

## Original Research Article

**Assessment of family planning practices of women of reproductive age group in rural area of West Bengal****Dr Shubham Bhattacharya<sup>1</sup>, Dr Barnali Maiti<sup>2</sup>, Dr Kishore P Madhwani<sup>3</sup>, Dr Kajal Kumar Patra<sup>4\*</sup>**

1. Assistant Professor, Dept of Pathology, Burdwan Medical College, Burdwan, West Bengal, India
2. Demonstrator, Dept of Pathology, Burdwan Medical College, Burdwan, West Bengal, India
3. Senior Medical Consultant, Mumbai, Maharashtra, India
4. Ex-Professor and Head, Dept of Gynae and Obstetrics, Gouri Devi Institute of Medical Science, Durgapur, West Bengal, India

**Corresponding author: Dr Kajal Kumar Patra****Mobile : +91 9830212433****Email: [drmch2000@gmail.com](mailto:drmch2000@gmail.com)****Abstract**

**Introduction :** The National Family Planning and Welfare Program has been in place for more than 50 years, yet the high rate of unmet family planning need remains a significant obstacle for the program. The goal is to reach all women whose reproductive behavior necessitates the use of contraception but who, for a variety of reasons, do not use it. **Objectives :** This study aimed to determine the prevalence of different types of contraceptive methods adopted by eligible couples (aged 15-49 years) as a method of family planning. **Methods :** The present descriptive, cross sectional study was carried out amongst 200 women of reproductive age group in the Sonarpur rural area of West Bengal. Participants were interviewed by the trained staff using the pre-tested questionnaire. The information about various family planning methods adopted by couple was taken. Study was carried out from August 2023 to December 2023. Statistical data were analysed by using Microsoft Excel and SPSS V.20 software. **Results :** A total of 200 eligible couples were interviewed. Maximum couples were in the age group of 30-34 years i.e. 44 (40%). Total 110 (55%) couples were using one or the other method of family planning. Condoms were most commonly used method by 52 (47%) couples followed by oral contraceptive pills 32 (29%). Among permanent methods of family planning, tubectomy was adopted by 8 (7%) and vasectomy

only by 6 (6%) couples. No one was practising any miscellaneous method of contraception. The percentage of family planning methods used by Hindus was maximum 84 (76.4%). The highest percentage of using family planning methods was used by upper middle class (41.8%) followed by middle class (34.5%) and least by lower middle class (5.5%). **Conclusions :** Almost 50% of couples who qualified did not use any form of birth control. The adoption of permanent methods of contraception, particularly vasectomy, ought to be encouraged among suitable couples.

**Keywords :** Eligible couple, Family planning, Permanent methods, Temporary methods

### **Introduction :**

Family planning is a method of thinking and living that individuals and couples choose to adopt willingly based on their knowledge, attitude, and responsible decision-making.<sup>1</sup> Family planning is the deliberate use of contraceptive treatments by a couple to reduce or space out the number of children they have.<sup>2</sup> Family planning addresses the woman's reproductive health, appropriate spacing between pregnancies, prevention of unwanted pregnancies and abortions, prevention of STDs, and enhancement of the quality of life for the mother, fetus, and family as a whole.<sup>3</sup>

If a man's sperm gets to a woman's egg (ovum), she can conceive. In order to prevent this, contraception either stops the generation of eggs, separates the egg and sperm, or prevents the fertilized egg from being inserted into the uterus. Simply put, contraception is the act of preventing pregnancy, and contraceptive methods are by definition those preventive measures that assist women in avoiding unintended pregnancies.<sup>4</sup>

There are currently 7.7 billion people on the planet, and by 2045, that number is predicted to rise to 9 billion.<sup>5</sup> Today, the globe faces a challenge with growing populations. India, the second most populous country in the world, accounts for one-fifth of the global population and grows by 16 million people annually.<sup>6</sup> Despite the fact that India was the first nation in the world to adopt a national population control program in 1952, unchecked population increase has been identified as the single biggest obstacle to our country's progress.<sup>6</sup> Therefore, it is crucial to guarantee that all pregnancies are desired or intended on a national and worldwide level.

