

**COMPARATIVE ANALYSIS OF FAMILY PLANNING
PRACTICES AND IDENTIFICATION OF CHALLENGES
AND BEST PRACTICES IN BIHAR AND RAJASTHAN.**

Dissertation submitted to



THE IIHMR University, Jaipur

for the partial fulfilment for the award of the degree of Master of
Business Administration (MBA)

in

Hospital and Health Management

by

Dr Charvi Jain

Under the supervision and guidance of

Dr. Varsha Tanu

2023

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DECLARATION BY STUDENT

I hereby declare that this dissertation titled “**Comparative Analysis of Family Planning Practices and Identification of Challenges and Best practices in Bihar and Rajasthan**” is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

Name of the student- Dr Charvi Jain

Date- 05.06.2023

CERTIFICATE

This is to certify that **Dr Charvi Jain** in partial fulfilment of the requirements for the award of the degree of MBA (Hospital and Health Management)/MBA (Pharmaceutical Management)/MBA (Development Management) from the IIHMR University, Jaipur has successfully completed her/his internship at (name of the organization) during February 20- May 19, 2023.

Place:

Preceptor/ Head of the organization

Date:

Name of the organization

CERTIFICATE

This is to certify that dissertation titled **“Comparative Analysis of Family Planning Practices and Identification of Challenges and Best practices in Bihar and Rajasthan”** is a record of the research work undertaken by **Dr Charvi Jain** in partial fulfilment of the requirements for the award of the degree of **MBA Hospital and Health Management** from the IIHMR University, Jaipur under my guidance and supervision and her approach to the research study has been sincere, scientific, and analytical.

Faculty Guide

Dr Varsha Tanu

IIHMR University, Jaipur

Date- 05.06.2023

School Dean

IIHMR University, Jaipur

Abstract

Introduction: By reducing STDs, unwanted pregnancies, abortions, and having an adequate birth spacing, family planning focuses on enhancing the reproductive health of the mother and enhances the quality of life for the entire family. According to NFHS-5 factsheet, the TFR of India has reached to 2 which is below the replacement level (2.1) but still many states are struggling for reducing the TFR to 2.1. According NFHS-5 report, Bihar state has the highest TFR which is 3. In order to fill in any gaps in the family planning services, it is necessary to analyze the current trends in family planning indicators.

Methods: This study was descriptive study, and the study areas were Bihar and Rajasthan state. The study population include 15 to 49 years currently married women and men. The study duration was from the month of April to May 2023. The data was collected from NFH-4 and NFHS-5 factsheets, review of publications, articles, and journals. The data analysis was done on MS-Excel.

Results: According to the latest NFHS-5, the TFR is high in Bihar as compared to Rajasthan. In NFHS-5, the Adolescent Fertility Rate in Bihar is 77 percent which is much higher than the 41 percent in Rajasthan which shows that adolescent boys and girls have less exposure to family planning services, and they have less knowledge about the contraceptive methods. Indicators of the quality of FP services have risen from NFHS-4 to NFHS-5 in both states. According to the NFHS-4 and NFHS-5 reports, the method mix is more heavily weighted to female sterilization, primarily conducted at public facilities. As observed in both NFHS-4 and NFHS-5, most of the contraceptive methods evaluated by eligible couples are public sector oriented. So, there is a need for the involvement of the private sector in family planning.

Discussions: After comparing all the indicators of family planning in the states Bihar and Rajasthan using NFHS-4 and NFHS-5 we can conclude that the family planning services in both the states but the improvement in Bihar state is lesser than that of Rajasthan state. The Adolescent fertility rate and teenage motherhood need to be addressed effectively which can be done by engaging the adolescent and the youth population by including comprehensive sexual education (CSE) in their education curriculum. However, it can be said that after implementation of many family planning programmes, the family planning indicators are improving in both the states, but the pace of the improvement is slow. It needs to be fastened so that FP2030 goals can be achieved within time.

Acknowledgement

The internship at the **PATH** provided me enormous knowledge and given me enough experience regarding how the health organization works and how the program gets implemented. I would like to owe my gratitude to my institutions **IIHMR University, Jaipur** for providing me with the opportunity to work in esteemed organization like **PATH India**. I want to thank **Dr. Varsha Tanu**, my faculty mentor, for her timely advice. I want to express my gratitude to my organization mentors, **Dr Vaibhao Ambhore** and **Dr Aishwarya Kharade** at **PATH** for their consistent support & guidance. I truly thank them for the time & effort they have dedicated for the completion of the internship that gave me insights into Family Planning Program in India. I also like to thank **Manish** and for always being there for me in need and helped me in improving my skills. I thank my parents & friends for their continuous support & motivation. I perceive this internship as a vital part of my professional development.

Table of Contents

Abstract	6
Acknowledgement	7
Abbreviations	12
Chapter 1: Introduction	13
Chapter 2: Literature Review	15
Chapter 3: Methodology	19
3.1 Research Question	19
3.2 Aim	19
3.3 Objectives	19
3.4 Study design	19
3.5 Study area	19
3.6 Study population	19
3.7 Duration	19
3.8 Data collection	19
3.9 Statistical method	19
3.10 Operational definitions	19
Chapter 4: Results	21
4.1 Fertility Indicators	21
4.2 Current use of family planning methods	23
4.3 Unmet need for family planning	24
4.4 Quality of family planning services	25
4.5 Source of modern contraceptives	27
4.6 Men's perception about family planning	28
4.8 Early Marriage	29
4.9 Teenage Motherhood	30
Chapter 5: Challenges and best practices in implementing family planning services.	31
5.1 Challenges	31
5.1.1. Less engagement of Males in family planning services	31
5.1.2. Less engagement of private sector	31
5.1.3 Teenage motherhood and early age of marriages	31
5.2 Best Practice	31

5.2.1. Best Practice at Global Level	31
5.2.2. Best Practice at India Level	32
Chapter 6: Discussion	34
Chapter 7: Conclusion.....	36
Chapter 8: References	37

List of Figures

Figure 1.1 Family planning programme trajectory in India.....	13
Figure 4.1.1 Total Fertility Rate in Bihar and Rajasthan according to NFHS-4 and NFHS-521.	
Figure 4.1.2: Adolescent Fertility Rate (age 15-19 years) in Bihar and Rajasthan according to NFHS-4 and NFHS-5. -----	22.
Figure 4.2.1: The percentage of women (15-49 years) who are using any contraceptive methods. -----	23.
Figure 4.2.2: The percentage of women (15-49 years) who are using any modern contraceptive methods. -----	23.
Figure 4.3.1: The percentage of women (15-49 years) who are having unmet need of spacing and limiting methods. -----	25.
Figure 4.5.1: Percent distribution of women aged 15-49 who are current users of modern contraceptive methods by most recent source of the method.-----	27.
Figure 4.6.1: Percentage of men aged 15-49 who agree with two specific statements about women and contraception. -----	28.
Figure 4.7.1: percentage of women (15-49 years) who have had Hysterectomy. -----	29.
Figure 4.8.1: The percentage of men and women (15-49 years) who were married before the legal age of marriage. -----	29.
Figure 4.9.1: the Percentage of women (age 15-19) who have begun childbearing. -----	30

