# **Original Research Article**

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# Awareness and acceptance of contraceptives among the mothers of infants attending an immunization session at a field practices area of a tertiary care hospital

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### **ABSTRACT**

**Background:** India was the first country in the world to have launched a National Programme for Family Planning. Methods: A cross-sectional descriptive study was carried out in the in Vaccination unit of rural field practice area of Shri Ram Murti Smarak institute of Medical Sciences (SRMSIMS) Bareilly (U.P). Objective of the study was to assess knowledge and practice of postpartum contraception and factors affecting the usage of contraceptives in Rural area. All females who delivered within last one year were included in the study. A pre-structured questionnaire was used. A total of 98 females were included. The appropriate statistical analysis was done to present the results.

Results: 28.57% females had adopted one or the other postpartum contraceptive measure. Condom was the most common method used. Usage of postpartum contraception was significantly associated with women's and husband's education, type of delivery and availing of antenatal and postnatal visits.

Conclusions: Overall usage of postpartum contraception was low there is need to focus at every step to contact of these women with health facility or health workers.

Keywords: Postpartum contraception, Prevalence, Factors, Rural area, Usage

## INTRODUCTION

The postpartum period is an ideal time to initiate contraception because these women are accessing the healthcare system and might have increased motivation and zeal to avoid another pregnancy in the near future. As is known, non-breastfeeding women might ovulate as early as 25 days postpartum, therefore, it is imperative to initiate contraception in the postpartum period as early as feasible. Contraceptive use during postpartum period is critical for maternal and child health. Family planning can avert more than 30% of maternal deaths and 10% of child mortality if couples spaced their pregnancies more than two years apart.<sup>2</sup> Closely spaced pregnancies within first year postpartum are the riskiest for both mother and

baby and lead to poor outcomes for both.<sup>3</sup> According to an analysis of Demographic and Health Survey data from 27 countries, 65% of women who are 0-12 months postpartum want to avoid pregnancy in the next 12 months but are not using contraception.

The largest population of women with an unmet and underestimated requirement for contraception is in their first year after childbirth.<sup>4</sup> It has been seen that mortality risks are increased for both the previous child and the newborn infant if birth intervals are smaller than recommended.5

As a measure to reduce the adverse maternal, perinatal and infant outcomes, WHO (2006), recommended that the interval between a live birth and the next pregnancy should be two years (24 months).<sup>6</sup> Short birth intervals (<24 months) also lead to increased risk of maternal death and pregnancy related complications.<sup>7</sup>

Hence this cross-sectional study was undertaken to assess the knowledge and practice of contraception in the postpartum women attending an immunization session.

### **METHODS**

This was a cross-sectional study conducted over a period of 3 month from July 2017 to September 2017 in Vaccination unit of field practices area of Shri Ram Murti smarak institute of Medical Sciences (SRMSIMS) Bareilly (U.P), a tertiary care hospital chosen purposely. A total of 98 post-partum women attending the immunization services for their infants were enrolled in the study after taking oral consent and were given a pre structured questionnaire to answer and their answers were noted. These mothers were asked questions to know about their knowledge and practice about contraception & the various methods available thereof. They were counseled about various methods of family planning accordingly. Permission for the study was obtained from the college authorities prior to commencement.

#### Inclusion criteria

Inclusion criteria were mother of infants for vaccination willing to participate and given oral consent.

# Exclusion criteria

Exclusion criteria were mothers not willing to participate; age of child more than one year; mothers were not resuming sexual activity.

# Data analysis

The data collected were entered in Microsoft Excel and checked for any inconsistency. The dichotomous/categorical variables were analyzed by using Chi-square statistics. The p<0.05 was considered as significant. All the analysis was carried out by using SPSS 16.0 versions.

# **RESULTS**

Tubectomy was the most commonly known method (91.84%) followed by condom (88.78%), 84.69% knew about male sterilization, 72.45% OC pills, 41.84% women knew about natural methods of contraception, 8.16% mother did not know about any method of family planning (Table 1).

Table 2 shows that total 28 mothers were using contraceptive out of them condom was the most preferred method of contraception by participants as it was 12 (42.86%) of total users, and 6 (21.43%) were adopted permanent sterilization 14.29% of participants adopted

IUCDs as method of family planning. 3 (10.71%) participants were using natural methods as a method of contraception.

