



Assessment on antenatal mothers knowledge and attitude regarding PPIUCD (Post Partum Intrauterine Contraceptive Device) in OPD at district hospital, Bikaner, Rajasthan

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Abstract

Context: Intrauterine contraceptive device (IUCD) is most effective and one of the good options for spacing pregnancies as it is convenient, long acting and rapidly reversible. PPIUCD insertion can be done post placental that is within 10 min of placental expulsion, intra cesarean at the time of cesarean section or within 48 h of delivery. Inserting IUCD 10 minutes after placental delivery is safe, will lead to wider usage of IUCD hence meeting the unmet needs of community. Despite making contraception widely available, there is poor acceptance of contraceptive methods either due to ignorance or fear of complications using them. Inadequate knowledge about contraceptive methods and incomplete or erroneous information about their use or where to procure them are the main reasons for not accepting

family planning. Ante natal mothers knowledge play a crucial role in acceptance of PPIUCD.

Aim: To assess the knowledge and attitude regarding PPIUCD (post partum intrauterine contraceptive device) among ANTENATAL MOTHERS in OPD at District Hospital Bikaner, Rajasthan.

Methods: The research approach adopted for this study was Quantitative research approach. The research design adopted for the study was descriptive research design for assessing the knowledge and attitude regarding PPIUCD among the antenatal mothers at a SDM Government District Hospital Bikaner. The systematic random sampling technique was utilized for the selection of antenatal mothers. This include a sample of 70 antenatal mothers selected for the study. Data was collected by using a structured questionnaire and Likert scale. The data were analyzed using descriptive and inferential

statistics, including correlation of knowledge and attitude using Karl Pearson's correlation coefficient, chi-square test.

Results: The findings showed that 77% of Antenatal Mothers had poor knowledge, and 23% had average knowledge regarding PPIUCD. With respect to attitude, 81% Antenatal Mothers had unfavorable attitude regarding PPIUCD whereas only 19% of the subjects had favorable attitude regarding PPIUCD and Mean attitude score was 36.2 and standard deviation was 7.43.

Conclusions: The study revealed significant gaps in knowledge and attitude of Antenatal Mothers regarding PPIUCD.

Keywords: Antenatal Mothers, Knowledge, Attitude, PPIUCD

Introduction

Postpartum period is one of the important and crucial times when women and couples are highly motivated and more receptive to family planning methods. PPIUCD has been introduced in the National Family Welfare Programme since March 2010 in several states. PPIUCD insertion can be done post placental that is within 10 min of placental expulsion, intra cesarean at the time of cesarean section or within 48 h of delivery. Inserting IUCD 10 minutes after placental delivery is safe, will lead to wider usage of IUCD hence meeting the unmet needs of community. Pregnant women's knowledge about PPIUCD effect acceptance of contraceptive methods. This study explores the current knowledge and attitude regarding PPIUCD (post partum intrauterine contraceptive device) among ANTENATAL MOTHERS.

Need for the study

There are varieties of contraceptives available today. Among them intrauterine contraceptive devices are

highly effective, inexpensive, safe, long acting, reversible and they do not interfere with sexual life. Contraception especially IUCD promises to be useful in such cases by preventing unwanted pregnancies following unprotected sex. Women who want to start intrauterine contraception (IUC) during the postpartum period might benefit from IUC insertion immediately after delivery. Couple of studies was conducted which suggest that post placental insertion of IUCD greatly reduce the risk of subsequent pregnancy and eliminates the need for a return visit to start contraception. most of the antenatal mothers do not voluntarily accept or approve contraceptive methods. Today even though increased facilities are being provided for family planning in all society, there are another factors that play an important role in adopting it like knowledge, attitudes, beliefs, values and misconceptions etc. The present study was therefore undertaken to assess the knowledge and attitude of antenatal mothers towards post-partum intra uterine device in the selected hospitals.

