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Research Article

Knowledge, attitude and belief about contraception in post-partum and post abortal women in a tertiary care centre

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ABSTRACT

Background: In this modern era where women have achieved the highest positions in politics, corporate world and conquered the moon, on the other side she is still fighting for her right, i.e. health. For this the women should become economically independent. The concept of waiting for a son preference by the society should be discouraged. Postpartum and post abortal period are very crucial for a women especially for many of those belonging to the villages as this may be the only time she comes in contact with a health personnel. Hence counseling should be given to all patients at this time.

Methods: We conducted a cross-sectional study in the department of obstetrics and gynecology of sir Sunder Lal hospital between August 2013 to October 2013. 230 post-partum and post abortal women were interrogated and counseled about various methods of contraception. Awareness about emergency contraception pill and MTPill was also noted.

Results: Only 69% had heard about various methods of contraception. IUCD and OCP were known to most patients. Most patients knew about contraception from television and doctors. After counseling 97% patients wanted contraception. Most patients opted for IUCD, Barrier method and DepoProvera. 20% patients knew about emergency contraception pill and 34.4% patients about MTPill.

Conclusions: There is lack of awareness of contraception, emergency contraception and medical abortion in women under study. Regular counseling is a must to all post-partum and post abortal women. Information should be provided about various methods and patients should be given a choice to choose the method of contraception.

Keywords: Contraception, Knowledge, Postpartum women, Post abortal women, MTPill, Emergency contraception

INTRODUCTION

The ability of women to control their own fertility is absolutely fundamental to women's empowerment and equality. When she is healthy, she can be more productive. And when her reproductive rights - including the right to decide the number, timing and spacing of her children and to make decisions regarding reproduction free of discrimination, coercion and violence - are

promoted and protected, she has freedom to participate more fully and equally in society. For this the women should become economically independent and the concept of son preference by the society should be discouraged. Post-partum and post abortal period are very crucial for a woman as for many of those belonging to the villages, this may be the only time she comes in contact with a health personnel. Hence counseling should be given to all patients at this time.

“The postpartum period is an important time to initiate contraception because women are accessing the health-care system and might have increased motivation to avoid another pregnancy,” writes Naomi K. Tepper, MD, from the division of reproductive health, national centre for chronic disease prevention and health promotion, CDC, and colleagues. “Ovulation can occur as early as 25 days postpartum among non-breastfeeding women, underscoring the importance of initiating contraception in the very early postpartum period”.¹ The fifth Millennium Development Goal (MDG) that aims to reduce infant deaths and improve maternal health while providing universal access to sexual and reproductive health services by 2015. The dynamics of contraceptive use among women in extended postpartum period, i.e. one year period after the birth of child, is of interest at the family planning programme level, since delay of use until the return of menstruation might subject women to the risk of unwanted pregnancy. An increase in contraceptive use during the postpartum period substantially reduces the rates of maternal and infant mortality by preventing unplanned and unwanted pregnancies, and spacing new pregnancies to at least two years after the previous birth.² Furthermore, the largest proportion of women with an unmet need for contraception is found among those in their first year after childbirth.³ An analysis of data from 25 countries collected as part of the Demographic and Health Surveys (DHS) project found that mortality risks are elevated for both the previous child and for the newborn infant if birth intervals are shorter than expected.⁴ According to the report of NFHS-III, in India, 11 percent of births occur within 18 months of a previous birth and 28 percent occur within 24 months. More than 60 percent occur within three years of the previous birth and only 28 percent have an optimal birth interval of 36-59 months.⁵ Thus in India, the higher proportion of unplanned pregnancies might be due to short birth intervals. In this context, the postpartum period is particularly important for initiating contraception to space births in a healthy manner.

