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Original Research Article

Knowledge and attitude towards post-partum insertion of intra uterine devices among pregnant women attending antenatal clinic at a tertiary care teaching hospital

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ABSTRACT

Background: Post-partum insertion of intra uterine devices (PPIUCD) increased the accessibility for women following childbirth. In India, the most women in the first year postpartum have an unmet need for family planning due to lack of information and fear of complications. The aim of the study is to assess the knowledge and attitude regarding postpartum insertion of intra uterine devices, among antenatal mothers.
Methods: Descriptive cross-sectional survey design. The antenatal mothers, gestational age above 20weeks, registered at AIIMS Jodhpur were selected by purposive sampling technique. A total of 183 subjects were recruited for the data collection. A structured knowledge questionnaire and 5 point Likert scale was used to assess the knowledge and attitude among regarding PPIUCD respectively. Informed consent was taken from each participant prior to data collection and descriptive and inferential statistics were employed to analyze the data.
Results: Majority (57.4%) of the subjects had fair knowledge, 24.6% had poor knowledge, only 18% with good knowledge and none of them had excellent in knowledge regarding PPIUCD. Majority (64.5%) had neutral attitude, 33.3% had positive attitude and 2.2% had negative attitude towards PPIUCD. A positive correlation found between the knowledge and attitude (r=0.509) regarding PPIUCD. Pregnant women's education was found to be significantly associated with knowledge and attitude regarding PPIUCD.
Conclusions: The findings underline that majority of the antenatal mothers having lack of knowledge and less positive attitude regarding PPIUCD. Hence there is a need to hence the comprehensive PPIUCD literacy and highly positive attitude among antenatal mothers in order to meet the family planning needs.

Keywords: Attitude, Knowledge, PPIUCD, Pregnant women

INTRODUCTION

The postpartum period is an important phase in the life of a woman and her baby. It is a time of transition, adjustment, and adaptation along with significant biological and psychosocial changes. Further, postpartum period is one of crucial times when women are more accessible to family planning methods. If a contraceptive is provided prior to discharge from the hospital then the women need not return specially for contraception. The couple has been protected before they assume sexual activity.[1] PPIUCD are still emerging as relatively new contraception choice in India.[2] Postpartum intrauterine contraceptive device is the only family planning method which is highly effective, reliable, inexpensive, non-hormonal, immediately reversible, and long-acting

contraceptive that can be initiated during the immediate postpartum period and it has no a negative effect on lactation.[3-5] According to Medical Eligibility Criteria of WHO, an IUCD can be inserted within 48 hours postpartum or after 6 weeks following birth is known as PPIUCD. Insertion of IUCD in postpartum period has various benefits over interval insertion.[6] Advantage includes high motivation with surety the woman being not pregnant. Postpartum insertion avoids the discomfort during interval insertion and insertion related bleeding will be masked by lochia.[7]

In India, 65% of women in the first year postpartum have an unmet need for family planning, 26% of women are using any method of family planning during the first year postpartum. 8% of the women desire to have another child within the next 2 years after giving birth and are vulnerable to the risks of early pregnancy.[8] Fear of complications and lack of information are the common problems for unmet need.[9] Therefore, it is necessary to assess the knowledge and attitude regarding PPIUCD among pregnant women to enhance the PPIUCD awareness program in India.

METHODS

A cross-sectional descriptive research was conducted at antenatal outpatient unit, over a period of 6 months from 1st August 2018 to 1st January 2019 at All India Institute of Medical Sciences, Jodhpur. Antenatal mothers, gestational age more than 20 weeks, attending AIIMS antenatal OPD was selected by purposive sampling technique. The sample size of this study was calculated as 183, by using similar previous study 13% good knowledge on PPIUCD, with 95% set interval and 5% confidence interval. Pregnant women who are registered at AIIMS, Jodhpur, and gestation age more than 20 weeks and able to read and understand Hindi were included.

Data were collected by interview using a data sheet for recording personal variables details of pregnant women such as age, education, husband's education, occupation, husband's occupation, type of family, religion, parity, previous contraceptive use, wish to use postpartum contraception, gestational age and desire for next pregnancy. Knowledge was assessed by a structured questionnaire comprising of 15 items to assess the knowledge of antenatal mothers regarding postpartum insertion of intra uterine devices. One mark will be given for each correct answer and zero for each incorrect or the unanswered item. Scores of knowledge are categorized into three levels: poor, fair and good. Out of a total score of 15, a score of 5 or below is considered as a poor level of knowledge, 6 to 10 is considered as fair knowledge, and 11 or great is considered as good knowledge.

A structured 5 point Likert scale was used to assess the attitude of antenatal mothers regarding postpartum insertion of intra uterine devices. Attitudes scale consisted of 10 items. The scores for the responses ranged from 1-5 for the answers from strongly disagree to strongly agree. Score of attitude is categorized into positive, neutral and negative. A score of less than 17 was considered as negative attitude and score of 17 to 33 was considered as neutral and 34 to 50 was considered as positive attitude. The self - structured knowledge questionnaire and attitude scale were found to be valid and reliable with score of internal consistency more than 0.7. Data were analyzed using SPSS 16 version descriptive statistics were employed. Karl Pearson's correlation coefficient was computed to determine the relationship between the knowledge and attitude regarding PPIUCD. Chi-square test was done to determine the association between the knowledge, attitude.

