

Current trends in family planning methods at tertiary care centre of central India – A retrospective study

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Received: 22-05-2021 / Revised: 26-07-2021 / Accepted: 23-08-2021

Abstract

Objective: To estimate the utilization of various modes of family planning services at a tertiary care Centre. **Methods:** A retrospective record based study was conducted to analyse the usage of various methods of family planning services offered at tertiary care centre of Madhya Pradesh over a period of 2018-2020. **Results:** Of the 129635 individuals who opted for family planning services, 45.61% individuals belonged to age group 28-32 years and 51.31% belonged to rural areas and the Female contraception contributed only to 12.42%. 99.14% individuals opted for temporary methods with only 0.08% of individuals undergoing permanent methods. Among the temporary methods main contribution was of the condom method followed by Oral contraceptive pills (OCP). Only 0.08% of individuals opted for permanent sterilization with tubectomy rate being 97.48% and vasectomy rate of as low as 2.51%. **Conclusion:** Temporary methods of contraception were more opted than permanent methods. Among the permanent methods female sterilization is more in practice than the male sterilization. While temporary methods were more taken up by men, with females opting more for OCP than long acting reversible contraceptive (LARC) methods.

Keywords: Family planning, Sterilization, Contraception.

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Introduction

India despite being the 1st country in developing world to initiate a Family planning programme it is the second most populous country in the world after china accounting to nearly 17% of world's population[1]. The population of India is 1.21billion in 2011[2] with population projection of 1.4billion by 2026.[3]

A finite world can support only a Finite population

Thus, Population stabilization should be achieved to help in attaining highest level of health care and quality of life for people of all ages.

Healthy timing and spacing of pregnancy (HTSP) is an intervention which helps couples delay, space or limit their pregnancies to achieve healthiest outcomes for women and the neonates. It is well known that perinatal outcomes and child survival can be improved by prolonging the interpregnancy interval where temporary contraception plays a vital role.

Government of India targets to bring down the TFR to 2.1 by the year 2025[4]. TFR of Madhya Pradesh is 2.8 thus making it a high focus area[5]. If the current unmet need for family planning of 12.9% could be fulfilled over next 5years, it is estimated to avert 35,000maternal deaths and 1.2 billion infant deaths[6]. This can be achieved by preventing unintended pregnancies and ensuring proper spacing of births.

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Even with free of cost availability of contraceptive measures like Nirodh, Mala -N, Chaya, IUCD'S, female and male sterilization and many family planning strategies such as home delivery of contraceptives by ASHA, Mission Pariwar Vikas, Saas Bahu Sammelans, Saarthi mobile vans, Mobile Applications like FP-LMIS (Family planning logistic information systems) the current use of family planning methods is 53.5% (NFHS-IV)[7] This study aims to estimate and analyse the utilisation of various modes of Family planning services at a tertiary care centre over a period of 2 years.

Materials and methodology

A retrospective record based study was conducted to analyse the usage of various methods of family planning services offered at tertiary care centre of Madhya Pradesh over a period of 2018-2020 after obtaining the ethical clearance.

The inclusion criteria included individuals adopting family planning services

Various Socio demographic variables like Age, Religion, Gender and the method of contraception adopted were analysed.

Results

Over a two year period 129635 individuals opting for family planning services were analysed, which included Condoms, OCP (Oral contraceptive pill), Chaya (Ormeloxifene), Antara (Depot Medroxy progesterone acetate), Intra Uterine Contraceptive Device (IUCD), Tubal sterilization, Nonscalpel vasectomy.

Of the 129635 individuals who opted for family planning services, 45.61% individuals belonged to age group 28-32 years (Table 1).

Table 1: Age distribution

Age group	Frequency	Percentage
18-22	6130	4.72%
23-27	56251	43.39%
28-32	59136	45.61%
>32	8118	6.26%

Female contraception contributed only to 12.42% (Table 2).

Table 2: Distribution of individuals according to gender

Gender	Frequency	Percentage
Male	113534	87.57%
Female	16101	12.42%

51.31% belonged to urban areas (Table 3).

Table 3: Distribution of individuals according to residence

Residence	Frequency	Percentage
Urban	66527	51.31%
Rural	63108	48.68%

Table 4: Distribution according to Religion

Religion	Frequency	Percentage
Hindu	116736	90.04%
Muslim	10371	8.1%
Others	2528	1.95%

99.14% individuals opted for temporary methods of family planning (Table 5).