The use of contraceptives can shield against STDs and avoid unwanted pregnancies and unsafe abortions, which can reduce the risk of at least 25% of maternal fatalities,<sup>7</sup> like the Human Immunodeficiency Virus (HIV), Syphilis, Chlamydia, and so forth, The obstacles in poorer

nations include a lack of awareness about contraceptive methods, limited accessibility, high costs, and a lack of supply sources.<sup>8</sup>

Presently, long-term family planning methods are offered at health centers, hospitals, and private clinics, while short-term modern family planning methods are available at all levels of governmental and private health institutions.<sup>9</sup> A study conducted in Jimma, Ethiopia, revealed that a high rate of contraceptive use is not always correlated with having adequate understanding of contraceptives.<sup>10</sup>

Hence, aim of this study was to determine the prevalence of different types of contraceptive methods adopted by eligible couples (aged 15-49 years) as a method of family planning.

### Methods

This present descriptive cross-sectional study of 200 eligible couples (aged 15-49 years) of Sonarpur rural area of West Bengal were interviewed using the pre-tested questionnaire. Study was conducted over a period of five months from August 2023 to December 2023.

**Sample size :** Estimated sample size was 200. Sample size was calculated by  $4pq/12$  [p- 6%, q- (100-6), 1- 4%].

**Inclusion criteria .:** Couples who consented to participate in the study were included in the study and interviewed.

**Exclusion criteria :** Couples who had reported infertility and pregnancy were excluded from the study

After initial selection data was collected using pre-tested questionnaire. Information was collected regarding the use of various family planning methods, unwillingness of contraceptive usage and reasons for unwillingness. Care was taken to maintain the confidentiality of the data.

**Data Analysis plan-** Data were entered in MS Excel and analyzed in the form of percentage and proportions whenever necessary and was analyzed using Statistical Package for Social Sciences, version 20 (SPSS).

### Results

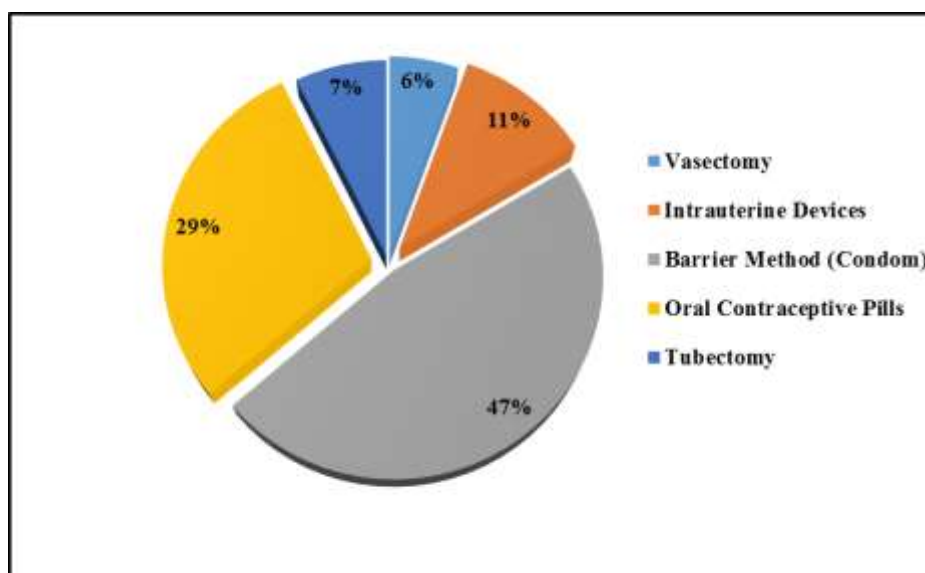
**Table 1: Distribution of eligible couples according to their age (n=200)**

Age (in years)	Contraceptive use	No Contraceptive use	Total

	No.	%	No.	%	No.	%
15-19	10	9.1	14	15.6	24	12
20-24	6	5.5	16	17.8	22	11
25-29	20	18.2	28	31.1	48	24
30-34	44	40.0	14	15.6	58	29
35-39	16	14.5	10	11.1	26	13
40-45	14	12.7	8	8.9	22	11
<b>Total</b>	<b>110</b>	<b>100.0</b>	<b>90</b>	<b>100.0</b>	<b>200</b>	<b>100</b>

