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# **Research Article**

# A knowledge, attitude and practice study on awareness and acceptance of contraception in postpartum women in a tertiary care hospital

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#### **ABSTRACT**

**Background:** India was the first country in the world to launch National Family Planning Programme in 1951. This was first step taken to stabilize population, but still lag behind in limiting family size and practicing contraceptive use. 55 million unintended pregnancies occur every year in developing countries due to no contraception use. 25 million pregnancies occur due to inconsistent or incorrect use of contraception method and contraception failure. The reason for promotion of family planning services to increase inter-pregnancy interval, birth spacing or to delay conception after birth by this method we can achieve optimum maternal and child outcome. This study was conducted to assess knowledge, awareness and acceptance about contraceptive methods during postpartum period.

**Methods:** A prospective observational questionnaire based study in which 500 postpartum women belongs to 15 to 45 years age group was interviewed with informed verbal consent. This was KAP study regarding socio-demographic profile, awareness and acceptance of contraceptive method in postpartum period or during inter-pregnancy and factors affecting its use.

**Results:** Statistical analysis of univariate and bivariate data done by using chi-square test and percentage (%). Out of 500 postpartum women, 46% women reported that they did not use any contraceptive method before. There was a significant association between contraceptive use with religion and education status (p=0.000, p=0.042 respectively). 62% obtained information from health professional (doctor/nurse), 23.8% obtained information from husband 44.4% of postpartum women implied that they would use contraceptive. Barrier method is the most preferred method (40.1%) of contraception.

**Conclusions:** To improve maternal and child outcome, health professionals should be more focused to encourage effective and high quality contraceptive counseling during antenatal, intrapartum and postpartum period.

**Keywords:** Contraceptive method, Postpartum counseling, Pregnant women, Family planning programme

## INTRODUCTION

Urological injuries which involve damage to the urinary Current population of India is 1.27 billion according to World Population Datasheet 2013, 17.64% growth rate of India in last decade. India is the second most populous country of the world after China. In next few decades India will cross China if this growth rate will keep on increase by exponential growth.

Effective contraceptive use during postpartum period can prevent unintended pregnancies and help in birth spacing. Inter pregnancy interval should be more than 24 months according to WHO Guidelines 2005. In India prevalence of contraceptive use is 73%, out of which effective methods used in 46% in the age group of 15-49 years. 7

Family Planning Programme first launched by India in 1952.<sup>3</sup> India is the first country in the world to launch family planning programmes. Despite of this fact, India is

still lag behind in limiting family size and practicing contraception. This was first step taken by India to stabilize population. By this programme India yielded excellent results by decreasing total fertility rate. Contraception usage in 1965-2009 increased by 48% and total fertility rate decreased by 5.7% to 2.6%.<sup>3</sup>

55 million unintended pregnancies occur every year in developing countries due to no contraception use. 25 million pregnancies occur due to inconsistent or incorrect use of contraception method and contraception failure. Maternal mortality rate would significantly decline by 25-30% by consistent and correct usage of contraceptive method by preventing unintended pregnancies. Evidence shows that short inter-pregnancy internal (<6 months) and increases health risk to mother and newborns and increased maternal morbidity and mortality.

Recent studies shows maternal and infant survival increased by 2-5 times as high, if inter pregnancy level increases. Use of contraceptive method decrease TFR by 2.7% according to national family health survey-3 survey (2005-2006) which corresponds to contraceptive usage (56%) among married women.<sup>9</sup>

#### **METHODS**

The present study was a hospital based prospective, observational study. A total of 500 postpartum women (postnatal or post-cesarean) were enrolled for the study and delivered in Department of Obstetrics & Gynaecology at UCMS and GTB Hospital, Delhi, India. 500 postpartum women were interviewed after taking informed verbal consent, on the basis of prestructured questionnaire. Women were counselled regarding need of postpartum contraception according to cafeteria approach by using interpersonal communication.

#### **RESULTS**

A total of 500 eligible postpartum women were included in the study. Mean age of postpartum women was 30.5 years. Majority of them (60%) belongs to 25-34 years. Out of them 28.6% were illiterate. Family income of majority of women (59%) was <1000 and most of them (75%) belongs to Delhi. Majority of women (73%) had 2 living issues and most of them (85%) were housewives. The main reasons for non-acceptance of contraceptive use were faith or religion (47.2%) followed by desire of more children (38.8%). Frequency of contraceptive use was highest amongst 25-34 years age group. 84.6% women were not discussed with husband (Table 1).

