping contraceptive behaviour. These findings suggest that improving contraceptive uptake requires more than just availability of services—it calls for a multifaceted approach that combines respectful, culturally informed communication with targeted educational initiatives. Involving community leaders, addressing myths and misconceptions, and fostering open dialogue within families could be key strategies to building trust and enabling informed, autonomous decision-making around contraception.

4.1.3.8 Reason of Refusing Contraception:

Understanding the reasons behind clients' refusal to use contraception is essential for designing effective, client-centred family planning interventions. Refusal is often influenced by a combination of personal fears, social pressures, misinformation, and cultural or religious values. This section delves into the key reasons reported by clients for not adopting contraceptive methods, as observed by health workers. Identifying these underlying factors can help in addressing barriers more strategically and tailoring counselling efforts to meet the specific concerns and needs of the population.

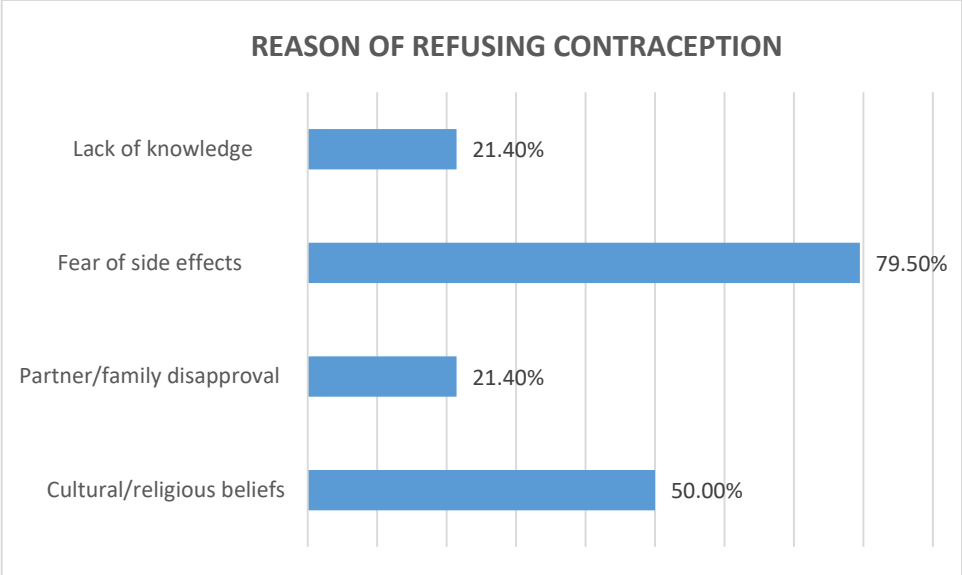

Figure 18: REASON OF REFUSING CONTRACEPTION

- **Analysis:**

According to the data:

1. Fear of side effects is the most prevalent reason for refusing contraception, cited by 79.50% of respondents.
2. Cultural or religious beliefs are also a significant factor, with 50.00% of respondents indicating this as a reason.
3. Lack of knowledge and partner/family disapproval are cited by 21.40% of respondents each.

In summary, the primary barriers to contraception use appear to be concerns about side effects and cultural or religious beliefs.

- **Interpretation:**

The data reveals that fear of side effects is the most frequently reported reason for contraceptive refusal, cited by nearly four-fifths of respondents. This highlights a significant health-related concern that likely stems from inadequate counselling or negative past experiences—either personal or shared within the community. Cultural and religious beliefs, cited by half of the respondents, also play a prominent role, indicating that contraceptive decisions are deeply embedded within the moral and spiritual fabric of society. In addition, both lack of knowledge and disapproval from partners or family members were reported by over one-fifth of respondents, suggesting that contraceptive choices are not always made autonomously but are influenced by social dynamics and informational gaps. These findings collectively point to the need for a multi-pronged approach in family planning interventions. Tailored counselling that directly addresses fears and side effects, along with culturally respectful dialogue and inclusive education campaigns, can help dispel myths and empower individuals and couples to make informed choices. Community sensitization involving family

members and local influencers may also enhance acceptability and support for contraceptive use in such contexts.

