

Original Article

Fertility regulation - a five year study

Mukhopadhyay Ashis Kumar¹, Ghosh Anuradha², Goswami Sebanti³, Adhikari Sudhir⁴

¹⁻⁴ Associate Professor, ² Senior Resident, ³ Associate Professor

Department of Obstetrics and Gynecology, Medical College and Hospitals, Kolkata

Abstract

Objectives : The purpose of this study was to evaluate the changing trends of acceptance of different methods of family planning during the five years from 2001-2005 and at the same time to analyze the acceptance of MTP as a means of fertility control over a period of five years. **Methods:** The present study is a retrospective one carried out in the Department of Obstetrics and Gynecology, Medical College Kolkata from January 2001 to December 2005. Fourteen thousand six hundred seventy seven patients who have accepted different methods of family planning with or without MTP were included. The number of patients accepting different methods of family planning was determined and simultaneous study was done with reference to their age, number of living children, marital status, religion, literacy status and timing with method of ligation. **Results:** Yearly acceptance of OCP showed a slight upward trend and that of ligation showed a downward trend, whereas that of CuT remained almost constant. It is evident that number of patients undergoing MTP showed a gradual but steady decrease over years. **Conclusion:** The downward trend of MTP and increased acceptability of OCP as noticed in our study is undoubtedly a welcome sign and increased familiarity with the newer methods of contraception will promise to brighten up the culture of family planning practices.

Key words: fertility control, contraception, MTP

Introduction

The population of India has increased from 863.3 million in 1991 to 1027 million in 2001. If the population explosion goes at this rate then we can expect to have a figure of 1175 million in 2010. Therefore the strategies for controlling this expansion play a vital role in determining the future prospects of the country. The two methods of population control which have been utilized from

time to time are Medical Termination of Pregnancy (MTP) and contraception.

The purpose of this study was to evaluate the changing trends of acceptance of different methods of family planning from 2001-2005 and at the same time to analyze the acceptance of MTP as a means of fertility control over a period of five years.

Material and methods

The present study is a retrospective one carried out in the Department of Obstetrics and Gynecology, Medical College Kolkata from January 2001 to December 2005. Fourteen thousand six hundred seventy seven patients who have accepted different methods of family planning with a without MTP were included. The number of patients accepting different methods of family planning

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Correspondence :
Dr. Goswami Sebanti
317, New Raipur (Dabur Park)
Flat No. 1B
Kolkata - 700084
Tel. 9831135933
Email : sebantigoswami@yahoo.co.in

was determined and simultaneous study was done with reference to their age, number of living children, marital status, religion, literacy status and timing with method of sterilization.

Results

Patients aged less than 20 years mostly accepted OCP as a method of contraception. Patients aged between 25 to 30 years mostly accepted CuT, whereas majority of the patients aged between 30 to 35 years underwent sterilization. All the women who were above 35 years accepted sterilization (Table 1).

Patients undergoing MTP were mostly from the age group of 25 to 30.

All the nulliparous patients accepted OCP, most of the primipara opted for OCP. But the second paras were

mostly in favor of CuT. All the women having 3 or more children went for sterilization. The group mostly undergoing MTP was para 3 or more. 0.2% of patient population was unmarried. Majority of the women had studied upto standard X (Table 2).

Yearly acceptance of OCP showed a slight upward trend and that of ligation showed a downward trend, whereas that of CuT remained almost constant. It is evident that number of patients undergoing MTP showed a gradual but steady decrease over years. (Table 3). Laparoscopic ligation showed an abrupt rise along with simultaneous downslide of minilap ligation over 5 years (Table 4).

There was a drastic increase in the number of interval ligation from 2001 to 2005, whereas post abortal ligation showed a drastic downfall. The caesarean ligation however showed a gradual decrease, puerperal ligation remaining almost constant (Table 3).

Table 1. Age distribution.

Age group	OCP	CuT	Ligation	Total	MTP
<20	1889 (90.4%)	201 (9.6%)	-	2090	601 (8.7%)
20-25	1771 (67.5%)	851 (32.4%)	-	2622	1900 (27.5%)
25-30	800 (42.4%)	1086 (57.6%)	-	1886	2996 (43.3%)
30-35	695 (21.2%)	800 (24.4%)	1784 (54.4%)	3279	723 (10.5%)
>35	-	-	4502 (100%)	4502	690 (10%)

Table 2. Distribution according to marital status, religion, literacy status.

Marital status	
Married	14647 (99.8%)
Unmarried	30 (0.2%)
Total	14677
Religion	
Hindu	6574 (44.81%)
Muslim	8905 (55.1%)
Others	8 (0.05%)
Literacy status	
Illiterate	2115 (14.4%)
Upto Std X	9321 (63.5%)
Above	3241 (22.1%)

Table 3. Acceptance of different methods of contraception and acceptance of different methods of contraception along with MTP.