Table 1: Distribution of participants according to knowledge of different contraceptive methods (multiple response answers)\*

Method	No. of participants	Percentage (%)		
Condom	87	88.78		
IUCD	66	67.35		
OC Pills	71	72.45		
Tubectomy	90	91.84		
Vasetomy	83	84.69		
Injectable	41	41.84		
Natural	41	41.84		

Table 2: Distribution of participants according to type of contraceptive use (n=28).

Type of controportive use	Contraceptive users			
Type of contraceptive use	(N)	(%)		
Condom	12	42.86		
Permanent methods	6	21.43		
Pills	2	7.14		
IUCD	4	14.29		
Inj. /implants	1	3.57		
Natural methods	3	10.71		
Total contraceptive methods	28	100		

Table 3 shows that the most (37) of mothers were belonged to the age group of 18-24 years out of them 22.86% were the user of contraceptive methods and 82.86% were not using any method. While maximum user were among the mother were in age group of 25-34 years i.e. 38.89%, in age group of 35-45 only 22.23% were the users of contraceptives, but the association of age of mother with contraceptive use rate was not found significant (p=0.131).

Most of mother were in middle socio economic status, followed by lower and upper, contraceptive user were more among the upper and middle status group i.e. 30% in both group, while in lower group were 26.32% but there was no statistically significant association between socio economic status and contraceptive use (p=0.925).

Most (50) of mother belonged to nuclear families. Contraceptive users were more (36%) among the mothers of nuclear families, 20.83% users were among the mothers belonged to joint families. But the type of family and contraceptive use rate was not found significantly associated (p=0.966).

Majority (72) of women belonged to Hindu community; contraceptive users were more among Hindu women 30.56% in comparison to Muslims (23.08%) but this

difference had no statistically significant association (p=0.469).

Table 3: Demographic and other factors affecting contraceptive use rate.

Characteristics		No. of Users		Nonusers		T4 -6	
		mother	(N)	(%)	(N)	(%)	Test of significance
Type of family	Nuclear	50	18	36.00	32	64	$\chi^2 2.76$ df=1 p=0.097
	Joint	48	10	20.83	38	79.17	
	Total	98	28	28.57	70	71.43	
Religion	Hindu	72	22	30.56	50	69.44	$\chi^2 0.524$ df=1 p=0.469
	Muslim	26	6	23.08	20	76.92	
	Total	98	28	28.57	70	71.43	
	Up to 2	70	18	25.71	52	74.29	$\chi^2 = 0.98$ df=1 p=0.322
Birth order	3or more	28	10	35.71	18	64.29	
Dirtii oruer	Total	98	28	28.57	70	71.43	
Age of marriage (in years)	<18	10	2	20	8	80	$\chi^2 = 0.401$ df=1 p=0.527
	≥18	88	26	29.55	62	70.55	
	Total	98	28	28.57	70	71.43	
Education of mother	Below High school	60	5	8.33	55	91.67	$\chi^2 = 31.055$ df = 1 p = 0.000
	High school and above	38	23	60.53	15	39.47	
	Total	98	28	28.57	70	71.43	
Education of father	Below High school	52	10	19.23	42	80.77	$\chi^2 = 4.736$ df=1 p=0.0295
	High school and above	46	18	39.13	28	60.87	
	Total	98	28	28.57	70	71.43	
Type of delivery	Home	24	3	12.5	21	87.5	$\chi^2 - 4.023$ df=1 p=0.0449
	Intuitional	74	25	33.78	49	66.22	
	Total	98	28	28.57	70	71.43	
ANC check up	<4	38	6	15.79	32	84.21	$\chi^2$ =4.969 df=1 p=0.0258
	≥4	60	22	36.67	38	63.33	
	Total	98	28	28.57	70	71.43	
PNC checkup with in 24 hr or birth	More than 24 hr	36	4	11.11	32	88.89	$\chi^2 = 8.5$ df=1 p=0.0035
	Less than 24 hr	62	24	38.71	38	61.29	
	Total	98	28	28.57	70	71.43	

Majorities (70) of participants were having two children, but the use rate was more among the mothers having 3 or more children i.e. 35.71%. Birth order was not significantly associated with contraceptive use rate (p=0.322).