In order to reduce the risk of adverse maternal, perinatal and infant outcomes, WHO (2006) recommended that the interval between a live birth and an attempt to the next pregnancy should be 24 months.⁶ Also Demographic and Health Survey (DHS) data analysis from 17 developing countries found that the risk of the newborn and infant dying decreases with increasing birth interval lengths up to 36 months.⁷ In addition, short birth intervals (<24 months) also have a potential effect on the increased risk of maternal death and complications of pregnancies.⁸

According to the national family health survey 2005-06, Uttar Pradesh, India, the unmet need for family planning in currently married women of reproductive age group is 21.2%. Among the common reasons for unmet need for family planning are inconvenient, unsatisfactory services, lack of information, fears about contraceptive side effects and opposition from husbands, relatives or others.⁹ Family planning and adoption of birth control

measures reduces unintended pregnancies and unsafe abortions, averts maternal and new borne deaths, and leads to a decline in the number of women facing complications due to unsafe pregnancies would decline.^{10,11} Selecting appropriate contraceptive is a major concern in postpartum period.

Aims and objectives

To assess the knowledge, attitude and belief about contraception in post-partum and post abortal women in a tertiary care centre - sir Sunder Lal hospital, Banaras Hindu University, Varanasi, India.

METHODS

A cross sectional study was conducted in the department of obstetrics and gynecology of sir Sunder Lal hospital between August 2013 to October 2013. Sir Sunder Lal hospital is a tertiary care hospital in Banaras Hindu University, Varanasi. It caters services to a huge population of Uttar Pradesh and Bihar. A total of 230 post-partum and post abortal women were enrolled in the study after calculating from the pilot study conducted. The patients were interrogated on a pre-tested pre structured questionnaire. Ethical requirements of informed consent and confidentiality were ensured.

Their knowledge about the awareness of contraception and the various methods was assessed. They were counseled about various contraception methods available and allowed to choose a method of their choice for contraception. Patients were also interrogated about awareness of emergency contraception pill and medical termination of pregnancy pills.

Data was entered in Microsoft excel and SPSS version - 15 was used for the statistical analysis.

RESULTS

Socio-demographic details

In this survey 230 immediate postpartum and post abortal women were taken. The age range was between 18-35 years (mean age - 26.4 with SD 4.2) given in Table 1.

Table 1: Socio-demographic profile of patients.

	Number (%)
Maternal age (years)	
15-24	76 (33%)
25-34	136 (59.1%)
35-44	18 (7.8%)
Parity	
One live issue	94 (40.9%)
More than one live issue	136 (59.1%)

We also divided patients based on modified Kuppuswamy scale and education level as shown in Table 2, 3. 10.9% were categorized as Kuppuswamy score 1, 32.6% in group 2, 47.4% in group 3, 7.8% in group 4, 1.3% in group 5.

Table 2: Socioeconomic status.

Modified Kuppuswamy score	Number (%)
Upper (I)	25 (10.9%)
Upper middle (II)	75 (32.6%)
Middle/lower middle (III)	109 (47.4%)
Lower/upper lower (IV)	18 (7.8%)
Lower (V)	3 (1.3%)

Table 3: Educational status.

Education score	Number (%)
Profession or honours	14 (6.1%)
Graduate or post graduate	1 (0.4%)
Intermediate or post high school diploma	26 (11.3%)
High school certificate	64 (27.8%)
Middle school certificate	19 (8.3%)
Primary school certificate	101 (43.9%)
Illiterate	5 (2.2%)
Profession or honours	14 (6.1%)

Knowledge about contraception

Among the 230 women enrolled only 69 % had heard about various methods of contraception. Figure 1 Only 65.95% women after one delivery or abortion had heard about contraception compared to 71.3 % after two or more deliveries as shown in Table 4.

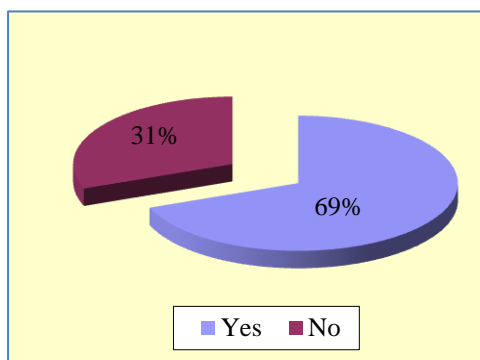


Figure 1: Knowledge about contraception.