Contraceptive use was significant more in 25-34 years age group compared to 15-24 years and 35-45 years age group (p=0.000) (Figure 1).

There was significant difference in contraceptive use between religions (p=0.000) (Figure 2).

There was significant difference between contraceptive use and education status (p=0.05) (Fig. 3).

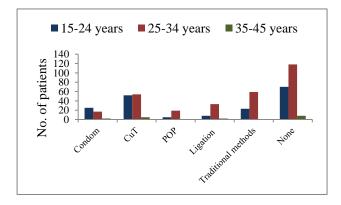
#### DISCUSSION

In our study 36.6% postpartum women aware and used contraceptive method after previous delivery. 51.6% never used any method of contraceptive. According to NFHS-3 survey 75% women used family planning method. Shweta et al study shows more than 90% had awareness about contraceptive method According to NFHS-3 data, contraception use prevalence rate among married women who have been used any type of contraceptive method was 55%. <sup>10,11</sup>

Table 1: Socio-demographic profile of study subjects.

Demographic Profile	No.	Percentage	
Resident			
Delhi	375	75	
Outside Delhi	125	25	
Religion			
Hindu	322	64.4	
Muslim	176	35.2	
Others	2	0.4	
Education			
Illiterate	143	28.6	
<8 <sup>th</sup> standard	213	42	
9-12 standard	116	24.8	
Graduate or above	28	5.6	
Occupation			
Housewife	450	87.5	
Working	50	12.5	
Family income			
< 5000	106	21.2	
5000-10000	285	57.0	
11000-15000	76	15.2	
>15000	33	6.6	
Residence			
Urban slum	400	80	
Rural	100	20	
Family size			
<5	297	59.5	
6-10	197	38.3	
>10	6	1.2	
Parity			
≤3	365	73.0	
4-5	134	26.8	
≥6	1	0.2	
Exclusive breastfeeding			
Yes	489	97.8	
No	11	2.2	
Postpartum high fertility rate awareness			
Yes	300	60	
No	200	40	