Table 5: Mode of family planning service opted

	Frequency	Percentage
Temporary	128522	99.14%
Permanent	1113	0.08%

Among the temporary methods, main contribution was of the condom method of contraception used by men accounting to 88.31%. Choice of Oral contraceptive pills was only 4.56%. Long acting reversible contraceptives which require less doses of administration and despite bearing good contraceptive efficacy were adopted only by as low as 6.51% (Table 6).

Table 6: Mode of temporary family planning service opted over 2 years

Year	Condom	OCP	CHAYA(ORMELOXIFENE)	ANTARA(MEDROXY PROGESTERONE ACETATE)	EC	IUCD
2018-2019	55830	2350	1895	880	490	1213
2019-2020	57676	3523	2090	1300	279	996
Total	113506	5873	3985	2180	769	2209

EC: Emergency Contraception

Only 0.08% of individuals opted for permanent methods. Mostly female sterilization was done in interval period and More females opted for permanent sterilization along with caesarean section than post normal delivery (Table 8).

Table 8: Timing of Tubectomy amongst Total Tubectomy cases

	Interval TT	Postpartum TT	LSCS with TT	MTP with TT
No. of Cases	309	281	309	29

Amongst which 53% belonged to the age group of 28-32 years(Table 9).

Table 9: Age distribution of sterilization cases

AGE	Frequency of Sterilization cases	Percentage
18-22	31	2.78%
23-27	429	38.54%
28-32	590	53%
>32	62	5.57%

Table 10: Distribution of sterilization cases according to Residence

	Sterilization cases	Percentage
RURAL	632	56.78%
URBAN	481	43.21%

95.95% of individuals undergoing permanent sterilization were Hindu's with Muslim individuals contributing only to 4.05% (Table 11).

Table 11 : Distribution of sterilization cases according to Religion

RELIGION	Sterilization cases	Percentage
Hindu	1045	93.89%
Muslim	45	4.04%
Others	23	2.06%

Even among the permanent sterilization although vasectomy being a simple procedure with short duration of hospital stay and associated with less complication rate it's usage is as Low as 2.51% with a tubectomy rate of 97.48% (Table 7).

Table 12: Utilization of permanent family planning services

YEAR	TUBECTOMY	NON SCALPEL VASECTOMY
2018-2019	519	7
2019-2020	566	21
TOTAL	1085	28

51.88% of individuals have undergone sterilization after having 3 children. While only 1.01% of individuals opted for sterilization with no male children and as high as 48.57% of individuals have undergone sterilization after having one male child (Table 12)

Table 13: Distribution of Female sterilization according to number and sex of children

No.Of Children	Female Sterilization	No. Of Male Children	Female Sterilization
0	-	0	11 (1.01%)
1	7 (0.64%)	1	527 (48.57%)
2	365(33.64%)	2	506(46.63%)
3	563(51.88%)	3	39 (3.59%)
4	150(13.82%)	4	2(0.18%)

Discussion

The present study revealed that 99.14% of individuals opted for temporary method of family planning with only 0.86 % opting for permanent methods. However, an increasing trend of adoption of permanent sterilization was observed from the year 2018-2019 to 2019-2020. Our study revealed that 56.78% of the individuals opting for permanent sterilization belonged from rural areas similar to a study conducted by Namdev G which showed more cases of permanent sterilization from rural areas.[8] Permanent sterilization was opted more with cesarean section than post vaginal delivery. This was to avoid additional procedure later after caesarean section. Over the 2 year period adoption of OCP has increased with a decreasing trend in utilisation of LARC method like IUCD from 1.91% to 1.49% which may be due to the assumption of its side effects.

In a study conducted by Ibnouf AH[9] they found that contraceptive pills were the most commonly used followed by IUCD in Sudanese women of north Africa similar to the practice of female family planning services in our study.

Limitations of study

As it is a single hospital based study the results cannot be extrapolated to the general population.

Information on some socio demographic variables like education status, income of the individuals were not available for the study.

Conclusion

Population control is the key for a happy nation. Most of the couples opted for family planning services in postpartum period during their hospital stay. Institutional deliveries needs to be promoted which is only 80.8% in Madhya Pradesh[10]. Policymakers and implementers should work on bringing out behaviour changing interventions, campaigns aiming to eliminate the myths regarding family planning methods specially male sterilization. Women should be educated regarding the spacing of pregnancies and benefits of family planning services. Further adoption of family planning services and permanent sterilization in males as well as females should be encouraged. Behaviour changing campaigns regarding male and female equality and sterilization without respect to number of male children should be promoted.

Conflict of Interest: Nil

Source of support: Nil

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