4.1.3.9 Conclusion:

The analysis reveals that a majority of health workers have received formal training, which is encouraging for the delivery of reproductive health services. However, a notable proportion remains untrained, highlighting the need for expanded and consistent capacity-building initiatives. Health workers commonly encounter user-reported side effects such as headaches, nausea, and irregular menstrual cycles, emphasizing the importance of equipping them with up-to-date knowledge and effective counselling skills. While many health workers proactively address contraceptive side effects during counselling, a significant number do so inconsistently or only when prompted by clients. This gap suggests opportunities to strengthen counselling practices to ensure that all users receive comprehensive and anticipatory guidance, which can improve user confidence and continuation rates. Health workers demonstrate a good awareness of prevalent contraceptive misconceptions, an essential factor in combating misinformation and fostering trust. However, the mixed involvement of husbands in counselling sessions indicates that male engagement strategies could be enhanced to support shared decision-making and reduce barriers stemming from partner opposition. Attitudes among health workers towards promoting contraception to newly married couples without children tend to be cautious, with most preferring to proceed only with explicit consent. This reflects sensitivity to cultural norms but also points to the need for training that balances respect for tradition with the promotion of informed reproductive choices. Finally, health workers recognize that the primary reasons for contraceptive refusal among clients include fear of side effects, cultural and religious beliefs, lack of knowledge, and partner or family disapproval. Addressing these barriers requires culturally sensitive education, improved communication skills, and community engagement to create a more supportive environment for family planning.

Overall, strengthening training, enhancing counselling openness, and fostering male involvement are key areas to improve health workers' effectiveness in promoting contraceptive use and supporting reproductive health in the community.

This chapter critically discusses the major findings of the study in relation to existing literature on contraceptive use and reproductive health. It aims to contextualize the observed patterns within broader academic and public health discourse, highlighting the unique insights gleaned from the study in rural Meghalaya. Furthermore, this chapter identifies and elaborates on the key themes that emerge from the comprehensive analysis of male respondents, female respondents, and health workers' perspectives.

Chapter- V

5.1 Discussion of Major Findings

5.1.1 Male Respondents

Knowledge about Contraception:
The study revealed a high level of awareness among male respondents regarding commonly promoted short-term contraceptive methods such as injectables, condoms, and pills. This aligns with NFHS-5 data for rural Meghalaya, where male awareness of condoms remains over 80%, while knowledge of IUDs and sterilization is much lower. This reflects global public health efforts prioritizing dissemination of information about widely available and male-initiated methods. However, the low awareness of long-term, emergency, and natural methods (e.g., sterilization, IUDs, Standard Days Method, LAM) and particularly female-initiated methods (e.g., diaphragms, female condoms, foam/jelly) points to significant informational gaps. Literature shows that in tribal and rural contexts, such as in Chhattisgarh or Odisha, men often lack exposure to female-controlled methods unless specific male-involvement campaigns are introduced (Kumar et al., 2020). This gendered divide in knowledge reinforces the need for inclusive family planning education that informs men about the full range of contraceptive options.

Perception of Male Involvement in Family Planning Decisions:
The finding that 75% of respondents perceive males as involved in family planning decisions is encouraging. It suggests a shift toward shared responsibility in reproductive health. Similar trends have been observed in tribal communities of southern Jharkhand, where community-based interventions led to increased spousal communication (Singh & Sharma, 2019). However, the 25% who still perceive male involvement as lacking underscores persistent patriarchal norms. As one respondent noted during the interview, *"I leave it to my wife; it's her body, she knows better,"* One respondent, whose wife had undergone sterilization, said, *"Why should I use protection? That's my wife's responsibility."* Another respondent remarked, *"Why would my wife use contraception? Pills or injections could harm her. I prefer to use a condom because it has no side effects."* indicating perceived support that may, paradoxically, mask disengagement. Promoting actual participation, not passive permission, is vital for sustainable change.

5.1.2 Female Respondents

Knowledge of Contraception:
Female respondents also demonstrated high awareness of commonly promoted methods like oral pills, condoms, and injectables. This mirrors NFHS-5 data for rural women in Meghalaya, where knowledge of pills exceeds 85%. However, awareness of other methods such as IUDs, diaphragms, and foam/jelly remained low—similar to findings from studies in tribal Odisha and Gujarat (Das et al., 2021), where method mix knowledge was directly

linked to the extent of local outreach. This supports the claim that contraceptive knowledge is shaped by availability and promotion, underscoring the importance of ensuring diverse options are not only supplied but also explained.