Table 4: Knowledge based on parity.

Obstetric history	Aware	Unaware	Total
Para 1	62 (65.95%)	32	94
Multipara	97 (71.3%)	39	136
	159	71	230

In the present study awareness according to education was also assessed, all professional were aware about contraception, 85.1% of graduates/post graduates, 73.7% of patients who studied till intermediate/diploma, 60.9% of high school, 42.3% of middle school and 28.57% of illiterate are aware about contraception. As shown in Table 5 and Figure 2 statistically significant variation was seen between education of the patient ($X^2 = 38.371$, degree of freedom = 6 and P value 0.001).

Table 5: Knowledge based on education - statistically significant (P value 0.001).

Education	Aware	Unaware	Total
Professional or honours	5 (100%)	0	5
Graduate/post graduate	86 (85.1%)	15	101
Intermediate/diploma	14 (73.7%)	5	19
High school certificate	39 (60.9%)	25	64
Middle school certificate	11(42.3%)	15	26
Primary school certificate	0	1	1
Illiterate	4 (28.57%)	10	14

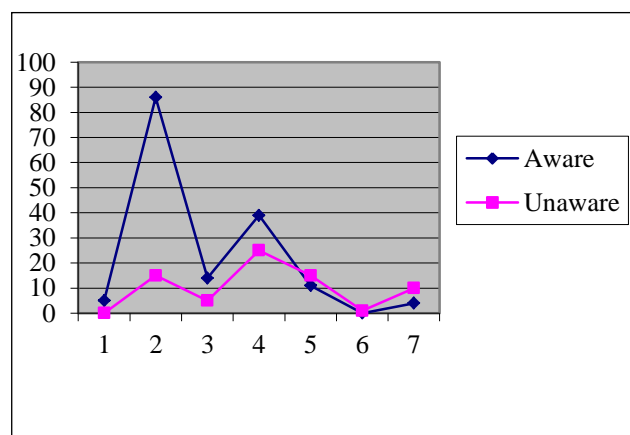


Figure 2: Knowledge based on education.

Their knowledge about the various methods of contraception according to socioeconomic status using modified Kuppuswamy score was assessed. On analysis 24 (96%) of class I, 55 (73.3%) of class II, 69 (63.3%) of class III, 10 (55.5%) of class IV and 1 (33.3%) of class V were aware. Statistically significant value was seen between the different socioeconomic classes. (X^2 value = 14.169, degree of freedom = 4 and a significant P value of <0.002).

Table 6: Knowledge based on socio economic status - statistically significant (P value <0.002).

Social class	Aware	Unaware	Total
Upper (I)	24 (96%)	1	25
Upper middle (II)	55 (73.3%)	20	75
Middle/lower middle (III)	69 (63.3%)	40	109
Lower/upper lower (IV)	10 (55.5%)	8	18
Lower (V)	1 (33.3%)	2	3
	159	71	230

Their awareness according to the occupation of wife is depicted in Table 7. Out of 213 housewives only 143 (67%) had heard about contraception, compared to 93.3% (14 out of 15 women) in skilled group (Tailor, clerk).

Table 7: Knowledge based on occupation.

Occupation	Aware	Unaware	Total
Housewife	143 (67.1%)	70	213
Skilled personnel	14 (93.3%)	1	15
Professional	2 (100%)	0	2
	159	71	230

Most patients knew about contraception from television (36%), 23% from doctor, 22% from family members, 12% from books and newspapers. Only 6% knew from ASHA as seen in Figure 3.