RESULTS

A total of 183 subjects in the gestational age more than 20weeks who visited antenatal OPD were enrolled for the study. All subjects were completed questionnaires.

Table 1 shows that majority 69.4% (127) belongs to the age group of 18-28 years, 31.7% (58) had degree and above, 77% (141) were housewife, 62.8% (115) were primi gravid, average gestational age of pregnant women was 28 weeks and desired for next pregnancy was 63.1% (119). Table 2 shows mean knowledge score was found to be 6.14 and standard deviation was 1.48**.** The Figure 1 shows that majority 57.4% (105) had fair level of knowledge, 24.6% (45) had poor level of knowledge and none of them had excellent knowledge on PPIUCD.

Table 1: Frequency and percentage distribution of personal variables.

Personal variables	Frequency	Percentage
Age (years)		
18-28	127	69.4
29-38	56	30.6
>38	0	0
Education		
Primary	15	8.2
Secondary	59	32.2
Higher secondary	51	27.9
Degree and others	58	31.7

Continued.

Personal variables	Frequency	Percentage
Husband's education		
Primary	20	10.9
Secondary	29	15.8
Higher secondary	47	25.7
Degree and above	87	47.5
Occupation		
Housewife	141	77
Govt servant	5	2.7
Private	19	10.4
Business	18	9.8
Husband's occupation		
Farmer	18	9.8
Govt. servant	31	16.9
Private	64	35
Business	70	38.3
Type of family		
Nuclear	33	18
Joint	148	80.9
Extended	2	1.1
Religion		
Hindu	163	89.1
Muslim	16	8.7
Christian	0	0
Others	4	2.2
Parity		
Primi	115	62.8
Multi	68	37.2
Previous contraceptives use		
Yes	36	19.7
No	147	80.3
Wish to use contraceptive after delivery		
Yes	48	26.2
No	135	73.8

Table 2: Mean and standard deviation of the level of knowledge regarding PPIUCD (n=183).

Level of knowledge (%)	Mean	S.D
Poor (>40)	6.14	1.48
Fair (40-50)		
Good (51-70)		
Excellent (>70)		

Table 3: Mean and standard deviation of level of attitude regarding PPIUCD (n=183)

Level of attitude (score)	Mean	S.D
Neutral (34-50)	32.09	4.28
Positive (17-33)		
Negative (<17)		

Table 4: Association between the level of knowledge with personal variables (n=183).

Personal variables	Chi-square	P value
Age		
18-28 years		
29-38 years	0.845	0.655

Continued.

Personal variables	Chi-square	P value
>38 years		
Education		
Primary		
Secondary	13.695	0.033*
Higher secondary		
Degree and others		
Husband's education		
Primary		
Secondary	2.813	0.832
Higher secondary		
Degree and others		
Occupation		
Housewife		
Govt. servant	5.213	0.517
Private		
Business		=
Husband's occupation		
Farmer		
Govt servant	5.444	0.488
Private		
Business		
Type of family		
Nuclear	1.512	0.825
Joint		
Extended		
Religion		
Hindu		
Muslim	4.599	0.331
Christian		
Others		
Parity		
Primi	4.985	0.083
Multi		
Previous contraceptives use		
Yes	0.257	0.879
No		
Wish to use contraceptive after delivery		
Yes		
No	1.559	0.459

*Correlation is sign at the 0.05 level (2 tailed)

Table 5: Association between level of attitude with personal variable (n=183).

Demographic variables	Chi-square	P value
Age		
18-28 years		
29-38 years	0.0744	0.689
>38 years		
Education		
Primary		
Secondary	18.155	0.006
Higher secondary		
Degree and others		
Husband's education		
Primary		

Continued.

Demographic variables	Chi-square	P value
Secondary	8.22	0.222
Higher secondary		
Degree and others		
Occupation		
Housewife		
Govt servant	3.992	0.678
Private		
Business		
Husband's occupation		
Farmer		
Govt. servant	8.715	0.19
Private		
Business		
Type of family		
Nuclear		
Joint	1.42	0.841
Extended		
Religion		
Hindu		
Muslim	8.009	0.091
Christian		
Others		
Parity		
Primi	2.437	0.296
Multi		
Previous contraceptives use		
Yes	1.013	0.603
No		
Wish to use contraceptive after delivery		
Yes		
No	2.614	0.271

*Correlation is sign at the 0.05 level (2 tailed).

Table 6: Correlation between the level of knowledge and attitude regarding PPIUCD (N=183).

Correlation	Karl Pearson's correlation coefficient	P-value
The level of Knowledge and attitude	r=0.509	P<0.0001*

*Correlation is sign at the 0.05 level (2 tailed).

