

RESPONDING TO REPRODUCTIVE TRACT INFECTIONS IN THE CONTEXT OF FAMILY PLANNING PROGRAMS

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SUMMARY

For several years now, we have borne the legacy of categorical programs which have been historically focussed on the control of fertility and population growth. Infections of the reproductive tract, are of central concern to the providers of family planning services, as these infections influence the safety and quality of service programs. In this study 671 women attending the gynaec. O.P.D. of the SSG Hospital and Medical College, Baroda, were evaluated with respect to the use or nonuse of a family planning method and reproductive infection. 70.49 percent were tubectomy acceptors and 11.01 percent were temporary method acceptors. The cytologic profile showed grade II - III changes in majority of patients regardless of contraceptive use. Amongst IUD users, cervical infection was highest whereas pelvic and vaginal infection was highest among tubectomy users. 59.6 percent had positive cytology for inflammation amongst those with clinically diagnosed RTI. Thus RTIs need to be dealt with, within the context of family planning programs.

INTRODUCTION

Acceptance and sustained use of family planning have been low in many parts of the developing world, despite the pressure

resulting from critical levels of population growth. At present, the contraception coverage is 44 percent of the country's 140 million eligible couples, a majority of whom have taken to sterilization, actually overwhelmingly the female tubectomy route. Over 120 million couples in the developing

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world do not want any more children but are not using effective methods of contraception. In India, the corresponding figure is 18 percent, numbering 24 million. In order to succeed, the population control programme has to turn IUDs, condoms and the pill into the thrust areas.

For many years, there has been considerable discussion of the prospects for integrating family planning efforts with other health care programmes. Responding to the problem of reproductive tract infections (RTIS) is a worthwhile and long overdue challenge to be taken up within the context of existing family planning programmes. Infections of the reproductive tract - including common STDs and HIV infection - are of central concern to the providers of the family planning services, as these infections influence the safety and quality of our service programs and impact on the demand for fertility regulation and utilization of contraceptive methods.

With this view in mind, this study was undertaken to evaluate the prevalence of RTI's amongst users and nonusers of family planning methods.

SUBJECTS AND METHODS

This study comprises a clinical gynecological and cytologic screening of 671 women attending the Gynaec. O.P.D. in the department of Obstetrics and Gynaecology, SSG Hospital and Medical College, Baroda. The patients presented either for a routine checkup or with various clinical symptoms. In all patients, a detailed clinical history was taken, followed by pelvic examination and cervical (ecto cervical and endocervical) smears. The smears were stained by the Papanicolaou method and examined by the cytopathologist. The emerging data was classified (Papanicolaou et al 1948).

Class I : Normal smears

Class II : Atypical cells attributable to infection (CIN - I)

Class III : Dyskaryosis grade II

Class IV : Dyskaryosis grade III

Class V : Conclusive evidence of malignancy

OBSERVATIONS

Table I shows the percentage distribution of users and non-users. Majority 473

Table I
Percentage Distribution of F.P. Method Users and Nonusers

F.P. Method	Mean Age (yrs.)	No. (n=671)	%	Mean Parity
Nonusers	40.80	120	17.88	3.06
Tubectomy	36.09	473	70.49	3.24
Vasectomy	43.94	04	00.59	3.64
I.U.D.	28	46	06.85	2.07
Hormonal	34.30	15	02.23	3.10
Condom	33.60	13	01.93	2.70

Table II
Cytologic Profile according to method of Contraception

	C y t o l o g y G r a d i n g				
	I	II	III	IV	V
Nonusers (n=120)	45 (37.5)	59 (49.16)	02 (01.66)	—	14 (11.66)
Tubectomy (n=473)	122 (25.79)	334 (70.61)	05 (1.05)	—	12 (02.53)
Vasectomy (n=4)	03 (75.0)	—	—	—	01 (25.0)
I.U.C.D. (N=46)	12 (26.08)	34 (73.91)	—	—	—
Hormonal (n=15)	05 (33.33)	10 (66.66)	—	—	—
Condoms (n=13)	03 (23.07)	09 (69.23)	—	—	01 (7.69)

Table III
Distribution of clinically diagnosed RTIs amongst F.P. Method users and nonusers.

Type of infection	Non-users (n=36)	IUD (n=39)	OCP (n=11)	Condom (n=15)	Tubectomy (=468)
1. Pelvic (n=126)	07 (05.55)	06 (04.76)	02 (01.58)	01 (0.79)	110 (87.3)
2. Cervical (n=90)	14 (15.55)	19 (21.11)	09 (10.0)	07 (07.77)	41 (45.55)
3. Vaginal (n=353)	15 (04.24)	14 (03.96)	—	08 (01.98)	317 (89.8)

(70.49 percent) had undergone tubectomy, and condom were 6.85 percent, 2.23 percent their mean age being 36.09 years. The and 1.93 percent respectively. The percentage for I.U.D., hormonal method Table II shows the cytologic profile