Review of literature

Yadav et al. (2017) conducted a study on Knowledge, attitude, practice and acceptance of postpartum intrauterine devices among postpartum women in a tertiary care center. The study was performed on 1000 postpartum women within 10 min. of delivery and up to 6 weeks of delivery at Labour Room of, M.Y. Hospital, Indore. Majority of acceptor (72.5%) belong to age group of 18-25 years and 53% belonged to urban area. Acceptance was more in those who completed their secondary school level education (33%). Working women (55.5%) accepted PPIUCD more than the non-working.

Jairaj, Sangeetha. (2016) conducted a cross-sectional study among eligible postpartum women at Gandhi

hospital divunderabad to assess the acceptability and safety of IUCD among study population. Counseling was given about IUCD. After obtaining consent, Cu-T 380 was inserted in a 250 women, followed up to 6 weeks. The reasons for both acceptance and decline were recorded. Mean age of acceptance was 23.70 ± 2.95 years. Majority were from urban area (79.75%). Acceptance was more in those who completed their secondary school level education (23.3%). Women undergoing caesarean divtion were accepting PPIUCD, more frequently than those who underwent normal vaginal delivery. Majority (67.12%) accepters told that they accepted IUCD because it is a reversible method

Ortiz-gonzalez.et al. (2014) conducted a study to describe the general knowledge and choices of postpartum contraception among pregnant teens who, at the time of the study, ranged in age from 13 to 19 years old and were receiving prenatal care at a hospital-based prenatal clinic. A significant proportion of the Antenatal mothers, 20 (45.5%), claimed not to know where to find information about contraception. All the Antenatal mothers acknowledged knowing about the male condom; as to other methods of contraception, 41 (93.2%) knew about oral contraceptive pills (OCPs), 31 (70.5%) knew about the patch, 30 (68.2%) knew about Depo-Provera, and 25 (56.8%) knew about intrauterine devices (IUD).

Materials and Methods

The research approach adopted for this study was Quantitative research approach. The research design

Results:

Table 1: Percentage distribution of subjects according to their socio-demographic characteristics (N=70)

Socio-demographic characteristics		<i>f</i>	%
Age group of antenatal mothers	20- 25 yrs	16	22.9
	25-30 yrs	29	41.4
	30-35 yrs	12	17.1

adopted for the study was descriptive research design for assessing the knowledge and attitude regarding PPIUCD among the antenatal mothers at a SDM Government District Hospital Bikaner. .

The target population was antenatal mothers, and a sample size of 70 antenatal mothers was selected using a systematic random sampling technique.

Two tools were used:

- Structured knowledge questionnaire (15 items)
- Five pointed Likert (16 attitudinal statements)

Scoring categorized knowledge as poor (<50%) and good (50-100%), and attitude as Unfavorable attitude (<50%) and Favorable attitude (50-100%).

The tools were validated by experts from nursing and a pilot study with 20 antenatal mothers confirmed feasibility. The reliability of the structured questionnaire was to be tested by using KR 20 method and reliability of likert scale was tested by using cronbach's alpha method. The reliability of the structured questionnaire was 0.713 and reliability of the likert scale was 0.726. Data was collected from 15.11.23 to 23.11.23, with informed consent and ethical approvals obtained. The data collection tools took approximately 30–40 minutes per participant. The data were analyzed using descriptive and inferential statistics, including Correlation of knowledge and attitude using Karl Pearson's correlation coefficient, chi-square test.

	> 35 yrs	13	18.6
Educational status of antenatal mothers	Primary	26	37.1
	Secondary	33	47.1
	Sr secondary	8	11.4
	Graduate and above	3	4.3
Parity	Nuliipara	25	35.7
	Primipara	37	52.9
	Multipara	8	11.4

As shown in table 1, highest frequency and percentage 29 (41.4%) of the subjects were in between 25-30 years of age group category where as 17.1% of the subjects were in age group of 30-35 years. Maximum of the subjects (47.1%) were studied up to secondary class

whereas only 4.3% of the subjects were educated up to graduate or above. More than half of the subjects were 37 (52.9%) were primipara where as 11.4% of the subjects were multipara.