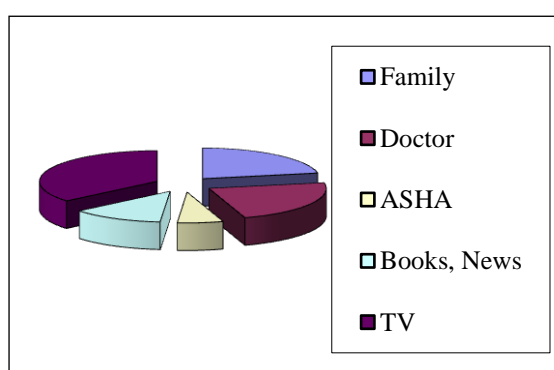


Figure 3: Source of knowledge

Among the inpatients who had knowledge about contraception (n = 159), survey was also carried to know the methods known to them. IUCD was known to 83.65%, barrier method - 70.44%, oral contraceptive pills - 45.28%, lactational amenorrhea- 1%, DepoProvera - 38.3% and safe method was known to 2.5% patients as given in Table 8.

Table 8: Knowledge about the various methods of contraception among the population aware of contraception.

Method of contraception	Number (%)
IUCD	133 (83.65%)
Barrier method	112 (70.44%)
Oral contraception pills (POP)	72 (45.28%)
DMPA	61 (38.3%)
Lactational Amenorrhea	15 (1%)
Safe method	4 (2.5%)

After counseling on post-partum contraception and giving them an informed choice 97% patients wanted contraception. Choices preferred were 33.6% opted for IUCD, 20% for barrier method, 26.5% opted for DepoProvera, 10% for progesterone pills safe method - 3%. However 3% patients did not want any method.

Table 9: After counselling the various methods of contraception chosen.

Method of contraception	Number (%)
IUCD	77 (33.6%)
Barrier method	46 (20%)
Oral contraception pills (POP)	23 (10%)
DMPA	61 (26.5%)
Lactational Amenorrhea	9 (3.9%)
Safe Method	7 (3%)
No method	7 (3%)

The key factors which influenced the knowledge of contraception were education of wife (P score <0.001) and socioeconomic status measured by the modified Kuppuswamy score (P score <0.02).

The various beliefs that people had towards contraception were as follows. Copper T was thought to cause polymenorrhagia by 18.3% patients, infection by 3% patients, weakness by 3% and white discharge and lower abdominal pain by migration to abdomen by 2.2% patients and cancer by 1.3% patients. Oral contraception pill causes polymenorrhagia was thought by 5 patients, infertility by 1 patient and carcinoma by 3 patients.

Table 10: Knowledge about emergency contraception pill.

Knowledge		Emergency pill		Total
		N	Y	
N	Count	65	6	71
	% within knowledge	91.5%	8.5%	100.0%
Y	Count	119	40	159
	% within knowledge	74.8%	25.2%	100.0%
Total	Count	184	46	230
	% within knowledge	80.0%	20.0%	100.0%

Table 11: Knowledge about medical termination of contraception pills.

Knowledge		MTP		Total
		N	Y	
N	Count	55	16	71
	% within knowledge	77.5%	22.5%	100.0%
Y	Count	96	63	159
	% within knowledge	60.4%	39.6%	100.0%
Total	Count	151	79	230
	% within knowledge	65.7%	34.3%	100.0%

Emergency contraception pill was known to only 20% (46 out of 230 patients) Table 11. Of the 71 patients who were not aware about the methods of contraception, 8.5% knew about emergency contraceptive pills. Medical termination of pregnancy was known to 34.3% (79 out of 230 patients).

DISCUSSION

This study is first of its kind as we could not find any previous study reporting on the awareness and knowledge on contraception in post-partum or post abortal women. Among the 230 women enrolled in our study only 69 % had heard about various methods of contraception. IUCD was known to 45% patients. Oral contraceptive pills - 30%, barrier method - 42%, lactational amenorrhea- 1%, Depo-Provera - 17% and safe method was known to 1% patients. Main source of information was from television and doctor. After giving post-partum contraception counseling - 97% patients were willing to use contraception. Choices preferred were 33.6% opted for IUCD, 20% for barrier method, 26.5% Depo-Provera, Progesterone pills - 10%, barrier method - 20%, lactational amenorrhea - 3.9% and safe method - 3%. However 3% patients chose abstinence.