List of Tables

Table 4.2.3: The percentage of women (age 15-49 years) who have limiting methods as contraceptive methods.	24
Table 4.2.4: The percentage of women (age 15-49 years) who have spacing methods as contraceptive methods.	24
Table 4.3.2: The percentage of Total Unmet Need.	25
Table 4.4.1: the percentage of women (15-49 years) receiving quality family planning health services.	26
Table 4.4.2: Method Information Index.	26

Abbreviations

STD	Sexually Transmitted Diseases
SDG	Sustainable Development Goals
HIV	Human Immunodeficiency Syndrome
IUD	Intrauterine Device
OCp	Oral Contraceptive Pills
SHC	Sub Health Centres
PHC	Primary Health Centres
FP	Family Planning
MoHFW	Ministry of Health and Family Welfare
MPV	Mission Parivar Vikas
TFR	Total Fertility Rate
NFHS	National Family Health Survey
DLHS	District Level Household and facility Survey
ASHA	Accredited Social Health Activist
MII	Method Information Index
CMHO	Community Medical Health Officer
NGO	Non-Governmental Organization
IEC	Information, Education and Communication
mCPR	Modern Contraceptive Prevalence Rate
PPIUCD	Postpartum Intrauterine contraceptive Device
USAID	United States Agency for International Development
NSV	No-Scalpel Vasectomy
TPIP	Taking Pride in Prevention
STIs	Sexually Transmitted Infections
SRH	Sexual Reproductive Health
WHO	World Health Organization
SDM	Standard Days Method
TMA	Total Market Approach
CSE	Comprehensive Sexuality Education
ECPs	Emergency Contraceptive Pills
UTs	Union Territories

Chapter 1: Introduction

In India the National Family Planning Program was launched in year 1952. Lowering birth rates and slowing the growth of the population were the program's main goals to boost economic development. The following figure describes the course of the FP programme in India.

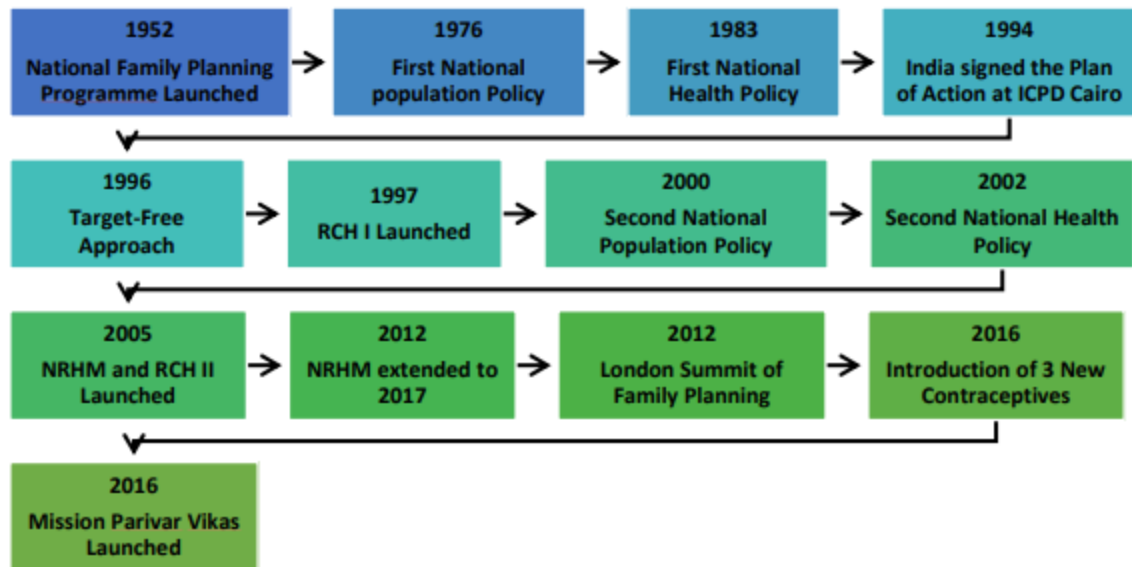


Figure 1.1 shows the FP intervention trajectory in India.

The motive of contraceptive methods is to lower the number of birth the eligible couples wish to have. Family planning focuses on improving the reproductive health of the women and it also improves quality of life of entire family by preventing sexually transmitted diseases (STDs), avoiding unintended pregnancies and abortions, and having an adequate birth spacing. Thus, family planning impacts all 17 SDGs to some extent, however main emphasize are on SDGs 1, 3, 5, 8 and 10. The research demonstrates that focusing on family planning has helped to reduce poverty (goal 1) and birth spacing has significant positive impact on the health of mother and child by reducing malnutrition (goal 2). Family planning has also helped in achieving gender equality and equity (goal 5) in a cost-effective manner by providing appropriate knowledge about the contraceptive methods available. The main intention of family planning is to reduce family sizes which will in turn affect the dependency ratio. So, there will be a larger working age group as compared to the dependent group which will enhance the economic growth of the country (goal 8). This will also result in reducing poverty and inequalities (goal 10), thus having a multiplier effect on the SDGs. By preventing unplanned pregnancies and unsafe abortions, as well as protecting against sexually transmitted diseases like Chlamydia, HIV, Syphilis, and others, the use of

contraceptives can reduce maternal mortalities by 32 percent and child deaths by 10 percent (Family planning: the unfinished agenda., 2006).

Contraceptive procedures are preventive measures that can help women avoid undesired births. Contraception refers to the act of preventing unwanted pregnancies. A woman can control her reproductive health and actively participate in family planning with the aid of contraceptives. Contraceptive methods are divided into two categories that are spacing methods and limiting methods. In India the spacing methods which are IUDs, condoms, OCPs are available at public health facilities beginning from SHC and limiting methods which include tubal ligation and Vasectomy are available at primary health centres (PHCs) or above. Family planning is the most crucial intervention for addressing maternal and infant mortalities and morbidities.

MoHFW has launched several interventions because family planning (FP) programmes have giving widespread ingress to SRH services will have a direct effect on women's health. One of these interventions is Mission Parivar Vikas (MPV). MPV is launched in 145 high fertility districts which have TFR of 3 and above. Bihar and Rajasthan are one of these states where MPV is implemented. The goal of the government's Mission Parivar Vikas is to improve these states' access to contraception and family planning services.

According to NFHS-5 factsheet, the TFR of India has reached to 2 which is below the replacement level (2.1) but still many states are struggling for reducing the TFR to 2.1. According NFHS-5 report, Bihar state has the highest TFR which is 3. Apart from Bihar there are many other states that have TFR above 2.1. The lack of knowledge about contraceptive methods, the scarcity of supplies, the high cost, the poor accessibility, and false beliefs about contraceptive methods are some of the challenges that present in developing nations like India.

It is vital to examine the most recent developments in family planning indicators to identify these gaps in the family planning services implementation.

