



Contraceptive Preferences of Women Attending a Tertiary Care Hospital

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Authors' contributions

This work was carried out in collaboration between both the authors. Author AQ designed the study, performed the statistical analysis and wrote the protocol. Author UM managed the analyses of the study and wrote the first draft of the manuscript. The literature searches were managed by both the authors. Both the authors read and approved the final manuscript.

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ABSTRACT

Introduction: In developing countries like India a large proportion of young women have unintended pregnancies and their unmet need for contraception is very high. The NFHS survey for unmet need was 13% for India. Such unplanned pregnancies are generally associated with an increased risk of unsafe abortions which significantly adds to maternal morbidity and mortality. To prevent such unplanned pregnancies and the associated adverse outcomes the use of contraception should be promoted and encouraged. In the built up towards the national population policy which came into force finally in 2000, the family planning program was implemented in 1952 to reduce the rapidly increasing population growth. This family planning program focused on a number of modern approaches but later shifted towards male sterilization. However post 1970's till mid 1990's the family planning programs were mainly women centric.

Materials and Methods: This Descriptive study was conducted in the family welfare and planning centre of LallaDed hospital, Government medical college Srinagar over a period of 19 months (April 2018-October 2019). 20,880 women in the age group of 18-40 years were interviewed after excluding the cases of infertility, those who had undergone sterilization, undergone hysterectomy and those with premature menopause.

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Results: Out of 20,880 patients attending the family planning clinic 26.8% used Condoms, 19.3% used Depot Medroxyprogesterone Acetate (DMPA), 15.65% opted for sterilisation, 14.6% used combined oral contraceptives (COC), 14.41% did not use any contraception, 8.65% used Intrauterine device, and 3.86% used Centchroman.

Conclusion: Barrier methods of contraception are very well accepted in our socio demographic setup mainly because of their easy usage, availability, affordability and an additional benefit of protection against Sexually Transmitted Infections. Further it does not have an impact on future fertility of women making it a favourable choice of contraception.

Keywords: COC; DMPA; condom; centchroman; IUD; sterilisation.

1. INTRODUCTION

In developing countries like India a large proportion of young women have unintended pregnancies and their unmet need for contraception is very high [1]. The NFHS survey for unmet need was 13% for India. Such unplanned pregnancies are generally associated with an increased risk of unsafe abortions which significantly adds to maternal morbidity and mortality [2]. To prevent such unplanned pregnancies and the associated adverse outcomes the use of contraception should be promoted and encouraged [3].

In the built up towards the national population policy which came into force finally in 2000, the family planning program was implemented in 1952 to reduce the rapidly increasing population growth. This family planning program focused on a number of modern approaches but later shifted towards male sterilization [4]. However post 1970's till mid 1990's the family planning programs were mainly women centric [5].

The globally adopted Sustainable Development Goals focus on improving the access to reproductive health services like contraception for the improvement of maternal health and welfare. Maternal mortality reduction remains a priority under "Goal 3: Ensure healthy lives and promote well-being for all at all ages" in the new Sustainable Development Goals (SDGs) agenda through 2030 [6,7].

A quarter of estimated 20 million unsafe abortions and 70 thousand related deaths each year occur among women aged 15-19 years [7]. The cultural and religious barrier impede the awareness regarding use of contraceptives particularly among the unmarried women which puts them at a larger risk of unplanned and unintended pregnancies.

KAP model is a rational model in health education. It is based on the notion that increasing personal knowledge will influence behaviour change (WHO, 2012). The use of contraceptives can be influenced by using the KAP approach. Knowledge, attitude and perception about use of contraceptives can lead to a reduction in unplanned and undesired pregnancies [8].

In Indian setup the use of contraceptives among women depends on several factors such as personal, interpersonal, partner related, service related and method related [9]. Further with restricted access and less choices, fear of adverse effects and gender centric inhibitions have led to high unplanned and undesired pregnancies [10]. As of now female sterilization is found to be the most common and sought method of contraception. A study conducted among the low income communities in Bombay, reported that from the perspective of women, sterilisation was the most sought method of contraception as it led them to control unplanned pregnancies. Further it was observed that most of women did not show any post sterilisation regret because of the improved sexual relations post sterilisation [11].

2. MATERIALS AND METHODS

This Descriptive study was conducted in the family welfare and planning centre of LallaDed hospital, Government medical college Srinagar over a period of 19 months (April 2018-October 2019). 20,880 women in the age group of 18-40 years were interviewed after excluding the cases of infertility, those who had undergone sterilization, undergone hysterectomy and those with premature menopause. After taking proper consent from the patients information regarding their age, residence, education, occupation, obstetrics history and use of contraception was taken. Ethical Clearance was obtained from the ethical committee. Data was collected using a

questionnaire and processed using Microsoft Excel.