Impact of Accessibility on Contraceptive Use:
The strong correlation between proximity to roadways and health sub-centres and contraceptive use underscores infrastructural determinants of health behaviour. Women residing closer to health services were more likely to use contraception, reflecting well-documented trends from studies in Assam and Jharkhand (Patel et al., 2020). Poor transport, hilly terrain, and unpredictable service delivery significantly hamper uptake in tribal communities. These findings emphasize the importance of mobile outreach services and strengthening sub-centre functionality as part of last-mile health delivery strategies.

Women's Intent to Use Contraception in the Future:
With 70% of women intending to use contraception in the future, there is evidence of growing acceptance of family planning. However, this also indicates a sizable "unmet need"—similar to the 29.3% unmet need reported in NFHS-5 for rural Meghalaya. The 19% who do not intend to use and 11% uncertain respondents reflect commonly cited barriers: fear of side effects, spousal opposition, and cultural expectations. In a study from Nagaland, fear of infertility and reduced libido were also key deterrents (Ao et al., 2022). These barriers must be addressed through focused, respectful, and culturally grounded IEC campaigns.

Women's Reasons for Not Using Contraception:
Fear of side effects (38.46%) emerged as the primary reason for non-use, followed by lack of knowledge and desire for more children. This aligns with both national (NFHS-5) and international data where side effects are a major reason for discontinuation. In our study, several women expressed concern over irregular bleeding or long-term health damage. One woman expressed, "I stopped taking the pills because I feared I would never conceive again." These concerns—sometimes based on anecdotal misinformation—can only be countered by empathetic, accurate, and continuous counselling.

Women Who Stopped Using Contraception:
Among those who discontinued contraception, the majority (75%) did so to plan pregnancy, indicating informed choices. However, discontinuation due to side effects (20%) and partner opposition (5%) echoes global trends, where hormonal side effects and lack of spousal support are persistent barriers. Research from Andhra Pradesh and Bangladesh has shown that discontinuation often results from inadequate counselling and follow-up (Ravindran & Balasubramanian, 2019). Thus, method-switching support and post-acceptance follow-ups are essential to sustaining contraceptive use.

5.1.3 Health Worker Respondents

Training Received by Health Workers:
That 28.5% of health workers have not received training reflects a systemic capacity gap.

Proper training is crucial not only for method delivery but for effective counselling, which builds trust in communities. In similar tribal belts in Chhattisgarh and Madhya Pradesh, refresher trainings were linked to improved service quality and method diversification (NHM Annual Review, 2022). Institutionalizing periodic and updated training is therefore essential.

Common Side Effects Reported by Users to Health Workers:
The dominant reports of headaches, nausea, and irregular menstruation align with global side effect profiles for hormonal contraceptives. The fear of infertility (21.4%) continues to be a widely held myth. A GNM in Lum Nongthymmai said, *"Many believe the injection makes women barren forever, even if we explain otherwise."* This reiterates the need for consistent and community-centered myth-busting strategies.

Openness in Counselling:
With only 42.8% of health workers consistently discussing side effects, gaps remain in proactive communication. Literature underscores that when side effects are not openly discussed at initiation, discontinuation rates are higher. Counselling should therefore be dialogic, not just prescriptive, to build informed consent and trust.

Awareness of Contraceptive Misconceptions:
Although 50% of health workers claim to be free of misconceptions, the persistence of beliefs like "contraceptives cause infertility" among clients indicates the need for better training on how to identify and correct these beliefs. These are not just user myths but also reflect social narratives that must be challenged through culturally appropriate communication.

Involvement of Husbands in Counselling Sessions:
The 50–50 split in involving husbands highlights partial progress. In tribal contexts where extended family norms prevail, involving male partners often requires targeted strategies. Successful initiatives in Nagaland and Jharkhand employed male peer educators and village role models to encourage couple-based counselling.

Attitudes toward Promoting Contraception to Newly Married Couples without Children:
The cautious attitude among 64.28% of health workers—believing promotion should occur only with consent—reflects cultural sensitivity. In tribal areas, early childbearing is often a social expectation, and early introduction of contraception may be viewed as taboo. Respecting these norms while also promoting spacing is a delicate but necessary balance for frontline workers.