Table 2: Percentage distribution of subjects according to their socio-demographic characteristics (N=70)

Socio-demographic characteristics		f	%
Family planning methods used previously	Not used any method	33	47.1
	IUCD (Copper-T)	8	11.4
	Oral Pills	25	35.7
	Injectable	4	5.7
Desire for future pregnancy	Within 3 years	25	35.7
	After 3 years	28	40.0
	Not decided	13	18.6
	No more pregnancy	4	5.7
Source of information	Family members and friends	24	34.3
	Mass media	21	30.0
	Health personnel	12	17.1
	No source of information	13	18.6

As shown in table 2, highest frequency and percentage 33 (47.1%) of the subjects were not using any method for family planning where as 5.7% of the subjects were using injectables as method of family planning. Maximum of the subjects (40%) had desire for future

pregnancy whereas only 5.7% of the subjects reported that they do not want any more pregnancy. One third of the subject's (34.3%) had source of information from family members and friends where as 18.6 % of the subjects had no source of information.

Table 3: Percentage distribution of subjects as per their level of knowledge regarding PPIUCD (N=70)

Knowledge of antenatal mothers	Score	f	%
Poor knowledge	0-7	54	77.1
Good knowledge	8-15	16	22.9

As shown in table 3 and figure 7, majority of the subjects (77.1%) had poor knowledge regarding PPIUCD whereas only 22.9% of the subjects had good knowledge regarding PPIUCD.

Hence, it can be interpreted that majority of the antenatal mothers had poor knowledge regarding PPIUCD.

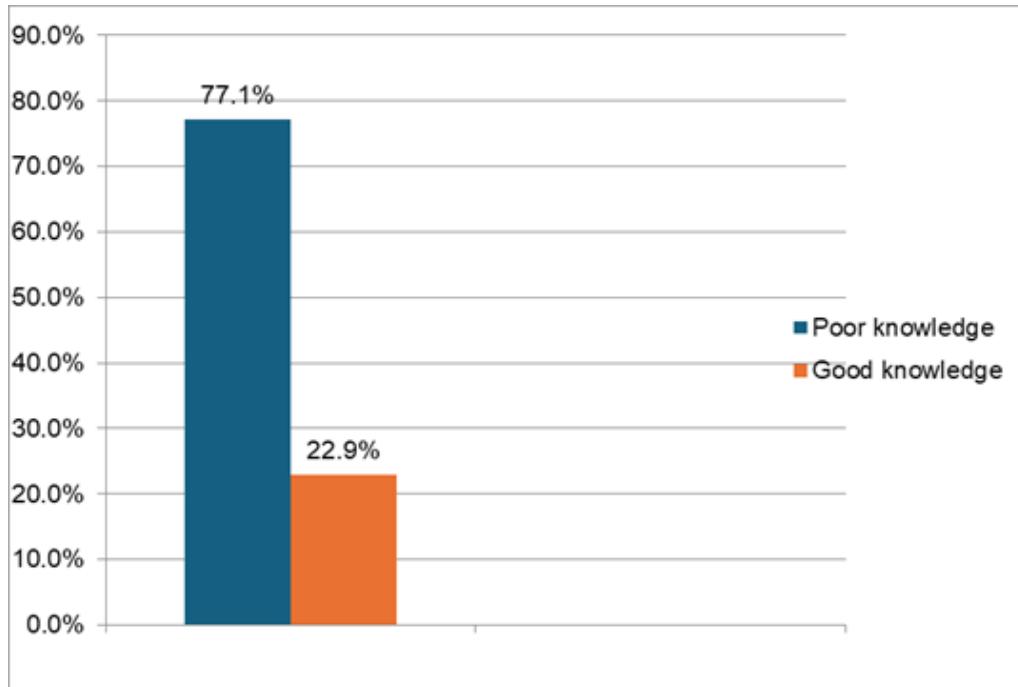


Figure 1: Percentage distribution of subjects according to their level of knowledge regarding PPIUCD (N=70)

