

# A study of contraceptive use pattern among the patients of reproductive tract infections at tertiary health care center

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## Abstract

**Introduction:** It is estimated that 340 millions of new cases of curable sexually transmitted infections occur each year in women and men suffering from reproductive tract infections (RTIs). **Aims and Objectives:** To Study Contraceptive use pattern among the Patients of Reproductive Tract Infections at tertiary health care center. **Materials and Methods:** Patients attending tertiary health care center with complaint of abnormal vaginal discharge of age group 15 to 40 years were selected for the study. While Patients who are menstruating, on any antibiotics or vaginal medication during period of 7 days, Patients who are having genital malignancy or fibroid uterus were excluded from the study. This study was conducted at tertiary health care centre from January 2009 to September 2010. During the study period the total number of gynaec O.P.D attendees was 19,270. Presuming the equal distribution of cases on all days the no. of attendees (symptomatic and asymptomatic) with findings of RTI were 6,423. **Result:** The age wise cases in the age group ≤ 19 years, 20-29 years and ≥ 30 years were 40%, 79% and 75% respectively. Out of 200 cases, 4 (2%) were IUD users, 12 (6%) were hormonal pill users, 88 (44%) had already undergone tubectomy and around 13.33% cases were dependant on their spouse for use of male condom as a contraceptive. None of the IUD users was found to be symptomatic, but among the hormonal pill users > 91% were asymptomatic. Those who resorted to permanent contraception almost 85% were symptomatic. Amongst the non-users the figure of symptomatic presentation was maximum almost 90%, while amongst those cases were dependant on their spouse for use of male condom as a contraceptive, the no. of symptomatic cases was around 14%. The Overall prevalence of RTI among Contraceptive pattern was ; In Tubectomied patients was 44% and in Non-users was 33% and in Male condom users was 15 % and in Hormonal contraceptive users was 6% in IUD users was only 2%. **Conclusion:** In our study it can be concluded that the prevalence of the RTI was less in the Condom, IUD users, Hormonal contraceptive users but was more in the Tubectomied and Non-users ; awareness regarding contraceptive knowledge and its proper usage should be in case of permanent sterilization & it must be with all aseptic precaution.

**Keywords:** Reproductive Tract Infections, IUD (Intra Uterine Device), Permanent sterilization.

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## INTRODUCTION

It is estimated that 340 millions of new cases of curable sexually transmitted infections occur each year in women and men suffering from reproductive tract infections (RTIs).<sup>1</sup> RTIs are the top five infectious disease in adults seeking health care, and about one third of RTIs occur globally among people younger than 25 years of age.<sup>2</sup> In developing countries, it has been reported that over 700,000 maternal deaths are associated with unintended pregnancies, and more than 400,000 of those deaths resulting from their unsafe abortions.<sup>3</sup> In general, contraceptive methods are used to prevent sexually

transmitted infections and unwanted pregnancies. Sexually transmitted disease and pelvic inflammatory disease (PID) resulting from inappropriate contraceptive method may cause infertility.<sup>4</sup> Certain contraceptives methods have been reported to increase host susceptibility to infections.<sup>5</sup> The complications of RTIs arising from the use of contraceptive methods indicate the urgent need for safe and effective tools of contraceptives. The control of RTIs, especially sexually transmitted infections, is an urgent health priority in many countries.<sup>6</sup> The prevalence of self-reported RTI symptoms among Indian women has been found to be 11–18% in nationally representative studies<sup>12, 13</sup> and 40–57% in various other studies<sup>7–9</sup>, while the prevalence of laboratory-diagnosed RTIs has ranged from 28% to 38%<sup>10, 11</sup>.

### AIMS AND OBJECTIVES

To Study Contraceptive use pattern among the Patients of Reproductive Tract Infections at tertiary health care center.

### MATERIALS AND METHODS

Patients attending tertiary health care center with complaint of abnormal vaginal discharge of age group 15 to 40 years were selected for the study. While Patients who are menstruating, on any antibiotics or vaginal medication during period of 7 days, Patients who are having genital malignancy or fibroid uterus were excluded from the study. This study was conducted at tertiary health care centre from January 2009 to September 2010. During the study period the total number of gynaec O.P.D attendees were 19,270. Presuming the equal distribution of cases on all days the no. of attendees (symptomatic and asymptomatic) with findings of RTI were 6,423. General, physical and local examination of the genitalia was carried out and clinical diagnosis was kept. Necessary tests, vaginal swabs were sent for routine, microscopic examination and also for the culture and sensitivity testing to the department of microbiology.