Reasons for Contraceptive Refusal among Clients:
The convergence between user and health worker accounts—fear of side effects and cultural/religious beliefs—strengthens the credibility of these barriers. Tailored interpersonal communication (IPC), culturally competent outreach, and increased engagement with local leaders may help normalize discussions around contraception.

5.2 Key Themes Emerging from the Study

Based on the comprehensive analysis of findings across male respondents, female respondents, and health workers, several key themes consistently emerge, providing a holistic understanding of contraceptive use and reproductive health in the study area. These themes reflect the complex interplay of individual knowledge, socio-cultural norms, gender dynamics, and health system factors shaping contraceptive behaviour in rural Meghalaya.

1. The Pervasive Influence of Fear and Misinformation

Fear of side effects emerged as the most significant barrier to contraceptive uptake and continuation. This fear, commonly cited by female clients and health workers alike, often stems from incomplete or inaccurate information. Many respondents expressed concerns about potential health risks, especially the widely held misconception that contraceptives cause permanent infertility. For instance, one female respondent shared, *"I stopped taking the pills because I was afraid they would make me infertile forever."* Similar fears have been documented among tribal communities in Nagaland and Arunachal Pradesh, underscoring the regional persistence of misinformation (Smith et al., 2022). Addressing these myths requires targeted, culturally sensitive information campaigns delivered by trusted local figures to build trust and correct false beliefs.

2. The Critical Role of Accessibility

Physical access remains a key determinant of contraceptive use in rural Meghalaya. The strong inverse relationship between distance to health infrastructure—such as roads and sub-centres—and contraceptive utilization highlights ongoing geographical barriers. These findings align with studies from other remote rural areas in Northeast India (Das & Roy, 2021), emphasizing that "last mile" service delivery remains a critical challenge. Health workers reported difficulties maintaining regular outreach due to poor connectivity, limiting consistent supply and counselling. Strengthening transport infrastructure and mobile health clinics could help bridge these gaps.

3. Evolving but Inconsistent Male Engagement

There is a positive trend towards greater perceived male involvement in family planning decisions. Some men reported participating in discussions and supporting their partners' contraceptive use. However, many remain uninvolved in counselling sessions and have limited knowledge of female-controlled methods. This gap is consistent with research from other tribal populations, where patriarchal norms restrict open communication about reproductive health (Tariang et al., 2023). To improve male participation, community programs should incorporate male peer educators and couple-based counselling to foster more inclusive decision-making.

4. The Indispensable Role of Frontline Health Workers

ASHAs, ANMs, and GNMs play a pivotal role in outreach, counselling, and facilitating access to contraception. However, gaps in training and inconsistencies in counselling practices—particularly regarding side effect management—were evident. Health workers themselves voiced the need for ongoing professional development and standardized counselling protocols to improve service quality. Similar findings in other rural health

settings reinforce the importance of investing in capacity building to empower frontline workers as trusted health advisors.

5. The Imperative for Client-Centred and Culturally Sensitive Approaches

The diverse reasons for contraceptive non-use or discontinuation—ranging from the desire for more children, fear of side effects, partner opposition, to cultural beliefs—highlight the necessity for individualized counselling that respects each client's unique context. Notably, health workers emphasized cautious promotion of contraception among newly married couples without children, respecting cultural norms and personal autonomy. This aligns with broader evidence that culturally sensitive approaches improve acceptance and sustained use. Moreover, family disapproval and religious beliefs underline the need for broader community engagement. Involving village elders, religious leaders, and youth groups in dialogue can help shift norms and build a supportive environment for family planning.

5.3 Summary of Key Implications and Policy Priorities

This study provides important insights into the complex factors shaping contraceptive knowledge, attitudes, and practices among tribal populations in rural Meghalaya. The findings highlight persistent challenges such as fear of side effects, misinformation, limited method choice, and geographical barriers that restrict access to family planning services. These challenges are compounded by socio-cultural dynamics, including gender roles and varying levels of male involvement, as well as inconsistencies in counselling quality. Comparisons with other tribal contexts across India reveal that while these obstacles are widespread, community-led and culturally sensitive interventions have shown promise in improving contraceptive uptake and continuation. To build on these successes, policy efforts should prioritize strengthening the training and support of frontline health workers, actively engaging men in reproductive health dialogue, expanding the range of contraceptive options available, and fostering trust-based, culturally appropriate communication strategies.