	2001	2002	2003	2004	2005
OCP	751 (33.6%)	827 (33.3%)	1045 (35.2%)	1259 (35%)	1264 (37.5%)
CuT	490 (21.9%)	545 (22%)	616 (20.6%)	774 (21.5%)	513 (15.2%)
Ligation	993 (44.4%)	1044 (42.6%)	1277 (42.6%)	1500 (41.7%)	1472 (43.7%)
Lunelle	-	65 (2.6%)	49 (1.6%)	-	-
Implanon	-	-	-	651 (1.8%)	1193 (3.5%)
Total	2234	2481	2996	3598	3368
	2001	2002	2003	2004	2005
MTP+OCP	401 (26.7%)	475 (32.3%)	500 (35.5%)	459 (34.5%)	410 (34.2%)
MTP+CuT	547 (36.5%)	502 (34.1%)	507 (38.7%)	501 (37.7%)	430 (35.8%)
MTP+Ligation	552 (36.8%)	495 (33.6%)	401 (28.5%)	370 (27.8%)	360 (30%)
Total	1500	1472	1408	1330	1200

Table 4. Timing of ligation.

	2001	2002	2003	2004	2005
Cesarian	270	211	205	309	250
Puerperal	71	187	176	221	157
Interval	100	151	495	600	705
Postabortal	552	495	401	370	360
Total	993	1044	1277	1500	1472

Table 5. Ligation - Laparoscopic vs minilap.

	2001	2002	2003	2004	2005
Lap	52 (8%)	208 (32.2%)	324 (36.2%)	490 (50.5%)	668 (62.7%)
Minilap	600 (92%)	438 (67.8%)	572 (63.8%)	480 (49.5%)	397 (37.3%)
Total	652	646	896	970	1065

Discussion

The different methods of fertility control have shown various level of acceptability since decades. Our study has reflected the changing trends over a period of five years in a tertiary care center.

In our study the women aged <20 years mostly accepted

OCP as a method of contraception whereas the 25-30 years age group mostly opted for CuT. Majority of the women aged 30-35 years underwent ligation. A survey of the birth control methods employed by women of the childbearing age in China was based on a nationwide randomized sampling of 1000 women¹. In the different age groups, ranging from 15-49 years, IUD users accounted for over 50%, tubal sterilization 25%,

and vasectomy 10%. The main IUD users were women in the age group of 20-24 years. Tubal sterilization was more prevalent among the women in the age group of 35-39 years. The use of oral contraceptives (OCs) was more common among younger women but accounted for less than 10% of the total.

While the primiparous patients accepted OCPs, most of the Para 2 went for CuT as their choice and women having more than three children went for tubectomy. Same was the findings in the study of Shrotriya et al² where the largest acceptance of tubectomy was among women with three children. But their study (in 1982) showed that those above or below parity 3 probably were using MTP as a substitute for contraception. Whereas in our study we saw that the number of patients undergoing MTP as a contraceptive procedure showed a gradual but steady decrease over the five years.

Abortion has become a popular method of prevention of unwanted births in India since the implementation of the MTP act in 1972. About six million procedures are performed each year. Of concern however, is the failure of many of these women to start contraception after the MTP. Our study shows that acceptance of OCP following MTP went up through the years from 26.7% in 2001 to 34.2% in 2005. Rates of insertion of CuT following MTP remained fairly constant down the years.

As is clearly evident from the figures in the Table 3, acceptance of the different methods of contraception has gone up from 2234 (in 2001) to 3368 (in 2005). Simultaneously we notice that the number of total MTPs performed each year has steadily gone down over the five years. The CDC (Center for Disease control and Prevention) began abortion surveillance from 1969 to 2003 and interpreted as follows³:

During 1990-1997, the number of legally induced abortions gradually declined. When the same 47 reporting areas are compared, the number of abortions decreased during 1996-2001, then slightly increased in 2002 and again decreased in 2003. In 2000 and 2001, even with one additional reporting state, the number of abortions declined slightly, with a minimal increase in

2002 and a further decrease in 2003. Debavalya⁴ in survey of the knowledge and practice in family planning of Thai women from 1969-1975 showed that both the familiarity with contraceptive methods and acceptability of contraception increased substantially in the 5-6 years between the surveys.

In our study and increase in the number of interval ligation was noticed. This definitely reflects the increased awareness of the people regarding the permanent methods of contraception. In each of the surveys conducted in Thai women by Debavalya⁴, sterilization accounted for a substantial proportion of contraception.

Analysis of the various types of tubectomy shows that the laparoscopic ligation has gained its foothold steadily and has jumped from the figure of 8% in 2001 to 62.7% in 2005. This also indicates the better training and proficiency of the care providers in the avenue of family planning. Replacing minilap with increasing lap ligations has reduced the operative time and shortened the hospital stay of the women. This has decreased the burden of the overcrowding wards of our tertiary centre and increased the quick turn over of the cases, both of which are highly appreciable and acceptable.

The practices of mankind have changed from time to time. Some become extinct, older ones are reviewed and newer evolve. Same is true for methods of fertility control. The downward trend of MTP and increased acceptability of OCP as noticed in our study is undoubtedly a welcome sign and increased familiarity with the newer methods of contraception will promise to brighten up the culture of family planning practices.

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