Chapter 2: Literature Review

This section include the literature review of the articles which is related to the study of the family planning in India and their

S No	Title of the study (Authors, year)	Authors and study year	Methodology	Key findings
1.	Comparative Analysis of contraceptive use in Punjab and Manipur: Explore beyond women's education and empowerment.	Sharma, A., Kumar, A., Mohanty, S.K. et al., 2022	Data from NFHS-4 and DLHS-4	• Although both states offered similar levels of family planning services, Manipur had a lower contraceptive use rate than Punjab. • The limited outreach of ASHAs, the under preparedness of health institutions, and the sociocultural norms that discourage the use of contraceptives all contributed to the reduced utilization of family planning services. • Therefore, increasing the use of contraception in Manipur requires tackling the societal barriers there.
2.	Do Indian women receive adequate information about contraception?	Rana,MJ, Jain A., 2020	NFHS-3 and NFHS-4 data is used	• The respondents' information on contraceptive methods was analysed using the Method Information Index (MII). • The outcome revealed an increase in the MII value from 16 percent in NFHS-3 to 31 percent in NFHS-4. • In addition, the percentage of women

				who have permanent female sterilization has climbed from 67 to 80 percent. • This study also suggests that there is scope to improve the information about the contraceptive methods which will help in voluntary acceptance of the family planning services.
3.	Pattern of contraceptive uses and associated sociodemographic factors in India: A cross-sectional study of young married women ages 15-24 years.	Nanigopal Kapasia, Pintu Paul, Avijit Roy & Pradip Chouhan. 2022	Data derived from NFHS-4, which included 76,747 young, married, non-pregnant women between the ages of 15 and 24.	• To determine the sociodemographic characteristics related to the use of contraceptives, multinomial logistic regression was utilized.. • Findings indicate that modern contraception use is favourably correlated with household wealth and education. • The contraceptives use was less in rural areas and among the socially marginalized groups. • The study has suggested that enhancing the girl's education, giving them financial support and enhancing knowledge of the family planning services can increase the contraceptive uses.
4.	Contraceptive method uses among women in India: Does the	Manas Ranjan Pradhan & Sourav Mondal.	Data taken from NFHS-4	• The analysis uses STATA version 13 and multinomial

	family type matter?	2022		logistic regression, using a 5 percent level of significance. • Results shows that the women in nuclear family use less contraceptive limiting methods as compared to the women in non-nuclear family. • The study has suggested that by creating awareness among the mother-in-law about the modern spacing methods will enhance their use.
5.	Do family planning advice and maternal health care utilization changes course in contraception usage? A study based on Bihar, India	Pradeep Kumar, Himani Sharma, Donald R. Mawkhlieng. 2020	Data taken from NFHS-4	• To determine the variables influencing the usage of contraceptives in Bihar, bivariate and multivariate analysis was conducted. • The result shows that majority women preferred female sterilization. • The use of contraceptive methods was more prevalent among females who had received maternity care. • The predictors for contraceptive use were age, religion, residence, and wealth index. • Age and wealth index of women was found positively correlated to contraceptive uses.
6.	Role of private sector in family planning programme in Rajasthan, India- A	Jain, M. L., Chauhan, M., & Talwar, B. 2017.	Total of 114 hospitals and outlets were included in the	• The result shows that majority of beneficiaries have preferred private

	rapid assessment.		sample size, along with 50 official Ad/Dy/ CMHO of the relevant districts and representatives from NGO partners.	sector more over public sector due to perceived confidentiality, privacy, ease, and access to a variety of contraceptive brands. • According to the study, IEC-produced content and advertising have increased the adoption of family planning products. • This study claims that collaborating with the private health sector will help to fill the gap in family planning supply.
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Chapter 3: Methodology

The chapter include the research question, aim and objective of the study.it also include the study design, area, population considered, duration of the study, data collection methods and the statistical method used for the analysis purpose.

3.1 Research Question

- What are the current family planning indicator trends in Rajasthan and Bihar according to NFHS-4 and 5?
- What are the challenges and best strategies for delivering family planning services?

3.2 Aim

To know the current FP indicators trends in Bihar and Rajasthan state as per NFHS-4 and 5 and identify the challenges and best practices for delivering family planning services.

3.3 Objectives

- To understand the current family planning indicator trends in Rajasthan and Bihar according to NFHS-4 and 5
- To identify the challenges and best practices in implementing family planning services.

3.4 Study design

This study was descriptive study which is based on secondary data.

3.5 Study area

The study areas were Bihar and Rajasthan state. The states are chosen these states because they are the EAG states and the MPV is implemented in both the states.

3.6 Study population

The study population include 15 to 49 years currently married women and men.

3.7 Duration

The study duration was from month of April to May 2023

3.8 Data collection

It was Secondary Data taken from the report of NFHS-4 and NFHS-5, review of publications, articles, and journals.

3.9 Statistical method

In the study for the analysis purpose MS-excel was used.

3.10 Operational definitions

- Total Fertility Rate (TFR): The average number of children a female would have by the time she stopped having children, supposing she spent her entire reproductive years in accordance with the age-specific fertility rates of the year.
- Adolescent Fertility Rate: The number of births each year among women between the ages of 15 and 19 among every 1,000 women in that age range.

- Contraceptive Prevalence Rate: The proportion of married or in-union women aged 15 to 49 who presently use or whose sexual partner currently uses at least one modern method of contraception, regardless of technique utilised.
- Unmet need for Family Planning: The proportion of reproductive-age female who are unmarried or living together but nonetheless need family planning. Women who desire to space out or restrict childbirth but don't use any form of contraception are said to have unfulfilled needs.
- Method Information Index (MIL): The Method Information Index (MII) is determined by asking contraceptive users whether they were told about methods other than the one they received, told about method-specific side effects, and given advice on what to do if they experienced side effects.

Chapter 4: Results

The family planning indicators are divided into following categories for analysis:

- Fertility indicators
- Current use of FP methods
- Total Unmet need
- Quality of FP services
- Source of modern contraceptives
- Men's perception about family planning
- Hysterectomy
- Early Marriages
- Teenage Motherhood