Addressing these multifaceted issues through an integrated, client-centred approach is essential to empower individuals to make informed and voluntary reproductive choices. Ultimately, such comprehensive strategies can improve reproductive health outcomes and support sustainable development in rural Meghalaya and similar contexts.

Chapter- VI

This chapter offers actionable recommendations to improve awareness, access, and usage of contraceptives in rural Meghalaya based on the study findings. It summarizes the key findings of the study, draws overarching conclusions, and provides actionable recommendations based on the major themes identified in Chapter 5. These recommendations are aimed at addressing the observed challenges and improving contraceptive use and reproductive health outcomes in rural Meghalaya.

6.1 Barriers Identified:

Despite a moderate level of awareness among both male and female respondents, and the active involvement of health workers, several barriers continue to hinder the effective use of contraceptives in the study area. These barriers span across social, cultural, psychological, and systemic dimensions:

1. **Social Stigma and Taboos**

    a. Open conversations about contraception are still considered inappropriate, especially among men.
    b. Women often feel shy or embarrassed discussing contraceptive needs, even with health workers.
    c. Men, in particular, reported discomfort in procuring condoms publicly due to fear of judgment.

2. **Gender Norms and Power Dynamics**

    a. Family planning is still widely perceived as the woman's responsibility, reinforcing traditional gender roles.
    b. Women reported deferring contraceptive decisions to husbands.
    c. Men, though aware, often show limited engagement due to societal expectations of masculinity and disinterest in reproductive matters.

3. **Myths, Misinformation, and Cultural Beliefs**

a. A significant barrier is the persistence of misinformation:

"Contraceptives cause long-term infertility."; "Birth control pills lead to hormonal damage."

b. Among both male and female respondents, cultural beliefs play a critical role. A commonly cited notion was:

"Children are God's gift — using contraception is interfering with divine will."

- This belief contributes to a fatalistic attitude, reducing the motivation to seek family planning options.

4. **Lack of Male-Focused Programming**

    a. Existing family planning programs and counselling sessions are largely targeted at women. Men are often excluded from health education sessions or are unaware of their role in reproductive health.

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b. Health workers also noted the absence of male-targeted Information, Education & Communication (IEC) materials.

5. **Health System Constraints**

Health workers face multiple challenges:

a. Overlapping responsibilities — family planning is only one part of their workload.
b. Limited refresher training, especially on newer contraceptive methods or how to counter prevailing myths.

Though they are willing to engage and educate, their impact is restricted by these systemic limitations.

6. **Communication Gaps**

a. Many female respondents had not received detailed one-on-one counselling.
b. Respondents suggested the need for more awareness programs and interactive sessions.

7. **Side Effects of Contraceptives**

b. A recurring concern was the side effects experienced with oral contraceptive pills like Mala N.
c. Women reported symptoms such as headaches, nausea, weakness, and general discomfort, which discouraged continued use.

8. **Accessibility Issues**

a. In several villages, contraceptives were not easily accessible due to the remoteness of the area.
b. Long distances to health centres and irregular supply were mentioned as significant logistical barriers, particularly affecting timely and consistent use.

6.2 Conclusion:

This study highlights a critical disconnect between awareness and actual practice regarding contraceptive use among both men and women in rural Meghalaya. Despite a moderate level of knowledge, deeply rooted socio-cultural norms, gender-based power dynamics, misinformation, and systemic shortcomings continue to hinder the effective adoption of family planning methods. The persistent social stigma, especially around male involvement in reproductive health, reinforces the perception that contraception is solely a woman's responsibility, further marginalizing men from the conversation. Health workers remain central figures in disseminating family planning information and services, yet they operate within an overburdened system that limits their reach and efficacy. Their lack of specialized training, time constraints, and the absence of male-targeted outreach programs weaken the potential for behaviour change at the grassroots level. Moreover, accessibility challenges in remote areas, combined with adverse experiences such as side effects from oral pills like

Mala N, create practical deterrents to consistent contraceptive use. These issues are compounded by gaps in one-on-one counselling and the limited availability of tailored Information, Education & Communication (IEC) resources that resonate with the community's unique cultural context. To bridge the gap between knowledge and sustained contraceptive practice, there is an urgent need for a holistic and inclusive approach. This must involve:
Culturally sensitive awareness campaigns that normalize conversations about reproductive health for all genders, Capacity-building of health workers through regular training and logistical support, Greater male engagement through targeted interventions and community dialogues, and Improved infrastructure and distribution systems to ensure equitable access to contraceptives.