Table 4: Mean (SD) and Range of antenatal mothers as per their score for knowledge score (N=70)

Variable	Mean (SD)	Range	Min	Max
Knowledge	6.27 (1.5)	8	2	10

Mean (SD) and Range (Minimum and Maximum) score of subjects as per their knowledge score regarding PPIUCD (N=70) is presented in table 4. The mean (SD) score of knowledge is 6.27 (1.5) with range of 8. The minimum score was 2 whereas maximum score of

antenatal mother was 10 for knowledge questionnaire regarding PPIUCD.

Hence, it can be concluded that the study subjects had low knowledge regarding PPIUCD

Table 5: Percentage distribution of subjects as per their level of attitude regarding PPIUCD (N=70)

Attitude of antenatal mothers	Score	f	%
Unfavorable attitude	<50%	57	81.4
Favorable attitude	50-100%	13	18.6

As shown in table 5 and figure 8, majority of the subjects (81.4%) had unfavorable attitude regarding PPIUCD whereas only 18.6% of the subjects had favorable attitude regarding PPIUCD. Hence, it can be interpreted that majority of the antenatal mothers had unfavorable attitude regarding PPIUCD.

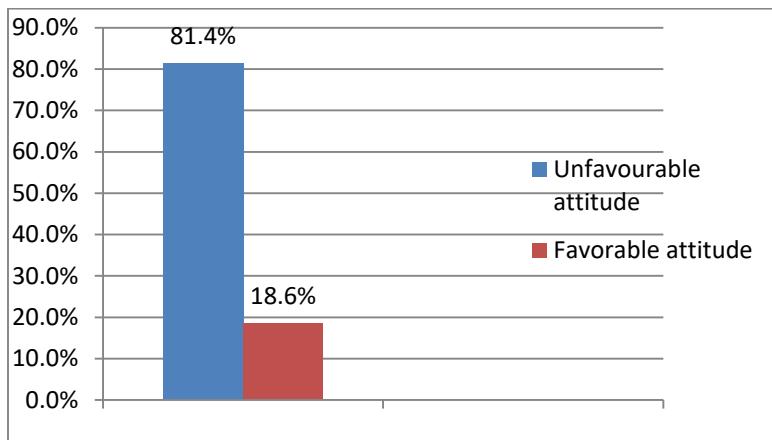


Figure 2: Percentage distribution of subjects according their level of attitude regarding PPIUCD (N=70)

Table 6: Mean (SD) and Range of antenatal mothers as per their score for knowledge and attitude score (N=70)

Variable	Mean (SD)	Range	Min	Max
Attitude	36.21 (7.4)	35	28	63

Mean (SD) and Range (Minimum and Maximum) score of subjects as per their attitude score regarding PPIUCD (N=70) is presented in table 4. The mean (SD) score of attitude is 36.2 (7.4) with range of 35. The minimum score was 28 whereas maximum score of antenatal mother was 63 for attitude questionnaire regarding PPIUCD. Hence, it can be concluded that the study subjects had unfavorable attitude regarding PPIUCD.

Table 7: Correlation between scores of knowledge and attitude among antenatal mothers (N=70)

Variables	r value	p value
knowledge -- Attitude	0. 588**	<0.001

**Correlation is significant at the 0.001 level (2-tailed)

0.3-0.5 indicates moderate correlation, 0.5-0.7 indicates large correlation, 0.7-0.9 indicates very large correlation.