4.1 Fertility Indicators

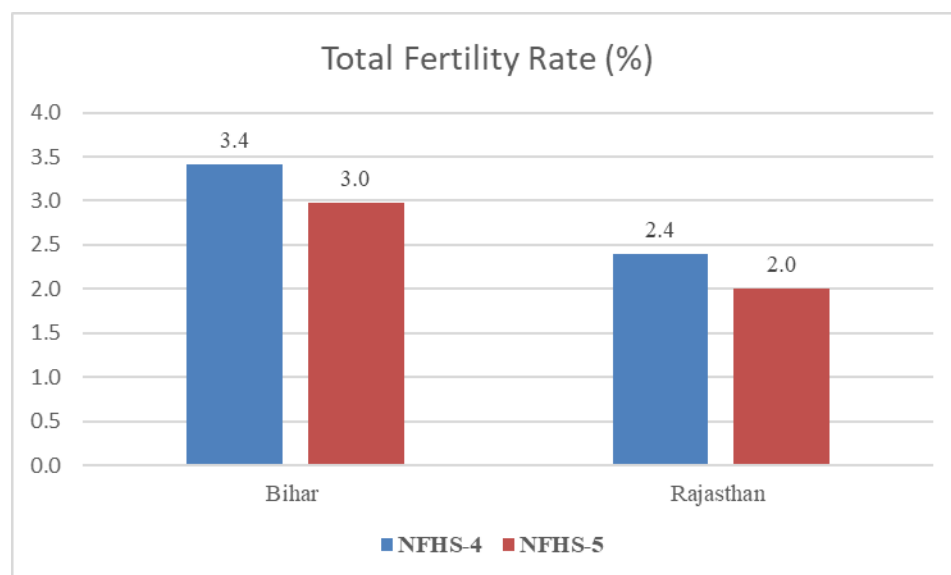


Figure 4.1.1: TFR in Bihar and Rajasthan according to NFHS-4 and NFHS-5

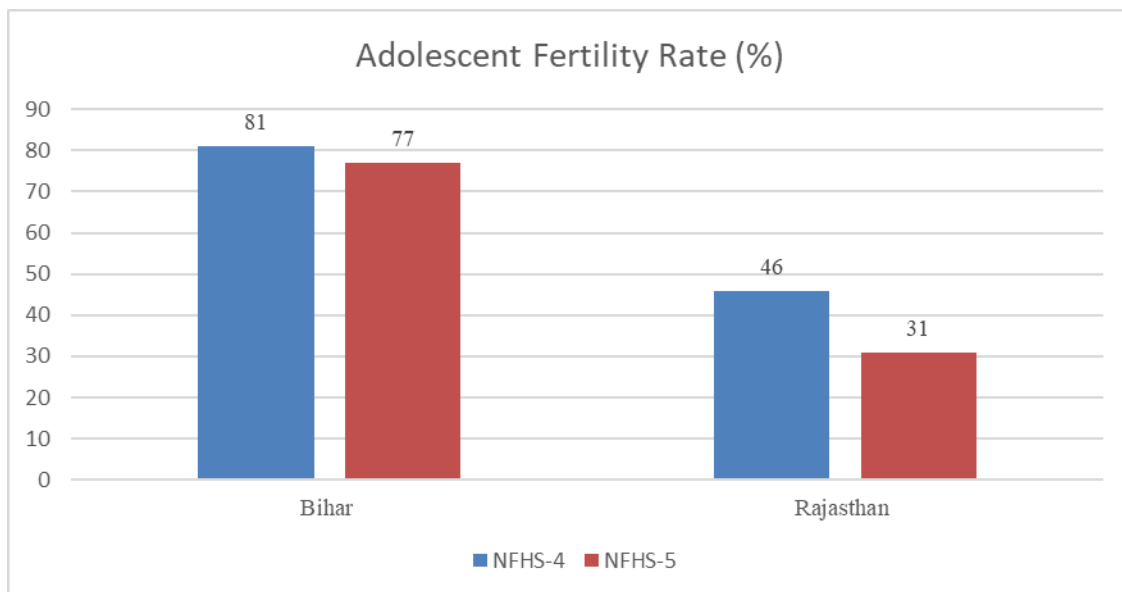


Figure 4.1.2: The Fertility Rate of age group 15-19 years in Bihar and Rajasthan according to NFHS-4 and NFHS-5.

Key Points:

- Figure 4.1.1 shows that TFR in Bihar has decreased from 3.4 in NFHS-4 to 3 in NFHS-5 same ways it has also decreased in Rajasthan state with 2.4 in NFHS-4 to 2 in NFHS-5.
- From figure 4.1.2 the Adolescent fertility rate in Bihar was 81 percent in NFHS-4 which has decreased to 77 percent in NFHS-5.
- While in Rajasthan Adolescent fertility rate was 46 percent in NFHS-4 which has decreased to 31 percent in NFHS-5.

4.2 Current use of family planning methods

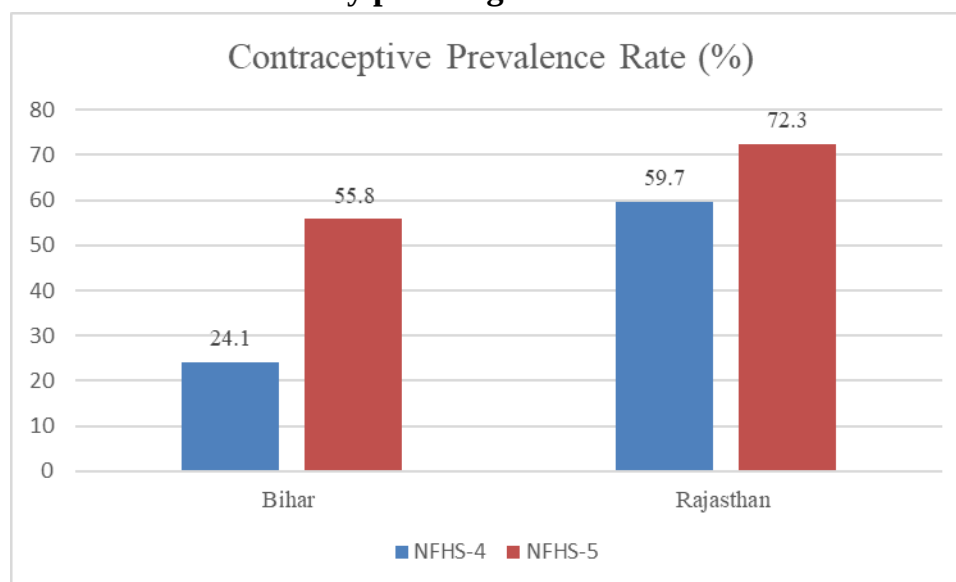


Figure 4.2.1: The percentage of females (15-49 years) who were using any contraceptive methods.

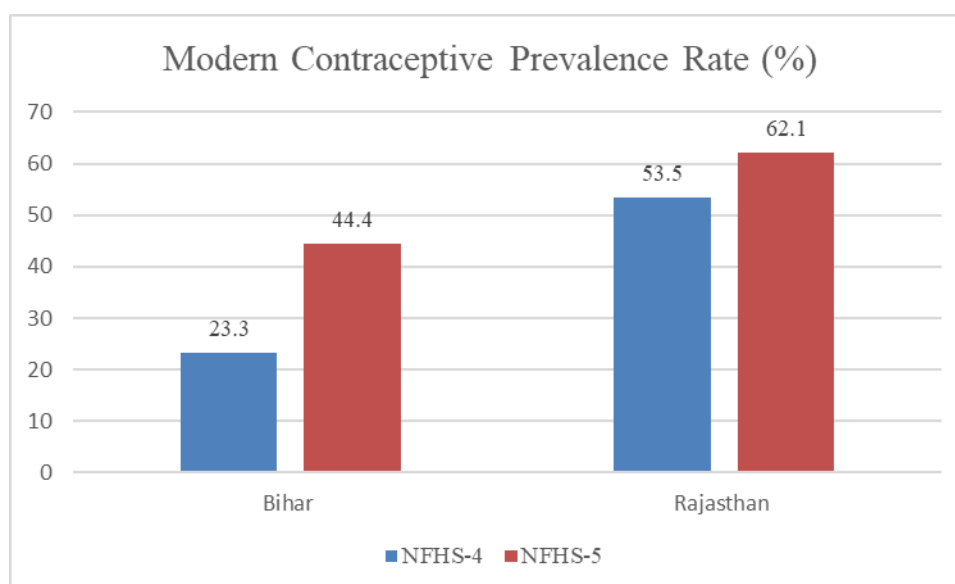


Figure 4.2.2: The percentage of women (15-49 years) who were using any modern contraceptive methods.