Yes       183       36.6         No       317       63.4         Partner discussion         Yes       77       15.4         No       423       84.6         Sexual activity         <6 week	Postpartum contraceptive	awareness			
Partner discussion           Yes         77         15.4           No         423         84.6           Sexual activity         <6 week	Yes	183	36.6		
Yes         77         15.4           No         423         84.6           Sexual activity         86         17.2           >6 week         414         82.8           Interpregnancy interval (n=400)         303         75.75           4-6 years         80         20.0           >7 years         17         4.25           Contraceptive use after previous delivery (n=400)         Yes         150         37.5           No         250         62.5           Contraceptive method use before           Condom         202         40.4           CuT         14         2.8           POP         16         3.2           Ligation         2         0.4           Traditional methods         37         7.4           None         229         45.8           ANC visit         298         58.4           No         202         41.6           Postpartum counselling during ANC visits         Yes         168         33.6           No         332         66.4         Source of information           Husband         119         23.8           Doctor/Nurse         310         62 <td>No</td> <td>317</td> <td>63.4</td>	No	317	63.4		
No         423         84.6           Sexual activity         86         17.2           >6 week         414         82.8           Interpregnancy interval (n=400)         303         75.75           4-6 years         80         20.0           >7 years         17         4.25           Contraceptive use after previous delivery (n=400)           Yes         150         37.5           No         250         62.5           Contraceptive method use before           Condom         202         40.4           CuT         14         2.8           POP         16         3.2           Ligation         2         0.4           Traditional methods         37         7.4           None         229         45.8           ANC visit         Yes         298         58.4           No         202         41.6         Postpartum counselling during ANC visits           Yes         168         33.6         No         332         66.4           Source of information           Husband         119         23.8         Doctor/Nurse         310         62           Friend         2 <td>Partner discussion</td> <td></td> <td></td>	Partner discussion				
Sexual activity           <6 week	Yes	77	15.4		
<6 week	No	423	84.6		
Some   Some	Sexual activity				
Interpregnancy interval (n=400)	<6 week	86	17.2		
<3 years	>6 week	414	82.8		
4-6 years       80       20.0         >7 years       17       4.25         Contraceptive use after previous delivery (n=400)         Yes       150       37.5         No       250       62.5         Contraceptive method use before         Condom       202       40.4         CuT       14       2.8         POP       16       3.2         Ligation       2       0.4         Traditional methods       37       7.4         None       229       45.8         ANC visit       Yes       298       58.4         No       202       41.6         Postpartum counselling during ANC visits         Yes       168       33.6         No       332       66.4         Source of information         Husband       119       23.8         Doctor/Nurse       310       62         Friend       2       0.4         Pharmacist/Chemist       16       3%	Interpregnancy interval (n	=400)			
>7 years       17       4.25         Contraceptive use after previous delivery (n=400)         Yes       150       37.5         No       250       62.5         Contraceptive method use before         Condom       202       40.4         CuT       14       2.8         POP       16       3.2         Ligation       2       0.4         Traditional methods       37       7.4         None       229       45.8         ANC visit         Yes       298       58.4         No       202       41.6         Postpartum counselling during ANC visits         Yes       168       33.6         No       332       66.4         Source of information         Husband       119       23.8         Doctor/Nurse       310       62         Friend       2       0.4         Pharmacist/Chemist       16       3%	<3 years	303	75.75		
Contraceptive use after previous delivery (n=400)           Yes         150         37.5           No         250         62.5           Contraceptive method use before           Condom         202         40.4           CuT         14         2.8           POP         16         3.2           Ligation         2         0.4           Traditional methods         37         7.4           None         229         45.8           ANC visit         41.6           Yes         298         58.4           No         202         41.6           Postpartum counselling during ANC visits         Yes         168         33.6           No         332         66.4           Source of information         119         23.8           Doctor/Nurse         310         62           Friend         2         0.4           Pharmacist/Chemist         16         3%	4-6 years	80	20.0		
Yes         150         37.5           No         250         62.5           Contraceptive method use before         Condom         202         40.4           CuT         14         2.8           POP         16         3.2           Ligation         2         0.4           Traditional methods         37         7.4           None         229         45.8           ANC visit         Yes         298         58.4           No         202         41.6           Postpartum counselling during ANC visits         Yes         168         33.6           No         332         66.4           Source of information         119         23.8           Doctor/Nurse         310         62           Friend         2         0.4           Pharmacist/Chemist         16         3%	>7 years	17	4.25		
No         250         62.5           Contraceptive method use before         Condom         202         40.4           CuT         14         2.8           POP         16         3.2           Ligation         2         0.4           Traditional methods         37         7.4           None         229         45.8           ANC visit         45.8         45.8           No         202         41.6           Postpartum counselling during ANC visits         41.6           Yes         168         33.6           No         332         66.4           Source of information         41.9         23.8           Doctor/Nurse         310         62           Friend         2         0.4           Pharmacist/Chemist         16         3%	Contraceptive use after previous delivery (n=400)				
Contraceptive method use before           Condom         202         40.4           CuT         14         2.8           POP         16         3.2           Ligation         2         0.4           Traditional methods         37         7.4           None         229         45.8           ANC visit         298         58.4           No         202         41.6           Postpartum counselling during ANC visits           Yes         168         33.6           No         332         66.4           Source of information           Husband         119         23.8           Doctor/Nurse         310         62           Friend         2         0.4           Pharmacist/Chemist         16         3%	Yes	150	37.5		
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CuT         14         2.8           POP         16         3.2           Ligation         2         0.4           Traditional methods         37         7.4           None         229         45.8           ANC visit         298         58.4           No         202         41.6           Postpartum counselling during ANC visits           Yes         168         33.6           No         332         66.4           Source of information           Husband         119         23.8           Doctor/Nurse         310         62           Friend         2         0.4           Pharmacist/Chemist         16         3%	Contraceptive method use before				
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Traditional methods         37         7.4           None         229         45.8           ANC visit         45.8         45.8           Yes         298         58.4           No         202         41.6           Postpartum counselling during ANC visits         41.6           Yes         168         33.6           No         332         66.4           Source of information         419         23.8           Doctor/Nurse         310         62           Friend         2         0.4           Pharmacist/Chemist         16         3%	POP	16	3.2		
None         229         45.8           ANC visit         Yes         298         58.4           No         202         41.6           Postpartum counselling during ANC visits           Yes         168         33.6           No         332         66.4           Source of information           Husband         119         23.8           Doctor/Nurse         310         62           Friend         2         0.4           Pharmacist/Chemist         16         3%	Ligation	2	0.4		
ANC visit  Yes 298 58.4  No 202 41.6  Postpartum counselling during ANC visits  Yes 168 33.6  No 332 66.4  Source of information  Husband 119 23.8  Doctor/Nurse 310 62  Friend 2 0.4  Pharmacist/Chemist 16 3%	Traditional methods	37	7.4		
Yes         298         58.4           No         202         41.6           Postpartum counselling during ANC visits           Yes         168         33.6           No         332         66.4           Source of information           Husband         119         23.8           Doctor/Nurse         310         62           Friend         2         0.4           Pharmacist/Chemist         16         3%	None	229	45.8		
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Yes         168         33.6           No         332         66.4           Source of information           Husband         119         23.8           Doctor/Nurse         310         62           Friend         2         0.4           Pharmacist/Chemist         16         3%	No	202	41.6		
No         332         66.4           Source of information         4         66.4           Husband         119         23.8           Doctor/Nurse         310         62           Friend         2         0.4           Pharmacist/Chemist         16         3%	Postpartum counselling during ANC visits				
Source of information           Husband         119         23.8           Doctor/Nurse         310         62           Friend         2         0.4           Pharmacist/Chemist         16         3%	Yes	168	33.6		
Husband         119         23.8           Doctor/Nurse         310         62           Friend         2         0.4           Pharmacist/Chemist         16         3%	No	332	66.4		
Doctor/Nurse         310         62           Friend         2         0.4           Pharmacist/Chemist         16         3%	Source of information				
Friend 2 0.4 Pharmacist/Chemist 16 3%	Husband	119	23.8		
Pharmacist/Chemist 16 3%	Doctor/Nurse	310	62		
2 2 7	Friend	2	0.4		
Media 55 11%	Pharmacist/Chemist	16	3%		
	Media	55	11%		