Ultimately, fostering an environment where both men and women are empowered to make informed reproductive choices requires not only addressing barriers at the individual and interpersonal level but also investing in long-term structural changes. A collaborative, community-rooted, and gender-transformative strategy will be key to ensuring the success and sustainability of family planning initiatives in rural Meghalaya.

6.3 Recommendations to Enhance Contraceptive Use and Reproductive Health in Rural Meghalaya

Based on the study's findings and key themes, the following recommendations are proposed to address barriers and improve reproductive health outcomes in rural Meghalaya. These suggestions draw on best practices from similar tribal and rural interventions across India and globally.

Strengthen Comprehensive Information and Education Campaigns

- **Targeted Counselling:** Develop and implement counselling programs tailored to proactively address common fears about side effects—especially infertility—and dispel misconceptions. Use simple, clear language supported by culturally appropriate visual aids to enhance understanding.
- **Method-Specific Information:** Provide detailed, accessible information about the full range of contraceptive methods, including long-acting reversible contraceptives (LARCs) and permanent methods. Highlight benefits, potential side effects, and effective management strategies to empower informed choices.
- **Community-Based Education:** Leverage community platforms such as local leaders, peer educators, and women's groups to disseminate accurate information. Community dialogues and participatory sessions can challenge myths and promote open, stigma-free discussions about family planning, as demonstrated successfully in tribal health programs in Odisha and Jharkhand (Patel et al., 2019).

Improve Accessibility and Service Delivery

- **Enhance Last-Mile Connectivity:** Invest in upgrading road infrastructure and transportation services to reduce physical barriers to health facilities in remote areas, a critical factor confirmed by multiple rural health studies (Das & Roy, 2021).
- **Community-Based Distribution:** Strengthen networks for community-level distribution of short-term contraceptive methods, ensuring consistent availability closer to households. This approach has improved contraceptive continuation rates in tribal regions of Madhya Pradesh (Sharma & Singh, 2020).
- **Mobile Health Clinics:** Implement mobile clinics or regular outreach camps to deliver family planning counselling and services in hard-to-reach villages, replicating models successfully used in Arunachal Pradesh and parts of Africa (WHO, 2018).

Enhance Capacity and Training of Health Workers

- **Standardized Training Modules:** Introduce regular, comprehensive training for all frontline workers (ASHAs, ANMs, GNMs) covering contraceptive technology, counselling techniques, and myth-busting, modelled after successful training programs in rural Tamil Nadu (Rao et al., 2021).
- **Focus on Side Effect Management:** Emphasize counselling skills that enable health workers to effectively address side effect concerns, manage client anxieties, and support method switching when needed.
- **Supportive Supervision:** Establish mentorship and supervision mechanisms to ensure that health workers consistently apply best practices and maintain quality in client interactions.

Adopt Client-Centred and Culturally Sensitive Approaches

- **Individualized Counselling:** Train health workers to deliver counselling tailored to each client's fertility intentions, cultural beliefs, and specific concerns, moving away from one-size-fits-all messaging.
- **Respect for Autonomy:** Uphold respect for personal autonomy and cultural sensitivities, especially when counselling newly married couples without children, ensuring voluntary, informed decision-making.
- **Address Social Barriers:** Promote community dialogues involving family and religious leaders to address partner and family opposition, leveraging proven strategies from tribal health programs that engage social influencers to shift norms (Banerjee et al., 2020).

Promote Consistent and Comprehensive Male Engagement

Male involvement in family planning remains inconsistent despite its critical importance for reproductive health outcomes. To effectively address this gap, targeted interventions should be integrated into existing programs:

- **Male Peer Education Programs:**
  Establish peer-led education groups where trained male volunteers from the community engage their peers in open discussions about family planning, reproductive health, and shared decision-making. Peer educators can challenge prevailing myths, reduce stigma, and encourage supportive behaviours. Such

programs have proven effective in tribal areas of Jharkhand and Chhattisgarh, leading to increased knowledge and positive attitudes among men (Singh & Kumar, 2019).