Key Points:

- Figure 4.2.1 shows that in Bihar the Contraceptive Prevalence Rate have increased twice times in NFHS-5 as compared to NFHS-4
- While in Rajasthan the Contraceptive Prevalence Rate have risen from 60 percent in NFHS-4 to 72 percent in NFHS-5

- Figure 4.2.2 shows that the mCPR in Bihar has grown from 23 percent in NFHS-4 to 44 percent in NFHS-5.
- The mCPR in Rajasthan has increases from 54 percent in NFHS-4 to 62 percent in NFHS-5

Below Table 4.2.3 and Table 4.2.4 depict the **method-mix**.

Table 4.2.3: The percentage of women (age 15-49 years) who use limiting methods as contraceptive methods.

Percentage of females who have chosen Limiting methods (%)				
State	Female sterilization		Male sterilization	
	NFHS-4	NFHS-5	NFHS-4	NFHS-5
Bihar	20.7	34.8	0	0.1
Rajasthan	40.7	42.4	0.2	0.3

Table 4.1.4: The percentage of women (age 15-49 years) who use spacing methods as contraceptive methods.

Percentage of females who have chosen Spacing Methods (%)								
State	IUD/PPIUD		Injectables		Condom (Nirodh)		Pill	
	NFHS-4	NFHS-5	NFHS-4	NFHS-5	NFHS-4	NFHS-5	NFHS-4	NFHS-5
Bihar	0.5	0.8	0.3	1.1	1	4	0.8	2
Rajasthan	1.2	1.4	0.2	0.6	8.7	13.7	2.4	3.1

Key Points:

- Table 4.2.3 shows the percentage of women who have chosen limiting methods. The female sterilization in Bihar has risen from 21 percent in NFHS-4 to 35 percent in NFHS-5 while the male sterilization remains invisible.
- In Rajasthan, the female sterilization increased by only 1 percent from 41 percent in NFHS-4 to 42 percent in NFHS-5 and here also the male sterilization remains insignificant with very less percent. Although both the states shows 0.1 percent increase in the male sterilization which could be assume as good initial trigger.
- Table 4.2.4 show the percentage of women who were using spacing methods. In Bihar the condom used has from 1 percent in NFHS-4 to 4 percent in NFHS-5 while in Rajasthan, condoms used has from 9 percent in NFHS-4 to 14 percent in NFHS-5.

4.3 Unmet need for family planning

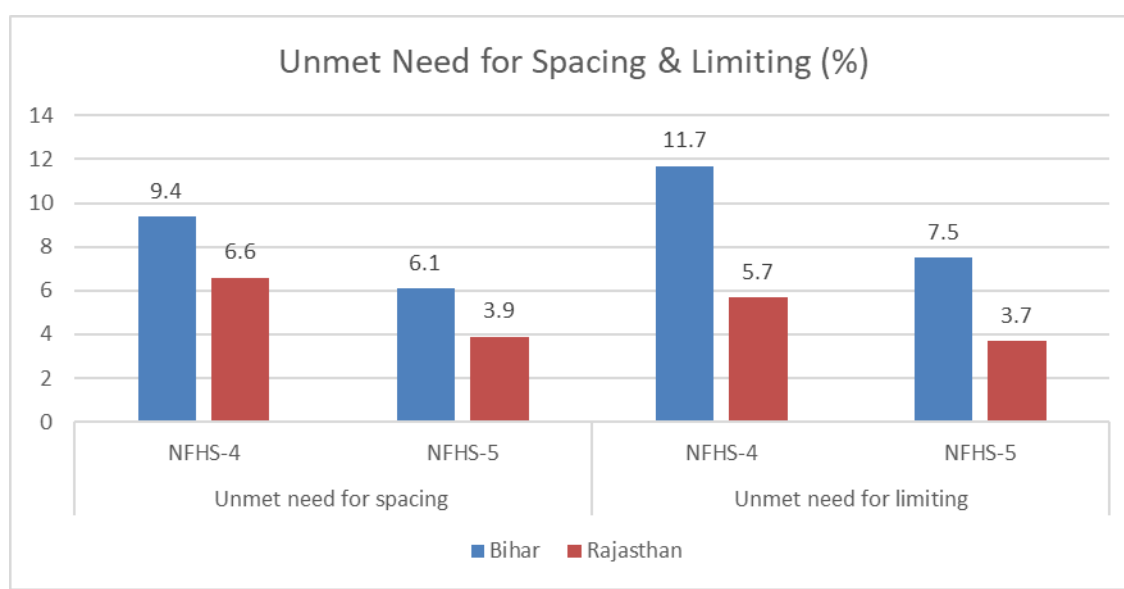


Figure 4.3.1: The percentage of females (15-49 years) who are having unmet need of spacing and limiting methods.

Table 4.2.2: The percentage of Total Unmet Need.

Total unmet need (%)		
State	NFHS-4	NFHS-5
Bihar	21.2	13.6
Rajasthan	12.3	7.6

Key Points:

- Figure 4.3.1 shows that unmet need for spacing and limiting in both the states.
- From 9 percent in NFHS-4 to 6 percent in NFHS-5 in Bihar, and from 7 percent in NFHS-4 to 4 percent in NFHS-5 in Rajasthan, the unmet requirement for spacing has decreased.
- In Rajasthan, the unmet need for limitation has fallen from 6 percent in NFHS-4 to 4 percent in NFHS-5, while it has fallen from 11 percent in NFHS-4 to 8 percent in NFHS-5 in Bihar.
- According to Table 4.3.2, the total unmet demand in Bihar has declined from 21 percent in NFHS-4 to 14 percent in NFHS-5.
- While in Rajasthan the total unmet need has fallen from 12 percent in NFHS-4 to 8 percent in NFHS-5.

4.4 Quality of family planning services

Table 4.3.1: the percentage of women (15-49 years) receiving quality family planning health services.

Quality of Family Planning Services (%)						
State	Percentage of women who was informed about side effects or problems of method used		Percentage of women who was informed about what to do if experienced side effects		Percentage of women who was informed by a health or family planning worker of other methods that could be used	
	NFHS-4	NFHS-5	NFHS-4	NFHS-5	NFHS-4	NFHS-5
Bihar	48.8	34.2	26.5	39.7	40	57.8
Rajasthan	43.7	60.8	33.8	49.1	50.7	67.8

Table 4.4.2: Method Information Index.

Method Information Index (%)		
State	NFHS-4	NFHS-5
Bihar	NA	35.3
Rajasthan	NA	44.6

Key Points:

- Table 4.4.1 and 4.4.2 shows the quality of FP in both the states.
- In Bihar the percentage of women who was informed about side effects or problems of method used has decreased from 49 percent in NFHS-4 to 34 percent in NFHS-5 while in Rajasthan it has increased from 44 percent in NFHS-4 to 61 percent in NFHS-5.
- In Bihar percentage of females who was informed about what to do if experienced side effects have increased from 27 percent in NFHS-4 to 40 percent in NFHS-5 and in Rajasthan it has increased from 34 percent in NFHS-4 to 49 percent in NFHS-5.
- In Bihar percentage of females who was informed by a health or family planning worker of other methods that could be used has increased from 40 percent in NFHS-4 to 58 percent in NFHS-5 while in Rajasthan it has increased from 51 percent in NFHS-4 to 68 percent in NFHS-5
- Table 4.4.2 shows the Method Information Index which is calculated in NFHS-5. So, in Bihar it is found to be 35 percent while in Rajasthan it is found to be 45 percent in NFHS-5.