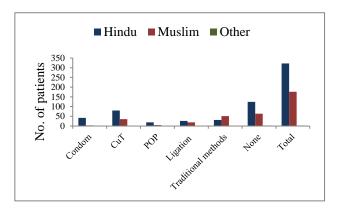


P=0.000

Figure 1: Contraceptive use in various age groups.

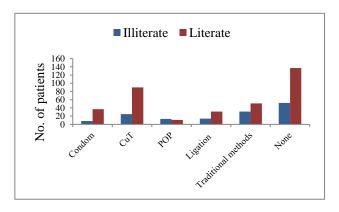
In our study, 40% women preferred barrier method, 46% preferred no contraceptive method and 7.4% preferred traditional method.

According to DHS (2008-2009) prevalence of use of traditional contraceptive method was 12.7%. In our study, POP use was 3.2%. According to USNAID, use of injectable contraceptive was 2.7%, least accepted method because it is not available in government supply.



P=0.000

Figure 2: Religion and contraceptive use.



P=0.05

Figure 3: Education and contraceptive use.

Majority of women convinced to use PPIUCD and barrier methods may be because of free government supply and better reliability, no need of daily use required. Women with  $\geq 3$  living issues were counselled for terminal method like ligation either by laparoscopy or interval tubal ligation or mini-laparotomy.

Even after counselling, 46% women did not prefer to use any suggested contraceptive methods. Majority of women were rigid to not to use any contraceptive method. 7.4% women used traditional method like safe period, abstinence, coitus interrupts The main reasons for non-acceptance were religious belief or faith followed by desire for more children. 84.6% females did not discussed about contraceptive method with husband. This is reflecting less spousal communication. If spousal communication increases will probable increase use of contraceptive method.

Study done by Shweta et al 45% women discussed with partner. Husband was playing important role in

contraceptive method acceptance. Therefore there is need of counselling of couples. A study done by Rajni et al shows male dominancy is quite common in rural India, where contraception is considered wife duty toward their husbands. Now trend is changed women wanted non-dependence on husband and wants contraception according to their convinence. By this method rapidly increasing population of India may not bring down or limit the family size but will decrease the population burden significantly or stabilize population. Media help in awareness about family planning services by using (IEC) information, education and communication campaign. By the stable of the contraction and communication campaign.

60% women had awareness about postpartum high fertility rate. 36.6% women had awareness or positive attitude about postpartum contraceptive use. About 49% women had inter pregnancy interval of 2-3 years whereas 11% women had interval of <1 year between two children.

In our study 36.6% postpartum women ever used any contraceptive method and 51.6% never used any method of contraception. 58.4% women had regular ANC visit, out of them only 33.6% patients had postpartum counselling during ANC visit.

There was significant difference between contraceptive use and education status (p=0.05). Contraceptive use was higher in literate women. There was significant difference in contraceptive use between religions (p=0.000). Contraceptive acceptance increases with age, educational status, family income. The study shows significant rise in contraceptive use after postpartum counselling  $(36\rightarrow46\%)$ . A study done by Medina et al shows similar results (33%).  $^{16}$ 

## **CONCLUSION**

To improve maternal and child outcome, health professionals should be more focused to encourage effective and high quality contraceptive counselling during antenatal, intrapartum and postpartum period.

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Institutional Ethics Committee

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