A total of 200 eligible couples were interviewed. Maximum couples using any form of contraception 40% were in the age group of 30-34 years. Contraceptive prevalence was 55% as 110 out of 200 eligible couples were using one or the other method of family planning. (Table 1)

**Figure 1 : Type of contraceptive method practised by eligible couple.**



Condoms was most commonly used method by 52 (47%) couples followed by oral contraceptive pills 32 (29%) and intrauterine devices 12 (11%). Among permanent methods of family planning, tubectomy was adopted by 8 (7%) and vasectomy only by 6 (6%) couples. No one was practicing any miscellaneous method of contraception. (Figure 1)

**Table 2: Distribution of eligible couples according to their sociodemographic characteristics. (n=200)**

Sociodemographic characteristics	Total (n=200)	No. of eligible couples using any contraceptive methods (n=110)	
	No.	No.	&
<b>Religion</b>			
Hindu	142	84	76.4
Muslim	32	22	20.0
Christian	26	4	3.6
<b>Socioeconomic status</b>			
Upper	14	12	10.9
Upper Middle	62	46	41.8
Middle	68	38	34.5
Lower Middle	38	6	5.5
Lower	18	8	7.3

The percentage of family planning methods used by Hindus was maximum 84 (76.4%) followed by Muslims (20%) and Christians (3.6%). Difference was also observed in the context of socio-economic status. The highest percentage of using family planning methods was used by upper middle class (41.8%) followed by middle class (34.5%) and least by lower middle class (5.5%). (Table 2)

### Discussion :

Family planning is an attitude and style of thinking that people and couples voluntarily adopt based on their knowledge, character, and responsible decision-making.<sup>11</sup> Married couples must make a deliberate effort to decide on the size of their family and space out the births of their children using contraceptive method.<sup>12</sup> Family planning addresses the woman's reproductive health, appropriate spacing between births, avoiding unintended pregnancies and abortions, preventing STDs, and enhancing the quality of life for the mother, the fetus, and the family as a whole.<sup>13,14</sup>

In our environment, the situation regarding the use of contraceptives was not very encouraging, since just 55% of eligible couples were using any sort of contraception. Comparable findings were seen in the Punjab research and the NFHS 4 survey, where the rates of contraceptive usage were 53.84% and 53.5%, respectively.<sup>15,16</sup> However, studies conducted in Southern India, had higher acceptance rates (nearly 80%) of contraceptive methods.<sup>17,18</sup> Lower acceptance and practice of contraceptives could be due to comparatively low awareness levels in rural area, incomplete family size, not willing, fear of side effects and lower education status. Eligible couples from lower middle and lower socio-economic status were among the least users of contraceptive methods. Christians

were the least users of contraceptives (3.6%) followed by Muslims (20%) while maximum eligible couples 84 (76.4%) practicing contraceptive methods belonged to Hindu. These results corroborated with research conducted in other parts of country as well.

Condoms were the most widely used method of contraception among eligible couples, followed by IUDs and oral contraceptive pills. The permanent procedure known as tubectomy was more frequently used. Studies released in other regions of the nation also revealed a similar consumption pattern.<sup>19,20</sup> The most commonly proposed explanations for this include its transitory nature, convenience of usage, and lack of negative effects. Sensitizing male partners to use long-term contraceptive techniques is still very important.

## Conclusions

The current study found that male sterilization was the least favored family planning technique, while the barrier approach like condom was the most chosen option.

Family planning and welfare services coverage, accessibility, and quality must be prioritized at all levels of the local health system, following the model of Mission Parivar Vikas. ASHAs should be included in the community-based distribution of contraceptives, and IEC/BCC activities should be concentrated on increasing demand and raising family planning awareness through outreach programs.