4.5 Source of modern contraceptives

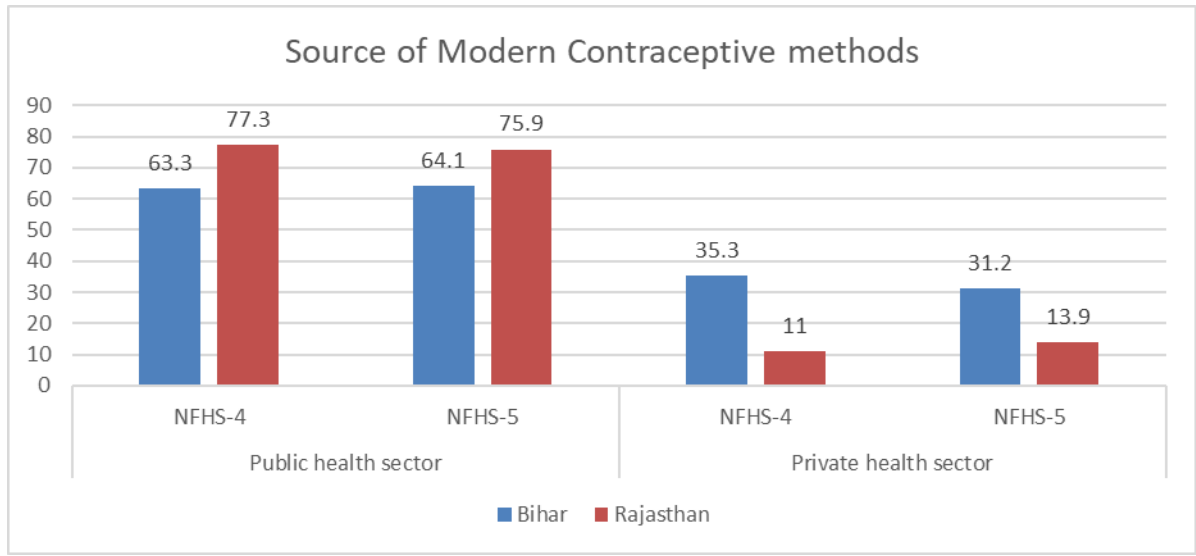


Figure 4.5.1: percent distribution of women between the ages of 15 to 49 who now use modern contraceptive methods, grouped by the method's most recent source.

Key Points:

- Figure 4.5.1 displays the percentage distribution of females who obtained modern contraceptive techniques from the public and private sectors.
- In Rajasthan, the percentage of women who chose the public health sector as their source of modern contraceptives declined by 1 percent in the NFHS-5, whereas it grew by 1 percent in Bihar.
- In NFHS-5, the percentage of females who picked the private sector as their source of modern contraceptives has declined by 4 percent in Bihar while rising by 3 percent in Rajasthan.

4.6 Men's perception about family planning

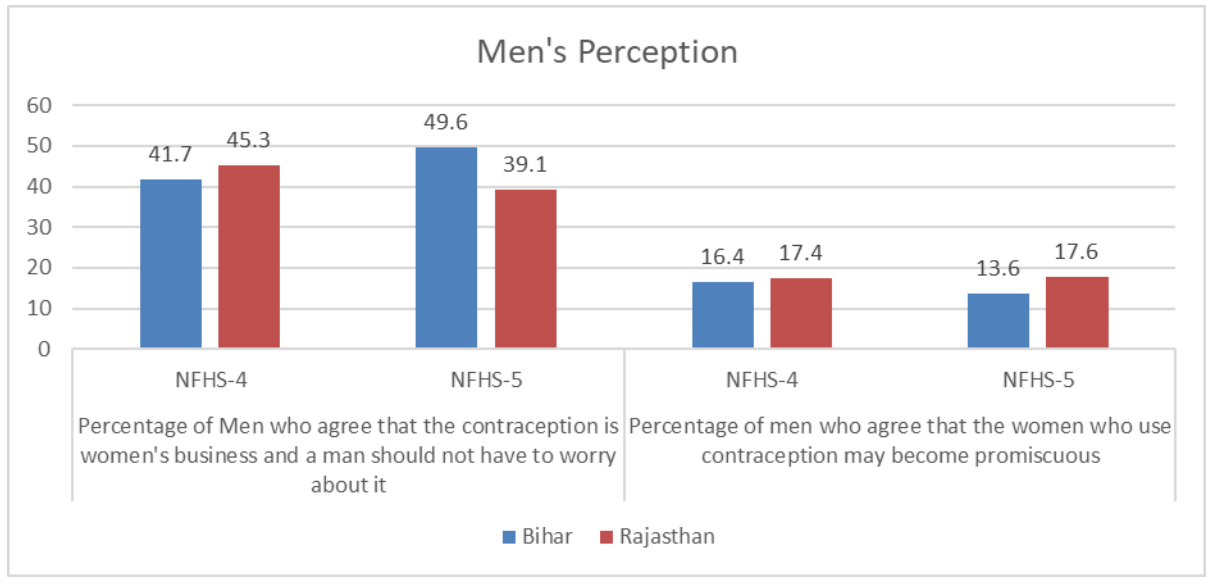


Figure 4.6.1: percentage of men between the ages of 15 and 49 who concur with these statements regarding females and contraceptive methods.

Key Points:

- In Bihar the percentage of men who agrees that the contraception is females business, and males should not be worried about it had increased from 42 percent in NFHS-4 to 50 percent in NFHS-5 while in Rajasthan it has decreased from 45 percent in NFHS-4 to 39 percent in NFHS-5
- In Bihar the percentage of men who agrees that the females who use contraception may become promiscuous had reduced from 16 percent in NFHS-4 to 14 percent in NFHS-5 while in Rajasthan it has increased by 1 percent in NFHS-5

4.7 Hysterectomy

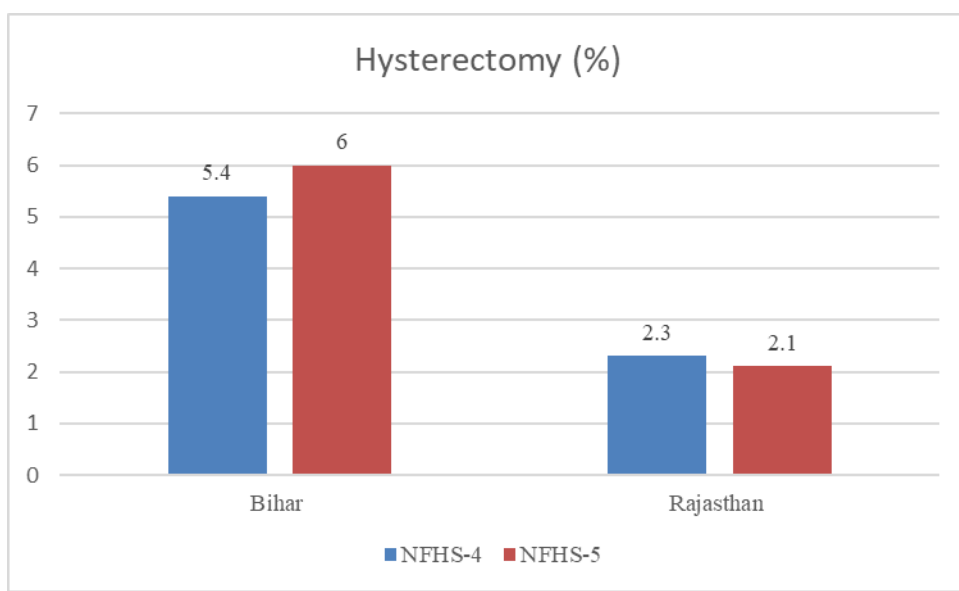


Figure 4.7.1: percentage of women (15-49 years) who have had Hysterectomy.