3. RESULTS

- In the age group of 18-20 years out of total 5540 patients 15.13% were from rural areas and 11.3% were from urban areas.
- In the age group of 20-24 years out of 5050 patients 11.8% were from rural areas and 12.3% were from urban areas.
- In the age group of 25-29 years out of 4100 patients 18.19% were from rural areas and 1.4% were from urban areas.
- In the age group of 30-34 years out of 3480 patients 12.45% were from rural areas and 4.2% were from urban areas.
- In the age group of 35-40 years out of 2710 patients 7.8% were from rural areas and 5.17% were from urban areas.
- In the age group of 18-20 years, among rural women attending the family planning clinic 18.9% did not use any contraceptive, 23.9% used combined oral contraceptives (COC), 6.8% used Centchroman. DMPA was used by none. 22.4% used condom, IUD and sterilisation was used by none. Among Urban women attending the family planning clinic 23.9% did not use any contraceptive, 12.9% used combined oral contraceptives (COC), 4.7% used Centchroman. DMPA was used by none. 28.7% used condom, IUD and sterilisation was used by none.
- In the age group of 20-24 years, among rural women attending the family planning clinic 10.5% did not use any contraceptive, 18.9% used combined oral contraceptives (COC), 3.8% used Centchroman. DMPA was used by 18.9%. 25.1% used condom, IUD and sterilisation was used by 11.9% and 5.3% respectively. Among Urban women attending the family planning clinic 18.1% did not use any contraceptive, 15.1% used combined oral contraceptives (COC), 3.2% used Centchroman. DMPA was used by 20.6%. 24.1% used condom, IUD and sterilisation was used by 5% and 2.7% respectively.
- In the age group of 25-29 years, among rural women attending the family planning clinic 17.1% did not use any contraceptive, 14.07% used combined oral contraceptives (COC), 3% used Centchroman. DMPA was used by 25.8%. 24.1% used condom, IUD and sterilisation was used by 12% and 16.4% respectively. Among Urban women attending the family planning clinic 16.6% did not use any contraceptive, 13.6% used combined oral contraceptives (COC), 8.6% used Centchroman. DMPA was used by 16%. 11.6% used condom, IUD and sterilisation was used by 8% and 25.3% respectively.
- In the age group of 30-34 years, among rural women attending the family planning clinic 12.3% did not use any contraceptive, 47.5% used combined oral contraceptives (COC), 3.8% used Centchroman. DMPA was used by 35.5%. 28.6% used condom, IUD and sterilisation was used by 18% and 35.8% respectively. Among Urban women attending the family planning clinic 3.6% did not use any contraceptive, 7.3% used combined oral contraceptives (COC), 3.5% used Centchroman. DMPA was used by 25.9%. 17.95% used condom, IUD and sterilisation was used by 5% and 7.9% respectively.
- In the age group of 35-40 years, among rural women attending the family planning clinic 2.4% did not use any contraceptive, 2.6% used combined oral contraceptives (COC), 1% used Centchroman. DMPA was used by 29.5%. 36.5% used condom, IUD and sterilisation was used by 20% and 34.6% respectively. Among Urban women attending the family planning clinic 1.8% did not use any contraceptive, 2.1% used combined oral contraceptives (COC), 1.2% used Centchroman. DMPA was used by 35.4%. 42.2% used condom, IUD and sterilisation was used by 6% and 36.4% respectively.
- Out of 20,880 patients attending the family planning clinic 14.41% did not use any contraception, 14.6% used combined oral contraceptives (COC), 3.86% used Centchroman, 19.3% used DMPA, 26.8% used Condom, 8.65% used IUD and 15.65% opted for sterilisation.

4. DISCUSSION

The acceptance or non- acceptance of methods of contraception is influenced by individual, family and community level factors. This study provides information on the pattern of use of different methods of contraception among women of different age groups [12].

Table 1. Demography of study subjects

Age	Residence	Education									
		Illiterate		Primary school		Secondary school		Undergraduate		Post graduate and above	
		No.	%	No.	%	No.	%	No.	%	No.	%
18-20	Rural	140	4.4	260	8.2	2719	86	50	1.5	0	0
	Urban	0	0	230	9.6	2040	85.7	110	4.6	0	0
20-24	Rural	60	2.4	240	9.7	2000	80.9	170	6.8	0	0
	Urban	140	5.4	50	1.9	2140	82.9	170	6.5	80	3.1
25-29	Rural	70	1.8	280	7.3	3360	88.4	90	2.3	0	0
	Urban	0	0	50	16.6	140	46.6	70	23.3	40	13.3
30-34	Rural	100	3.8	280	10.7	2130	81.9	90	3.4	0	0
	Urban	40	4.5	50	5.6	700	79.5	40	4.5	50	5.6
35-40	Rural	120	7.3	200	12.2	1200	73.6	70	4.3	40	2.4
	Urban	40	3.7	40	3.7	800	74.1	40	3.7	160	14.8

Table 2. Demography of study subjects

Age	Residence	Occupation				Total (%)
		Employed		Unemployed		
		No.	%	No.	%	
18-20	Rural	160	5.06	3000	94.9	15.13
	Urban	580	24.3	1800	75.6	11.3
20-24	Rural	920	37.2	1550	62.7	11.8
	Urban	1230	47.6	1350	52.3	12.35
25-29	Rural	1920	50.5	1880	49.5	18.19
	Urban	20	6.6	280	93.3	1.4
30-34	Rural	1200	46.1	1400	53.9	12.45
	Urban	80	9.1	800	90.9	4.2
35-40	Rural	630	38.6	1000	61.4	7.8
	Urban	80	7.4	1000	92.6	5.17