**Acknowledgements :** Authors would like to acknowledge the patients who participated in this research study.

**Funding:** No funding sources

**Conflict of interest:** None declared

**Ethical approval:** The study was approved by the institutional ethics committee

## References :

1. World Health Organization. Standards for Maternal and Neonatal Care. Geneva: World Health Organization; 2007.
2. Survey H. Central Statistical Agency. Ethiopian Demographic and Health Survey 2016

- Key Indicators Report. Addis Ababa and Maryland, Ethiopia. 2016.
3. World Health Organization. World Health Organization. Fact Sheets on Family Planning, World Health Organization.
4. Park K. Park's Textbook of Preventive and Social Medicine. 17th ed. Jabalpur: Banarasidas Bhanot; 2002. pp. 325–58.
5. Van Bavel J. The world population explosion: Causes, backgrounds and -projections for the future. *Facts Views Vis Obgyn*. 2013;5:281–91.
6. Renjhen P, Kumar A, Pattanshetty S, Sagir A, Samarasinghe CM. A study on knowledge, attitude and practice of contraception among college students in Sikkim, India. *J Turkish Ger Gynecol Assoc*. 2010;11:78–81
7. Weldegerima B, Deneke A. Women's knowledge, preferences, and practices of modern contraceptive methods in Woreta, Ethiopia. *Res Social Adm Pharm*. 2008;4:302–7.
8. Jahan U, Verma K, Gupta S, Gupta R, Mahour S, Kirti N, et al. Awareness, attitude and practice of family planning methods in a tertiary care hospital, Uttar Pradesh, India. *Int J Reprod contraception Obstet Gynecol*. 2017;6:500–6.
9. Republic FD. National guideline for family planning Federal Democratic Republic of Ethiopia. 2011:1–69.
10. Tilahun T, Coene G, Luchters S, Kassahun W, Leye E, Temmerman M, et al. Family Planning Knowledge, Attitude and Practice among Married Couples in Jimma Zone, Ethiopia. *PLoS One*. 2013;8:e61335
11. World Health Organization. Standards for maternal and neonatal care. [https://www.who.int/reproductivehealth/publications/maternal\\_perinatal\\_health/a91272/en/](https://www.who.int/reproductivehealth/publications/maternal_perinatal_health/a91272/en/). Accessed on 20 May 2024.
12. Central Statistical Agency. Ethiopian Demographic and Health Survey 2016- key indicators report. Addis Ababa and Maryland, Ethiopia; 2016. <https://dhsprogram.com/pubs/pdf/FR328/FR328>. Accessed on 20 May 2024.
13. Adeyomo AR, Asabi O, Adedoturo O. Knowledge and practice of contraceptives among women of reproductive ages in southwest, Nigeria. *Int J Engineering Sci*. 2012;1(2):70-6.
14. World Health Organization. India and Family Planning: An overview.

[http://www.searo.who.int/entity/maternal\\_reproductive\\_health/documents/india-fp.pdf](http://www.searo.who.int/entity/maternal_reproductive_health/documents/india-fp.pdf). Accessed on 20 May 2024.

15. International Institute for Population Sciences (IIPS) and ICF, 2017. National Family Health Survey (NFHS-4), 2015-16: Mumbai, India: IIPS. Accessed 4 February 2019
16. Singh BR, Singh S, Kaur P, Verma G, Kaur S. Contraceptive practices adopted by women attending an urban health centre in Punjab, India. *Int J Res Develop Health*. 2013;1(3):115-9.
17. Kshirsagar V, Rajderkar S, Dudhbhate B. Family planning practices amongst women of reproductive age groups in field practice area of rural health training centre of Government Medical College, Miraj, Maharashtra. *Int J Community Med Public Health*. 2018;5(11):4735-8.
18. Lakshmi MM, Rai NS. Contraceptive practices among reproductive age groups of women in Justice K. S. Hegde Medical College Hospital, Mangalore. *Int J Reprod Contracep Obstetr Gynecol*. 2013;2(1):39-46.
19. Gaur DR, Goel MK, Goel M. Contraceptive practices and related factors among females in predominantly Muslim area of North India. *Int J World Health Societ Polit*. 2008;5(1):35-9.
20. Giridhar S, Chaudhary A, Gill P, Soni RK, Sachar R. Contraceptive practices and related factors among married women in a rural area of Ludhiana. *Internet J Health*. 2010;12(1):17-21.