### RESULT

**Table 1:** Distribution of cases according to age and suggestive symptoms of RTI

Sr. No.	Age group (years)	Total No. of cases 200	No. of
			Symptomatic cases 141 (70.5)
1	≤ 19	40 (20)	16 (40)
2	20- 29	120 (60)	95 (79)
3	≥ 30	40 (20)	30 (75)

(Figures in line parenthesis show percentages.)

Above table shows the age wise distribution of cases in this study with symptoms suggestive of RTI. No. of symptomatic cases in the age group ≤ 19 years, 20-29 years and ≥ 30 years were 40%, 79% and 75% respectively.

**Table 2:** Distribution of cases according to contraceptive used and suggestive findings of RTI

Contraception	No. of patients		Total No. Of cases 200 (%)
	Symptomatic 141(70.5)	Asymptomatic 59(29.5)	
IUD	0	4	4 (2)
Hormonal	1	11	12 (6)
Tubectomy	76	12	88 (44)
Male condom	4	26	30 (15)
Non-users	60	06	66 (33)
<b>Total</b>	<b>141 (72.00)</b>	<b>59 (29.50)</b>	<b>200 (100)</b>

(Figures in line parenthesis show percentages.)

Above table shows the current contraceptive practice in the study group. Out of 200 cases, 4 (2%) were IUD users, 12 (6%) were hormonal pill users, 88 (44%) had already undergone tubectomy and around 13.33% cases were dependant on their spouse for use of male condom as a contraceptive. None of the IUD users was found to be symptomatic, but among the hormonal pill users > 91% were asymptomatic. Those who resorted to permanent contraception almost 85% were symptomatic. Amongst the non-users the figure of symptomatic presentation was maximum almost 90%, while amongst those cases were dependant on their spouse for use of male condom as a contraceptive, the no. of symptomatic cases was around 14%.

### DISCUSSION

Genital and urinary tract diseases due to contraceptive methods contributed to the sequelae of infertility, ectopic pregnancy, PID and its higher mortality and morbidity rates among neonates and their mothers.<sup>14</sup>

The comparisons of various studies are as follows:

**Table 3:** Distribution of cases according to contraceptive used with respect to Various studies

Sr. No.	Contraception	K.M.	Dasgupta	Present
		Bansal et al <sup>15</sup> 200	et al <sup>16</sup> 210	Study 126
1	IUD	30 (15)	25 (12)	04 (3.17)
2	Hormonal	7 (3.5)	10 (5)	09 (7.14)
3	Tubectomy	80 (40)	39 (17)	54 (43.65)
4	Male condom	15 (7.5)	23 (11)	6 (4.76)
5	Non-users	68 (34)	113 (55)	52 (41.26)

(Figures in line parenthesis show percentages)

Above table shows prevalence of RTI according to the contraceptive practice in the present study population. The prevalence of RTI with contraceptive practice is different in various studies. The prevalence of RTI was highest in non-users (41.26%) as compared to other groups, which is comparable to other studies which also show high prevalence in non-users. It was lowest in the women who were dependent on their spouse for the use of condom as a contraceptive. These results of the study corroborate the universal fact that the use of condom during sexual intercourse prevents RTI. As per prevalence RTI in Tubectomy patients was 44% and in Non-users was 33% and in Male condom users was 15 % and in Hormonal contraceptive users was 6% in IUD users was 2%. But this is not in Accordance Pål Z<sup>5</sup> Hawkes S<sup>6</sup> they found the higher incidence of infection in IUD user but in present study the prevalence was lower this could be because of more hygienic precautions are being taken at tertiary health care.

## CONCLUSION

In our study it can be concluded that the prevalence of the RTI was less in the Condom, IUD users, Hormonal contraceptive users but was more in the Tubectomied and Non-users patients; awareness regarding contraceptive knowledge and its proper usage should be in case of permanent sterilization & it must be with all aseptic precaution.

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