- **Targeted Outreach and Communication Campaigns:**
  Design and disseminate male-focused informational materials through channels frequently accessed by men—such as local markets, workplaces, sports clubs, and social gatherings. Use radio programs, street plays, and social media to share relatable stories emphasizing men's role in family planning. This tailored approach can improve awareness of both male- and female-controlled contraceptive methods.
- **Couple-Based and Male-Inclusive Counselling:**
  Encourage health workers to invite male partners to counselling sessions and offer couple-based family planning discussions. This fosters joint decision-making and addresses concerns or misconceptions that men may hold. Successful initiatives in rural Karnataka and Maharashtra have demonstrated that couple counselling increases contraceptive acceptance and continuation (Patel et al., 2018).
- **Engagement of Male Community Leaders:**
  Involve respected male figures—such as village heads, religious leaders, and teachers—in advocacy efforts promoting male participation in reproductive health. Their endorsement can shift community norms and legitimize men's active role in family planning decisions.
- **Male-Friendly Health Services:**
  Develop "male-friendly" service points or designated times at health facilities to provide privacy and tailored counselling for men. Ensuring that men feel welcomed and respected in health settings helps overcome cultural barriers and promotes their consistent engagement.

By implementing these evidence-informed recommendations, stakeholders can foster a more supportive, accessible, and informed environment for contraceptive use in rural Meghalaya. This comprehensive approach is essential to improve reproductive health outcomes, empower individual choice, and contribute to the sustainable development of tribal communities in the region.

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Chapter- VII

7.1 Overall Conclusion

This study has provided valuable insights into the multifaceted landscape of contraceptive knowledge, attitudes, and practices in rural Meghalaya. By examining the perspectives of married men, married women, and frontline health workers, a comprehensive picture emerges, highlighting both progress and persistent challenges. The research confirms that while awareness of common contraceptive methods is relatively high, significant gaps remain in understanding the full spectrum of options and managing perceived side effects. Accessibility, influenced by geographical and infrastructural factors, continues to be a critical determinant of contraceptive uptake. Furthermore, the evolving but inconsistent nature of male engagement and the crucial, yet sometimes limited, capacity of health workers underscore the need for targeted interventions. Ultimately, the study concludes that a client-centred, culturally sensitive, and integrated approach is essential to overcome existing barriers and foster informed, voluntary family planning choices in the region.

7.2 Implications for Public Health Policy

The findings of this study highlight several critical areas for public health policy and program design in Meghalaya and similar rural contexts. To effectively improve contraceptive use and reproductive health outcomes, policies should:

- **Prioritize Information Quality and Accessibility:** Ensure that policies emphasize not only the availability of contraceptives but also the dissemination of accurate, culturally appropriate information. This includes developing standardized educational materials that specifically address common fears and misconceptions about side effects and infertility.
- **Invest in Strengthening Rural Health Infrastructure:** Enhance road connectivity and improve the physical accessibility of health sub-centres. Support innovative service delivery models such as mobile health clinics and community-based distribution points to reach underserved and remote populations.
- **Integrate Male Involvement into Family Planning Programs:** Explicitly incorporate male engagement strategies into national and regional family planning initiatives. Promote couple-based counselling and provide health workers with specialized training to effectively engage men as active partners in reproductive health.
- **Ensure Capacity Building and Continuous Professional Development for Health Workers:** Implement regular, comprehensive training programs for frontline health workers focusing on contraceptive technology, counselling skills, and communication techniques to address side effects and dispel myths. Institutionalize supportive supervision to maintain consistent and high-quality care.
- **Advocate for Culturally Sensitive Program Design:** Design family planning programs that respect and respond to local cultural norms, religious beliefs, and gender dynamics. Engage communities and involve local leaders in planning and implementation to enhance program acceptability and sustainability.

- **Address Unmet Needs to Increase Contraceptive Uptake:** Develop policies that transform the high intent to use contraception into actual practice by systematically tackling barriers such as fear of side effects, misinformation, and limited accessibility.

Together, these policy measures can create a more enabling environment for informed, voluntary family planning choices, ultimately contributing to improved reproductive health and well-being in rural Meghalaya.