Key Points:

- In Bihar the percentage of female who had hysterectomy has risen from 5 percent in NFHS-4 to 6 percent in NFHS-5 while in Rajasthan it is almost equal in both NFHS-4 and NFHS-5.

4.8 Early Marriage

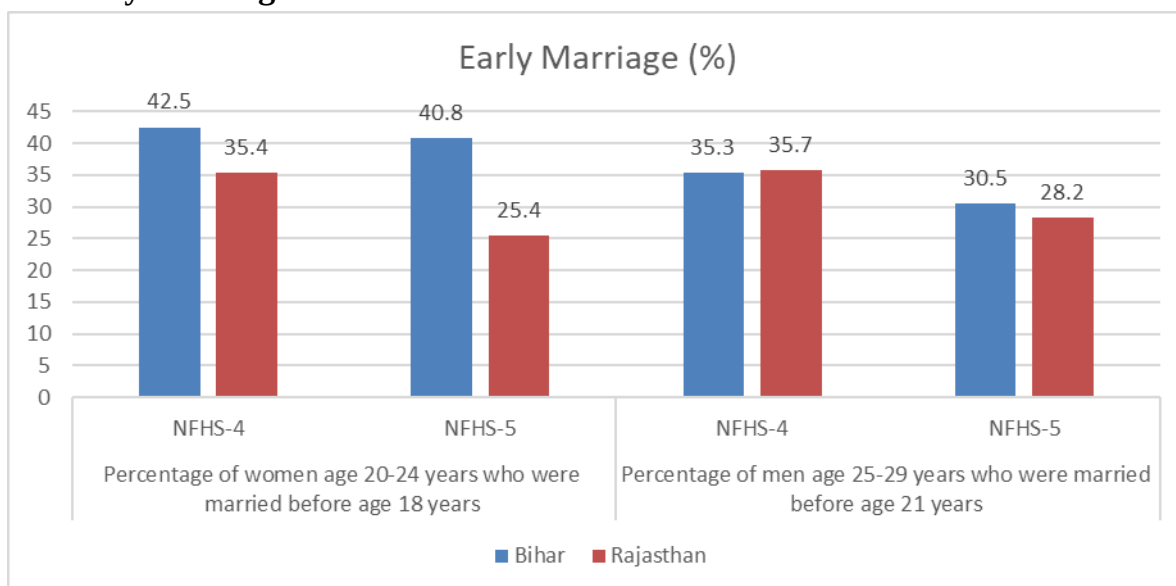


Figure 4.8.1: the proportion of male and female (aged 15 to 49) who were married before reaching marriageable age.

Key Points:

- In Bihar the proportion of females who were married before 18 has decreased from 43 percent in NFHS-4 to 41 percent in NFHS-5 while in Rajasthan it has decreased from 35 percent to 25 percent in NFHS-5
- In Bihar the proportion of males who were married before 21 had decreased from 35 percent in NFHS-4 to 31 percent in NFHS-5 while in Rajasthan it has decreased from 36 percent in NFHS-4 to 28 percent in NFHS-5

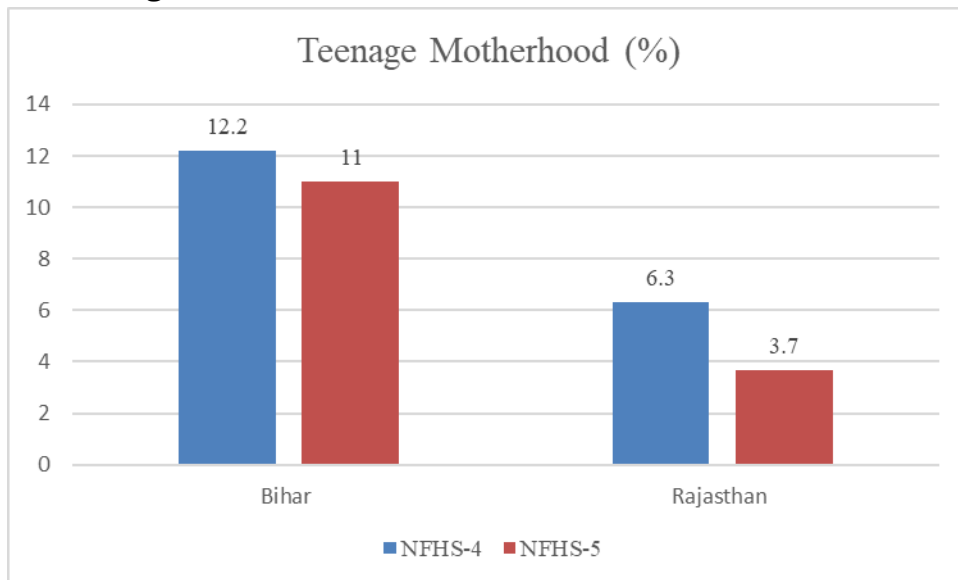
4.9 Teenage Motherhood

Figure 4.9.1: the proportion of teenage pregnancy

Key Points:

- Figure 4.9.1 exhibits that proportion of females aged 15-19 who have begun childbearing shows that in Bihar it has reduced by 1 percent in NFHS-5 and in Rajasthan it has decreased from 6 percent in NFHS-4 to 4 percent in NFHS-5.

Chapter 5: Challenges and best practices in implementing family planning services.

5.1 Challenges

5.1.1. Less engagement of Males in family planning services

The table 4.2.3 shows that the male sterilization is insignificant as compared to female sterilization and figure 4.6.1 shows the perceptions of men which need to be addressed by engaging male as an active participants of FP programme.

Reasons: -

- A significant barrier is societal norms and beliefs that view FP as being women's responsibility.
- The misconception of the effect of vasectomy on masculinity (such as making them physically weak, loss of virility, and making it easy to have outside partners) may restrict the uptake of vasectomy.
- There are limited choices of available male contraceptives (vasectomy and condoms).

5.1.2. Less engagement of private sector

The figure 4.5.1 shows that there is less engagement of private health sector in providing contraceptive methods for family planning. Thus, there is need to involve private and public health sector for effectively implementing these services.

5.1.3 Teenage motherhood and early age of marriages

The figure 4.8.1 and 4.9.1 shows the trends of early marriages and teenage motherhood which is high in both the states. So there is need to implement the CSE in schools and at community basis to reduce the teenage pregnancy.

5.2 Best Practice

5.2.1. Best Practice at Global Level

The male engagement can be enhanced by:

Engaging Men as Users

The project **Permanent Smile Campaign** which is launched in Ghana in two major metropolitan areas—Accra and Kumasi by the USAID with an aim to provide a comprehensive strategy for bridging the gap between the supply and demand inconsistencies. On the supply side, the project tried to increase service accessibility and combat provider biases; on the demand side, it sought to increase awareness about vasectomy and remove common misconceptions. The project aim was to enhance

knowledge of the healthcare providers about the No-Scalpel Vasectomy (NSV) and to make them more aware of how their attitudes towards these issues may hinder men's access to services. Before the project the number of vasectomies was very low (less than 0.1 percent). During the project the vasectomies increased by 350 percent.