Table 8: Association of knowledge levels with selected socio-demographic characteristics (N=70)

Socio-demographic characteristics		Poor, n= 54		Good, n= 16		χ^2	df	p value
		f	%	f	%			
Age group of antenatal mothers	20- 25 yrs	11	15.7	5	7.1	2.963	3	0.397
	25-30 yrs	21	30	8	11.4			
	30-35 yrs	10	14.3	2	2.9			
	> 35 yrs	12	17.1	1	1.4			
Educational status of antenatal	Primary	17	24.3	9	12.9	3.823	3	0.281
	Secondary	27	38.6	6	8.6			

mothers	Sr secondary	7	10	1	1.4			
	Graduate and above	3	4.3	0	0			
Parity	Nuliipara	22	31.4	3	4.3	2.683	2	0.261
	Primipara	26	37.1	11	15.7			
	Multipara	6	8.6	2	2.9			

* Significant at level of <0.05

Table 9: Association of knowledge levels with selected socio-demographic characteristics (N=70)

Socio-demographic characteristics		Poor, n= 54		Good, n= 16		χ^2	df	p value
		f	%	f	%			
Family planning methods used previously	Not used any method	26	37.1	7	10	2.227	3	0.527
	IUCD (Copper-T)	7	10	1	1.4			
	Oral Pills	19	27.1	6	8.6			
	Injectable	2	2.9	2	2.9			
Desire for future pregnancy	Within 3 years	19	27.1	6	8.6	2.134	3	0.545
	After 3 years	20	28.6	8	11.4			
	Not decided	11	15.7	2	2.9			
	No more pregnancy	4	5.7	0	0			
Source of information	Family members and friends	19	27.1	5	7.1	0.098	3	0.992
	Mass media	16	22.9	5	7.1			
	Health personnel	9	12.9	3	4.3			
	No source	10	14.3	3	4.3			

* Significant at level of <0.05

Table 10: Association of attitude levels with selected socio-demographic characteristics in antenatal mother (N=70)

Socio-demographic characteristics		Unfavorable n= 57		Favorable n=13		χ^2	df	p value
		f	%	f	%			
Age group of antenatal mothers	20- 25 yrs	12	17.1	4	5.7	1.442	3	0.696
	25-30 yrs	23	32.9	6	8.6			
	30-35 yrs	11	15.7	1	1.4			
	> 35 yrs	11	15.7	2	2.9			
Educational status of antenatal mothers	Primary	17	24.3	9	12.9	7.266	3	0.064
	Secondary	30	42.9	3	4.3			
	Sr secondary	7	10	1	1.4			

	Graduate and above	3	43.	0	0			
Parity	Nuliipara	23	32.9	2	2.9	3.792	2	0.150
	Primipara	27	38.6	10	14.3			
	Multipara	7	10	1	1.4			

* Significant at level of <0.05

Table 11: Association of attitude levels with selected socio-demographic characteristics in antenatal mother (N=70)

Socio-demographic characteristics		Unfavorable, n= 57		Favorable, n=13		χ^2	df	p value
		f	%	f	%			
Family planning methods used previously	Not used any method	30	42.9	3	4.3	11.06	3	0.011*
	IUCD (Copper-T)	7	10	1	1.4			
	Oral Pills	19	27.1	6	8.6			
	Injectable	1	1.4	3	4.3			
Desire for future pregnancy	Within 3 years	20	28.6	5	7.1	1.184	3	0.757
	After 3 years	22	31.4	6	8.6			
	Not decided	11	15.7	2	2.9			
	No more pregnancy	4	5.7	0	0			
Source of information	Family members and friends	20	28.6	4	5.7	1.620	3	0.655
	Mass media	18	25.7	3	4.3			
	Health personnel	10	14.3	2	2.9			
	No source	9	12.9	4	5.7			

* Significant at level of <0.05

Major Findings of the Study

Major findings of the study can be summarized as follows:-

Section – I

Findings related to Socio-Demographic characteristics of the Antenatal mothers.