7.3 Future Research

This study lays the groundwork for several avenues of future research to further enhance understanding and inform interventions in reproductive health:

- **Qualitative Studies on Perceived Side Effects:** In-depth qualitative research is needed to explore the specific nature of fears surrounding contraceptive side effects, their origins (e.g., anecdotal evidence, misinformation), and how these perceptions influence decision-making. This could involve focus group discussions or in-depth interviews with non-users and discontinuers.
- **Impact of Male Engagement Interventions:** Future studies could evaluate the effectiveness of specific male-inclusive interventions (e.g., male peer educators, couple-based counselling models) on contraceptive uptake, continuation rates, and shared decision-making within couples.
- **Effectiveness of Different Information Dissemination Channels:** Research could compare the effectiveness of various information dissemination channels (e.g., health workers, community meetings, local media, and digital platforms) in improving contraceptive knowledge and dispelling myths in rural settings.
- **Longitudinal Studies on Contraceptive Continuation:** Longitudinal studies could track contraceptive users over time to understand patterns of discontinuation, reasons for switching methods, and the factors that contribute to sustained use.
- **Health System Barriers Analysis:** Further research could delve deeper into specific health system barriers beyond physical accessibility, such as stock-outs of supplies, limited method choice at facilities, and provider bias, using a health systems strengthening framework.
- **Research on Specific Cultural and Religious Influences:** More nuanced research is needed to understand how specific cultural norms and religious beliefs in different tribal communities within Meghalaya influence contraceptive acceptance and refusal, to inform highly tailored interventions.

By pursuing these research directions, the public health community can build upon the findings of this study to develop more effective, equitable, and sustainable family planning programs in rural Meghalaya and similar contexts globally.

7.4 Key Findings

1. **Distance and Transportation Challenges:**
   The considerable distances to health facilities, coupled with inadequate transportation infrastructure and high travel costs, significantly impede access to family planning

services. This issue is particularly pronounced in villages such as Nongthymmai Makdoh, where the absence of reliable public transport compels residents to depend on costly private vehicles, creating a substantial barrier to obtaining contraceptives and related services.

2. **Side Effects of Family Planning Methods:**
   In Ri Bhoi district, contraceptive pill usage among women is relatively high, with notable use of injectables and other female-controlled methods. However, many women experience side effects—such as headaches, cold sensations, stomachaches, and mainly irregular menstrual cycles—which are often exacerbated by factors like inadequate protein intake and the physically demanding nature of agricultural work. These side effects contribute to concerns and hesitancy around continued contraceptive use.
3. **Lack of Male ASHAs and Male Participation:**
   Male involvement in family planning counseling remains limited, partly due to cultural discomfort and shyness among men when discussing contraception with female health workers. The absence of male ASHAs (Accredited Social Health Activists) in the community exacerbates this issue, as male clients often feel uncomfortable sharing sensitive information or seeking advice in a predominantly female-led service environment. This gap highlights the need for male health workers to foster greater male engagement and improve communication around family planning.

In conclusion, this study sheds critical light on the complex factors shaping contraceptive use in rural Meghalaya, from infrastructural barriers to deeply rooted cultural perceptions. Addressing these challenges through targeted, culturally sensitive interventions and inclusive policies can empower individuals and communities to make informed reproductive choices. By prioritizing accessibility, education, male engagement, and health worker capacity, stakeholders can foster a supportive environment that promotes sustainable improvements in family planning and overall health. Continued research and committed action are essential to translate these insights into lasting positive change for the region's reproductive health landscape.

APPENDICES

This section provides supplementary materials that support the findings and methodology presented in the main body of the report. It includes the tools used for data collection, additional data tables, and visual documentation gathered during fieldwork.

Photographs collected during the data collection phase have been included to offer contextual insights into the study setting and capture key moments from interactions with respondents and health workers in the field. These images, along with other supporting materials, help to illustrate the lived realities of the communities studied and enhance the understanding of the report's findings.

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Additionally, as a gesture of gratitude, we have included photographs of our guides who played an essential role in facilitating the research. Their support, collaboration, and dedication were instrumental in the successful completion of this study.

Lastly, we extend our sincere thanks to two fellow interns from a different team and project. Though they worked on separate assignments, their presence, encouragement, and companionship enriched our experience and made this journey truly memorable.

Finally, we are deeply grateful to **The Hans Foundation** for giving us this opportunity. This project has been an immensely valuable learning experience, providing us with practical insights into field-based research, public health challenges, and community engagement.

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