Engaging male as supportive partners

The **Malawi Male Motivator** project is implemented in Malawi region of sub-Saharan Africa where they had studied the effect of Male motivator intervention on the contraceptive uptakes of the couples. The male motivators that were chosen were age of 30 or above. The male motivators focused on three areas: educating people about current family planning techniques and locally accessible resources; encouraging them to use these techniques; and improving communication between couples. Additionally, they have urged participants to take part in decisions on family planning and the size of families. The couples have been split up into intervention and control groups. At the end of the project that the ease and frequency of communication between couples had increased and 78 percent males in the intervention group have reported increased FP use.

Engaging male as agent of change

'**Tékponon Jikagou'** (TJ) project which was implemented by USAID in Benin employed social networking strategies to promote discussion about gender equity and FP and link the people to the services. They have recruited men and women as volunteers which were called as “catalyzers” to initiate discussion on gender equity and FP challenges and helped them in accessing health services. According to qualitative research, males who were reached by the volunteer catalyzers spread knowledge about FP among their male counterparts, and they took extra measures such as providing financial assistance to women and help them accessing FP services. Evaluation results have shown that the men who were exposed to the project have used FP services 2.8 times more as compared to men who were not exposed.

5.2.2. Best Practice at India Level

Tamil Nadu has good performance in the providing FP services. IUD insertion is highest in Tamil Nadu as compared to all other states and UTs. At the National Family Planning Summit in New Delhi, the state received a national award.

According to NFHS-5, the mCPR is 66 percent in Tamil Nadu which is higher at India level which is 57 percent. The IUD insertion in Tamil Nadu has grown from 1.9 percent to 4.8 in NFHS-5 which shows 100 percent point basis increase while in India it has increased from 1.5 percent to 2.1 percent in in NFHS-5 which depict 40 percent point basis increase.

The Initiatives which Tamil Nadu government have employed for increased use of FP services are:

- Organization of IUD insertion camps at the PHC level on ANC and immunisation day (every Wednesday) and during MMU visits to reach eligible unprotected moms and accelerating training for the new IUD insertion programmes among VHN/ANM/Staff nurses.
- Community Health workers do social marketing of condoms, OCPs, and ECPs
- They have combined a fixed day (every Thursday) approach with a camp strategy for NSV.
- Enhancing NSV performance through training and BCC.

So, these practices can be implemented in other states to achieve the FP targets.

Chapter 6: Discussion

According to figure 4.1.1, the TFR is high in Bihar as compared to Rajasthan. In NFHS-5 and the figure 4.1.2 the Adolescent Fertility Rate in Bihar is 77 percent which is much higher than the 41 percent in Rajasthan which shows that adolescent boys and girls have less exposure to family planning services, and they have less knowledge about the contraceptive methods. So, there is need to implement an intervention which focuses on the adolescent and youth population. Researchers that investigated the sexual attitudes and understanding of young people in India found that most of them held conservative views on sexuality and had limited sexual knowledge. (Joseph JT. , 2023 May) This also suggests the poor knowledge and attitude of adolescents which leads to high-risk sexual behavior. Recent research from India found that young people frequently engage in high-risk sexual behaviors, such as having several partners, seldom using condoms, and knowing little about STIs and HIV.

According to figure 4.2.1 and 4.2.2 the Contraceptive Prevalence Rate and the mCPR have increased in both states in NFHS-5 but male sterilization remains insignificant. According to certain studies, male participation in family planning discussions is influenced by male opinions norms, and self-efficacy. (Yadav, K., Singh, B., & Goswami, K., 2009) Most FP programmes in India view women as the main clients of contraceptives while viewing males as supporting partners. Additionally, research indicates that male participants should be actively included in the current family planning efforts.

According to table 4.4.1 and 4.4.2 the quality indicators of FP services have boost from NFHS-4 to NFHS-5 in both states According to the NFHS-4 and NFHS-5 reports, the method-mix is more heavily weighted towards sterilization of female, which is typically carried out at public health facilities. According to studies, women who were sterilized know the least about the methods of contraception. It was also found that the sterilization is higher among the women with less education and who are economically backward. Thus, there is a need to improve the knowledge contraceptives available and its uses.

The figure 4.7.1 the Hysterectomy percentage has increased in the Bihar state while in decreased in Rajasthan state in NFHS-5. According to some studies hysterectomy is found to be associated with the household coverage insurance scheme and more in the women who have undergone sterilization process. (Rana MJ, Jain AK. , 2020 May) Thus, there is a need to modify this insurance scheme to avoid their misuse of it and the need to create awareness about the same.

As observed in both figures 4.5.1, the source of contraceptive methods to which the eligible couples reached for family planning services is mostly focused on the public sector. Therefore, it is necessary to involve both the sector in FP. The TMA focuses on effective utilization of public, nonprofit, and private health sectors, aims to increase access for all population segments while preserving the market's sustainability. According to some

research in metropolitan regions, people with high income index are more likely to utilize contraception., and there is evidence that the FP market in Bihar, Uttar Pradesh, and the northeastern regions needs additional demand generation. (Mozumdar A, Acharya R, Mondal SK, Shah AA, Saggurti N. , 2019)

Chapter 7: Conclusion

After comparing all the indicators of family planning in the states Bihar and Rajasthan using NFHS-4 and NFHS-5 we can conclude that the family planning services in both the states but the improvement in Bihar state is lesser than that of Rajasthan state. The TFR in Bihar remains highest so specific measures should be taken to reduce it. While analyzing the method mix the female sterilization is more as compared to the male sterilization. There is very small increase in male sterilization from NFHS-4 to NFHS-5 but the male sterilization remains insignificant. Male participation in family planning should therefore be encouraged, and male-friendly services should be put in place to help men make better family planning decisions, which will also promote gender equality. The Adolescent Fertility Rate is greater in Bihar than other states, hence there is a need to raise awareness among adolescents and young people about family planning services and accessible contraceptive options. However, it can be said that after implementation of many family planning programmes, the family planning indicators are improving in both the states, but the pace of the improvement is slow. It needs to be fastened so that FP2030 goals can be achieved within time.

Recommendations

- The Adolescent fertility rate and teenage motherhood need to be addressed effectively which can be done by engaging the adolescent and the youth population by including comprehensive sexual education (CSE) in their education curriculum.
- Currently the Family Planning Programmes in India are mainly focusing on the women as the active participants in FP while the men are considered as supportive partner. Thus, there is a requirement to modify these interventions to incorporate men as an active participants of family planning. Thus, involving men will also enhance their decision making in FP and in attaining gender equity.
- The method mix is currently more heavily weighted towards female sterilisation, which primarily occurs in the public health sector. Therefore, it is important to expand awareness of available contraceptive options. Women must be advised about the PPIUCD approach, which can be applied after the results of the birth, and this will affect how often they need maternal health care.

Limitation of study

- The study limitations are that I have not segregated the population 15-49 years in rural and urban population, and I have not included some indicators which are fertility trends according to background characteristics, sex preferences and contraceptive discontinuation rates.

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