Finding related to background factors which contain 6 items (Age, Education, parity, family planning methods used in past, desire for future pregnancy and source of information) are summarized as follows:

Majority of the Antenatal mothers frequency and percentage 29 (41.4%) of the subjects were in between 25-30 years of age group category.

Based on educational qualification majority of the Antenatal mothers 33 (47.1%) were studied up to secondary class

Majority 37 (52.9%) of the Antenatal mothers were belong to the primipara.

Majority 33 (47.1%) of the Antenatal mothers were not used family planning method in the past.

Majority 28 (40%) of the Antenatal mothers had desire for future pregnancy.

Majority 24 (34.3%) had source of information from family members.

Section - II

Findings related to the level of knowledge among antenatal mothers regarding PPIUCD.

Distribution of antenatal mothers knowledge towards PPIUCD shows that, majority of antenatal mothers 77.1% had poor knowledge. The mean of knowledge score was 6.57 and standard deviation was 1.5. It seems that antenatal mothers had poor knowledge towards PPIUCD.

Section - III

Findings related to the Attitude of the antenatal mothers regarding PPIUCD.

Distribution of antenatal mothers attitude towards PPIUCD shows that Majority of the subjects (81.4%) had unfavorable attitude regarding PPIUCD whereas only 18.6% of the subjects had favorable attitude regarding PPIUCD and Mean attitude score was 36.2 and standard deviation was 7.43. Hence, it can be interpreted that majority of the antenatal mothers had unfavorable attitude regarding PPIUCD.

Section - IV

Assessment of relationship between the knowledge and attitude of antenatal mothers regarding PPIUCD.

Positive correlation was found (+0.588) between knowledge and attitude of antenatal mothers towards PPIUCD.

Section - V

Assessment of Association between Antenatal mothers Knowledge and Selected background factors

On the basis of analysis there was no association between knowledge score and selected background factors (Age, Educational qualification, Parity, Family

planning methods used in past, Desire for future pregnancy& Source of information).

Section- VI

Assessment of Association between Antenatal mothers Attitude and Selected background factors

On the basis of analysis age of antenatal mothers, educational status, parity, desire for future pregnancy and source of information had no association with their level of attitude regarding PPIUCD where as family planning methods used previously had significant association with their attitude level regarding PPIUCD.

Conclusion

The study was conducted to assess the knowledge and attitude towards PPIUCD among antenatal mothers at district hospital Bikaner Rajasthan. In the present study 70 Antenatal mothers were selected using systematic random sampling method.

The research approach adopted to this is an quantitative research approach and research design was descriptive research design. The data were collected by using structured questionnaire and likert scale. Data was analyzed and interpreted by applying statistical method.

The conclusion were drawn on the basis of major findings of the study were as follows.

- The antenatal mothers had poor knowledge towards PPIUCD.
- The antenatal mothers had unfavourable (81.4%) and favourable (18.6%) attitude towards PPIUCD.
- Overall mean knowledge and attitude of antenatal mothers towards PPIUCD was 6.27 and 36.2 respectively.
- The correlation coefficient (R) = +0.588 obtained between knowledge and attitude found to be significantly positive indicating that as the knowledge increase the attitude also increase

significantly. Hence Research hypothesis (H_1) was accepted.

- There was no significant association observed between antenatal mother's knowledge with background factors. Hence Research hypothesis (H_2) was rejected.
- There was age of antenatal mothers, educational status, parity, desire for future pregnancy and source of information had no association with their level of attitude regarding PPIUCD whereas family planning methods used previously had significant association with their attitude level regarding PPIUCD hence hypothesis H_3 was partially rejected

Recommendations:

- Same study can be conducted in community setting and on a larger sample size.
- Same study can be conducted on postpartum mothers.
- A comparative study can be conducted on knowledge regarding PPIUCD and other contraceptive methods among antenatal mothers.
- A study may be conducted to evaluate the effectiveness of self-instructional module prepared on the topic.

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