Emergency contraception pill was known to only 20% of patients and medical termination of pregnancy pill was known to 34.4% patients.

In a study among the rural females of Bareilly district by Syed Esam Mahmood the prevalence of postpartum contraceptive method use was 13.8%.¹² Another study in rural Uttar Pradesh by Goel et al. (2010) reported a much higher figure 28.0%.¹¹ Higher postpartum contraceptive prevalence (41.0%) has also been reported by the population council study.¹³ Around 20.0% of post-partum contraception has been reported by NFHS-3 (2005-06) for rural Uttar Pradesh.¹

Another study on contraceptive use among married women in a slum in Mumbai by Kiran G. Makade stated 87.7% of women were aware of at least one method of contraception. 68.4% women were using a contraceptive at the time of study. Out of 342 women, 87.71% were aware about Oral Contraceptive Pills (OCP) and Cu-T, followed by female sterilization and condoms which was known to 80.4% and 77.5% women respectively.¹⁵ Only 12.67% were aware of emergency pills 78.94% of the study population was aware of medical termination of pregnancy. Very low awareness of emergency contraception has also been observed in other studies.²³⁻²⁷

In our study, The key factors which influenced the knowledge of contraception were education of wife (P score <0.001) and socioeconomic status measured by the modified Kuppaswamy score (P score <0.02). Significant association between contraceptive acceptance and type of family, socioeconomic status and age at marriage was observed in a study conducted among women of reproductive age in rural Maharashtra.¹⁶ Similar findings

have been reported by other Indian studies.^{16,17} Contraceptive use was higher (19.1%) among the females who were delivered at a hospital/health centre as compared to those delivered at home (8.3%). This can be attributed to the antenatal and postnatal family planning advice given to patients delivered at a hospital/health centre.

In a study conducted in Mexico, women who received family planning advice during prenatal care were more likely to use a contraceptive than were those who did not receive such advice. Strong associations between maternal health care and family planning practice have been established in previous studies.¹⁸⁻²²

CONCLUSION

There is lack of awareness of contraception in post-partum and post abortal patients. Regular counseling is a must to all pregnant women from every health centre in a village to super speciality centres in cities. Information should be provided about various methods of contraception and patients should be able to choose a method of their choice. There is lack of awareness of emergency contraception and medical termination of pregnancy in post-partum and post abortal women under study.

The limitation of this study was that only a group of patients who sought health care in a tertiary centre were interviewed. Hence the findings in this study cannot be generalized to the state or to India as a whole. Our study reveals that education level and socioeconomic status are the major limiting factors in accepting family planning methods. There is a need for proper promotion of spacing methods by policy makers and field workers and motivation of couples to accept them.

Women who have recently given birth need augmented attention from family planning and reproductive health programs if they are to reduce their numbers of unwanted births and abortions and to lengthen subsequent birth intervals. Prenatal visits, delivery services and subsequent health system contacts are promising avenues for reaching postpartum women with an unmet need for and a desire to use family planning services.²⁸

While it is essential to device programmes to spread awareness among women to use contraception to limit births, it is also very essential to effectively device and implement postpartum family planning programmes in India by integrating them with maternal and child health services. When postpartum family planning is presented as a part of maternal and child-health services, it will have a broader cultural acceptance. In addition, women who receive counseling during hospital stay for delivery are more likely to use contraceptives in postpartum period. It is also seen that women who receive counseling during hospital stay for delivery are more likely to use contraceptives in postpartum period. Thus, there is a need

to observe more closely the role of family planning policies and health care providers in effectively generating motivation and knowledge among Indian women to use contraceptives in postpartum period. It is also very important to target the poor and less educated women for the success of postpartum family planning programmes in India.

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