Majority (88) of mothers were married at or after the legal age of marriage out of them 29.55% were the users of contraceptives, women married before 18 years were using less contraceptive also, but this difference of use of contraceptive methods with age of marriage of women was not found statistically significant (p=0.527).

Out of total 98 participants, mostly (74) delivery was conducted at institutions approved for delivery while 24 deliveries conducted at home, delivery places other than approved places considered as home deliveries. 33.78% were the contraceptive methods user were among the participants with last institutional delivery while only 12.5% were user of family planning methods among the participants last delivery at home, this difference was proved statistically significant (p=0.045).

60 Mother were receiving 4 or more ANC check up in their last pregnancy, out of them 36.67% were the users of contraceptive methods, while the mothers receiving less than 4 check up also adopting less contraceptives methods i.e. 15.79% and 36.67% respectively (p=0.0258).

(Minimum 4 check up recommended by GOI). First PNC check up within 24hr of child birth were received by most (62) of women. Maximum user of contraceptive also from this group i.e. 38.71% in comparison to contrast group i.e. 11.11%. This was proved statistically (p=0.0035).

# **DISCUSSION**

Table 1 shows that 91.84% of mothers were having knowledge about contraceptive, tubectomy was the most (88.78%) commonly known methods followed by condom (88.78%). 41.84% women knew about natural methods of contraception, 8.16% mother did not know about any method of family planning. In a study by Nath et al found the knowledge of post partum women was 72%, IUCD was the most commonly known methods followed by barrier methods i.e. 82.77% and 76.38%, injectable was known to 38.83% 9.72% were aware about lactation amoemorrea methods, few known to safe methods.8 Kripa et al Karnataka found that around 88% of the post partum women knew that there are methods to prevent pregnancy. Over all knowledge of contraceptive among women of reproductive age group was more than 90% by in NFHS 3.

In present study among the mothers post partum contraceptive use rate was 28.57%. In a study by Sidhu et al the postpartum contraceptive use observed in their study was 30.4%. Singh et al reported postpartum contraceptive usage was 33% in an urban area.<sup>11</sup> Mahmood et al reported the post partum contraceptive use rate was 13.8%. 12 Goel et al reported post partum contraceptives use was 28% for rural UP the current use of different methods of Family planning. 13 Around 20.0% of post-partum contraception has been reported by NFHS-3 (2005-2006) for rural U.P.<sup>14</sup> Singh et al in our study 36.6% postpartum women used contraceptive method after previous delivery, higher post-partum contraception prevalence of 41.0% has also been reported from a population council study. 11,15

Condom was the most (42.86%) preferred methods of contraception by participants and 21.43% of participants adopted permanent methods as method of family planning.10.71% participants were using natural methods as a method of contraception. it was in comparable to Sidhu among those using contraceptives 71.4% used condoms while 10.6% had got permanent sterilization. 10 Condom use was maximum as also reported in the studies by Singh KK, Mahmoodand, Goel et al. 11-13

In present study most of user mothers were in age group of 25-34 years 38.89%, age of mother, socio economic status, age of marriage, parity not found significantly associated but the education of mother and father were found significantly associated with contraceptive use rate. Similarly the Mahmood et al found the education of mother was significantly associated with post partum contraception, similarly Singh et al reported that there was significant difference between contraceptive use and education status (p=0.05).  $^{12,15}$  Contraceptive use was higher in literate women.

In present study MCH services utilization was more found as a significantly associated with post partum contraceptive use, type of delivery and number of ANC and PNC checkup were found significantly associated with contraceptive use. Similar association was reported by Singh, Mahmood, Barber and Ekabua. 11,12,16,17 Antenatal period is more appropriate to motivate a female to accept postpartum contraception than postnatal period. So this period should be adequately utilized for postpartum contraceptive counseling. 16,17

### CONCLUSION

In spite of good knowledge few women were using contraceptives in post partum period, so need to focus on providing correct information and proper counseling during their visit to health facility or contact to health worker at ANC visits, hospital stay for delivery, PNC visit or at the time of vaccination of their child. Such an approach will break all the myths and wrong beliefs among the women about contraception and the various devices that are available and help improve the general health of the women and their children.

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Institutional Ethics Committee

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