Table 3. Types of contraception used by study subjects

Age	Residence	No contraception		Method of contraception											
				Pills				DMPA	Condom		IUD		Sterilisation		
				COC		Centchroman			No.	%	No.	%	No.	%	
No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
18-20	Rural	598	18.9	758	23.9	217	6.8	0	0	710	22.4	0	0	0	0
	Urban	571	23.9	309	12.9	112	4.7	0	0	685	28.7	0	0	0	0
20-24	Rural	260	10.5	469	18.9	94	3.8	469	18.9	619	25.1	296	11.9	131	5.3
	Urban	469	18.1	389	15.1	85	3.2	533	20.6	674	24.1	129	5.0	71	2.7
25-29	Rural	650	17.1	535	14.07	114	3.0	983	25.8	917	24.1	456	12.0	722	16.4
	Urban	50	16.6	41	13.6	26	8.6	48	16.0	35	11.6	24	8.0	76	25.3
30-34	Rural	320	12.3	418	47.5	100	3.8	924	35.5	744	28.6	468	18.0	932	35.8
	Urban	32	3.6	65	7.3	31	3.5	228	25.9	158	17.95	44	5.0	70	7.9
35-40	Rural	40	2.4	43	2.6	15	1.0	481	29.5	596	36.5	326	20.0	565	34.6
	Urban	20	1.8	22	2.1	13	1.2	383	35.4	456	42.2	65	6.0	394	36.4
Total		3010	14.41	3049	14.60	807	3.86	4049	19.39	5596	26.80	1808	8.65	3061	15.65

In our study it was found that the most common method of contraception used was barrier contraception (Condom) 26.8% followed by Depot Medroxyprogesterone Acetate (DMPA) Injections 19.39% followed by sterilisation 15.65%. Similar study was conducted in 2015–2017, in USA where it was found that 64.9% of the 72.2 million women aged 15–49 years in the United States of America were using contraception. The most common method of contraception used was female sterilisation (18.6%), oral contraceptive pills (12.6%), long-acting reversible contraceptives (LARCs) (10.3%), and male condom (8.7%). Use of LARCs was higher among women aged 20–29 years (13.1%) compared with women aged 15–19 years (8.2%) and 40–49 years (6.7%). Use was also higher among women aged 30–39 years (11.7%) compared with those aged 40–49 years. Female sterilization declined and use of the pills increased with higher education. Use of LARCs did not differ across education (about 10%–12%) [13]. One most significant reason for higher usage of condoms in our study is the National Aids Control Organisation's condom distribution programme. Promoting the use of condoms is one of the cornerstones of the HIV prevention and control programme. NACO also gives condoms to non-traditional outlets such as kirana shops and barber shops, where condoms are either given away for free or sold at a low prices. NACO has installed condom vending machines in major cities and towns so that people can pick up condoms discreetly.

Variation in contraceptive use across social and demographic characteristics offers potential insight into larger fertility patterns, including birth rates and incidence of unintended pregnancies. The chance that a woman not seeking a pregnancy will have an unintended pregnancy varies by whether any method of contraception is used and which method she or her partner uses. Hormonal methods, particularly the combined oral contraceptive pills, are a viable choice for young women from menarche age to 35 as is the choice of condoms since both are reversible methods of contraception. They are easy, cheap, accessible and simple in their usage. Condom has an additional benefit of preventing Sexually Transmitted Infections. Both require, an understanding of effective use as was observed by Bowen-Simpkins et al in his study [14].

In the study conducted by Mahera Abdulrahman et al, it was found that the majority of women

(247, 56%) were using less effective methods of contraception (condom, withdrawal, sponge, calendar, and spermicide) than methods readily available. Their results demonstrate that higher education and communication of the benefits and risks of different types of contraceptive methods are needed to improve the use of contraception in the UAE population [15].

Nicola Firman et al in their study from the third British National Survey of Sexual Attitudes and Lifestyles reported that 26.0% of 16–49 year olds used hormonal contraception as their usual method and use of hormonal and barrier methods was highest in the youngest age group and decreased with age [16]. This is mainly due to short term relationships among youngsters.

Contraceptive preferences have individual, regional, religious, cultural, gender based variations. In our socio-demographic setup majority (18.9%) were in the age group of 25-29 years. And majority of them 26% used condom as the preferred method of contraception.

5. CONCLUSION

Barrier methods of contraception are very well accepted in our socio demographic setup mainly because of their easy usage, availability, affordability and an additional benefit of protection against Sexually Transmitted Infections. Further it does not have an impact on future fertility of women making it a favourable choice of contraception.

DISCLAIMER

The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

CONSENT AND ETHICAL APPROVAL

After taking proper consent from the patients information regarding their age, residence, education, occupation, obstetrics history and use of contraception was taken.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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