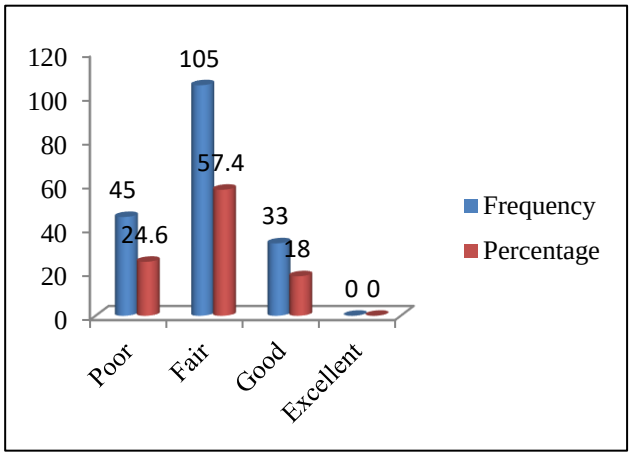

Figure 1: Percentage distribution of level of knowledge regarding PPIUCD.

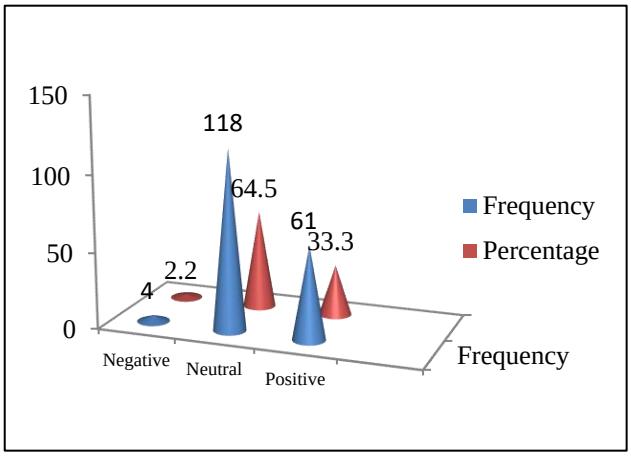

Figure 2: Percentage distribution of level of attitude regarding PPIUCD.

Table 3 shows mean attitude score was found to be 32.09 and standard deviation was 4.28. Figure 2 shows that majority 64.5% (118) had neutral attitude, 33.3% (61) had positive attitude and 2.2% (4) of them had negative attitude on PPIUCD.

Table 4 shows that there was no association between the level of knowledge and selected personal variables except education.

Table 5 shows that there was no association between the level of attitude and selected personal variables except education.

Table 6 shows that there was positive correlation exit between the level of knowledge and attitude.

DISCUSSION

Most women in present study belong to 18-28 years age group and degree and above had good knowledge on PPIUCD. Similarly, in a study by Saroj et al. majority of women belong to 20-25 years. Awareness level about PPIUCD was highest among age group of 25-35 years and in women who were educated as postgraduate or more.[10]

Yadav et al stated that majority of the participants 65.7% (46) were not used any family planning method in past and majority of the participants 45.7% (32) were not decided their future pregnancy whereas 31.4% (22) participants were desire no more pregnancy in future.[11] In the present study gestational age of pregnant women on an average 28 weeks, majority 80.3% (147) were not used any family planning measures in past, 65% of participants had desire to more pregnancy, 35% of participants were desire no more pregnancy in future. More 73.8% (135) of participants were not willing for postpartum contraception.

Yadav et al stated that majority (81.4%) of the antenatal mothers had poor knowledge regarding PPIUCD. 50% of the antenatal mothers had favourable attitude towards PPIUCD. There was a significant positive relationship between knowledge and attitude (r=0.749) at 0.05 level of significance.[11] As like in this study fair level u knowledge about 57.4%, poor level of knowledge 24.6% and there was significant positive relationship between knowledge and attitude (r =0.509) at p<0.0001 level of significance.

Asnani et al. was found that 18% acceptance rate for insertion of PPIUCD after the delivery.[12] Nayak et al reported the low (25.32%) rate of PPIUCD insertion acceptance rate among pregnant women in a tertiary care centre. More acceptances were higher in the age group of 26-30 years (35.3%), para-2 (42.84%).[13] But, in the present study majority reported neutral attitude 64.5% and 33.3% had positive attitude towards PPIUCD. More, the majority the age group between 18-28 years (23.5%), primi gravida (23.5%) and degree holders (14.8%) had positive attitude towards PPIUCD.

The present study is limited with OPD, AIIMS Jodhpur and the participants were assessed by verbal response. The present study included a large sample of women; the findings cannot necessarily be generalized to all of India since the participants were purposive samples rather than a sample representative of the country.

CONCLUSION

This present study finding revealed the majority of antenatal mothers having lack of knowledge and less favourable attitude regarding PPIUCD. Hence, this study imply the strong need for awareness programme on PPIUCD among antenatal mothers in order to meet the family planning needs after delivery.

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