Table IV
Prevalence of infection in relation with cytologic findings

	Nonusers (n=120)	IUD (n=46)	OCP (n=15)	Condom (n=13)	TL (n=477)
I. Clinically diagnosed infection with.					
A) Negative Cytology for inflammation.	56 (46.66)	07 (15.21)	03 (20.0)	03 (23.0)	84 (17.61)
B) Positive Cytology for inflammation.	36 (30.0)	39 (84.78)	09 (60.0)	07 (53.84)	309 (64.77)
C) Positive for CIN-II-III	--	--	--	--	12 (2.51)
D) Positive for Ca.	--	--	--	-- (0.83)	04
II. No Clinically diagnosed infection with.					
A) Negative Cytology	--	-- (13.3)	02 (15.38)	02 (7.75)	37
B) Positive Cytology for inflammation.	19 (15.83)	--	01 (6.6)	01 (7.69)	14 (2.93)
C) Positive for CIN II-III	--	--	--	--	16 (3.35)
D) Positive for Ca.	09	--	--	-- (0.2)	01

No. of cases of Vasectomy has been combined with Tubectomy cases for convenience.

according to method of contraception used. Out of 120 nonusers, 45 (37.5 percent) had Class I and 59 (49.16 percent) had Class II profile, Class II cytologic change was the predominant finding across all the other user groups as well. There were 12 cases of malignancy in the tubectomy group.

Table III shows the distribution of clinically diagnosed RTIs amongst users and nonusers. Pelvic infection was seen in 126 (18.77 percent), cervical infection in 90 (13.41 percent) and vaginal infection was highest at 353 (52.6 percent). IUCD users had mainly cervical and vaginal infection. Oral pills users had mainly cervical infections, tubectomy users had upper RTI's and vaginal infection. Thus there does not appear to be any predisposition towards a particular type of infection by method used.

Table IV shows the prevalence of infection with relation to cytologic findings. Amongst those with clinically diagnosed RTI, positive cytology for inflammation was present in 400 (59.61 percent), whereas 153 (22.8 percent) had negative cytology. Amongst those with no clinically detectable infection, 35 (5.21 percent) had positive cytology for inflammation and 41 (6.11 percent) had negative cytology for inflammation. In both groups 28 (4.71 percent) had Dyskaryosis grade II and III and 5 (0.74 percent) had frank malignancy.

DISCUSSION

This study was carried out to evaluate the prevalence of RTI's and abnormal cervical cytology amongst users and nonusers of family planning methods. Majority of the acceptors were terminal methods acceptors (70.49 percent), with temporary methods

comprising 74 (11.02 percent). According to Wasserheit et al (1989) users of each method differ from one another with respect to demographic and behavioural characteristics that might influence the risk of reproductive tract infection. The nonuser profile was usually that of young predominantly uneducated women with low gravidity whereas hormonal method users and tubectomy users were older with higher parity. In the present study, 59.61 percent women reported symptoms consistent with RTI's with vaginal discharge and low pelvic pain being the predominant symptoms. In the Wasserheit et al (1989) study 68 percent of 472 symptomatic women who were examined had evidence of vaginal cervical or pelvic infection. Women who were tubectomised were more frequently infected (24 percent) and women using IUDs were infected in 22 percent. IUD users and tubectomised women were approximately seven times more likely to have infection as compared to nonusers.

In the present study, out of 39 IUD users having clinical infection, cervical infection was most common, whereas vaginal infection was highest amongst tubectomy users. Our findings are consistent with those of the Wasserheit et al (1989) study. Agarwal et al (1992) in a screening study of asymptomatic women, found a 5.6 percent incidence of dyskaryotic smears with the largest number of women belonging to the age group between 28 - 35 years.

One of the limitations of this study is that this is based on hospital data hence only women with symptoms are included and the prevalence of RTIs among asymptomatic method users cannot be determined.

In much of the world, however, the nature of infectious morbidity associated with family planning interventions, remains largely unexplored. Family planning interventions, like all other procedural medical interventions carry a definite risk of morbidity. The value of an intervention must be assessed in terms of the balance between its benefits, and the severity, reversibility and potential morbidity. This capability makes possible safer childbearing (Fortney 1987) improves the health and nutrition of mothers and children (Trussell and Pebley 1984, Hobcraft et al 1983), permits allocation of adequate resources for physiologic and educational needs of children and increase the social and financial productivity of women.

CONCLUSION

Lack of sufficient recognition of the significance and scope of reproductive tract infection is not the only ill we bear. We also bear the legacy of categorical

programs which have historically focussed on the control of fertility and population growth. Much can be done right now by family planning programs to respond to the concerns of their clients and staff about RTIs, STDs and HIV/AIDS. In summary, there are compelling reasons to take up the challenge of addressing RTI's within the context of existing family planning programs (Elias et al 1993).

REFERENCES

1. Agarwal A., Swain S., Dubey S., Rastogi B.L.: *Ind. J. of Maternal and Child Health* 3 (2), 43; 1992.
2. Elias C.J., Leonard A., Thompson J.: *Paper presented at the Africa ORITA. End of Project conference, Kenya, 1993.*
3. Fortney J.A.: *Studies in Family Planning* 18 (2), 109; 1987.
4. Hobcraft J.J., Macdonald and S. Rutstein : *Population index* 49 (4), 585; 1983.
5. Papanicolaou G.N., Traut H.F., Marchetti A.A.: *Commonwealth Fond., Cambridge* 1948.
6. Wasserheit J.N., Harris J.R., Chakraborty J., Kay B.A., Mason K.J.: *Studies in Family Planning* 20 (2), 69; 1989.
7. Trussell J. and Pebley A.R.: *Studies in Family Planning* 15 (6), 267; 1984.