

Knowledge and Practice regarding Post-Partum Intra-Uterine Contraceptive Device among Antenatal Women Attending AMDA Hospital, Jhapa

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ABSTRACT

Introduction

Family planning was set up in 1936. It was at first known as the sex hygiene and birth regulation society. Intrauterine contraception is one of the most cost-effective methods of contraception. PPIUCD can be inserted in 48 hours postpartum, referred to here as postpartum intrauterine contraceptive device. Failure to plan a pregnancy can adversely affect the health of the family as a whole. High parity is related to increased maternal, perinatal and infant deaths and is associated with nutritional problems of both mother and child.

Objectives

The aim of this study is to assess knowledge and practice regarding PPIUCD among the Antenatal mothers attending AMDA Hospital, Damak, Jhapa.

Methodology

A cross-sectional observational design was used for the study. One hundred sixty-four antenatal mothers will be taken in the study. Self-administered questionnaire and interview method used for the study. Data will be summarized using descriptive statistics and inferential statistics.

Results

One hundred sixty-four antenatal mothers participated in the study, 121 antenatal mothers (73.8%) had moderate, 20 antenatal mothers (12.2%) had adequate and 23 antenatal mothers (14%) had inadequate knowledge. There was a significant association between knowledge with age, sex, religion, educational status, marital status, type of family, occupation, type of family, monthly income, parity, previous source of information.

Conclusion

The study concludes that awareness and knowledge among antenatal mothers are high but the usage is low. Many educational and motivational activities are needed.

KEYWORDS

Family planning, Knowledge, Practice, Postpartum intrauterine contraceptive device (PPIUCD)

INTRODUCTION

Family planning is adopted voluntarily, upon the basis of knowledge, attitude and responsible decisions by individual and couples, to promote the welfare of the family and thus, contribute effectively to the social development of the country (WHO, 1971). India was the first country in the world to start a National family planning program in 1956 to address the problems planning method and develop among the people an attitude favorable for adoption of contraceptive method. Contraceptive counseling has become an integral part of antenatal and postpartum programs (Gupta et al., 2017) According to the World Health Organization Medical Eligibility Criteria; an IUCD can be inserted in the 48 hours postpartum, referred to here as a postpartum IUCD (PPIUCD), or after four weeks following a birth (Yadav, 2017). PPIUCD is a long-term reversible safe, feasible and cost effective method of contraception, which avoids unintended pregnancies (Pradeep, 2019).

Globally, an estimated 300,000 maternal deaths occur annually owing to causes associated with pregnancy, of which nearly 75% were preventable. In developing countries, 55 million unintended pregnancies occur every year to women not using contraceptive method; another 25 million occur because of incorrect or inconsistent use of contraceptive method and method failure (Bajracharya, 2015).

Postpartum family planning (PPFP) is the prevention of unintended pregnancy and closed pregnancy through the first 12 months following childbirth and is recognized as a key life-saving intervention for mothers and their children.

When couples space their pregnancies more than two years aside birth control can prevent just about thrice of maternal demise and child death rate of 10%. Small terms between births are connected with elevated mother and child trace and incidence. Stopping of unintentional and closely spaced pregnancies through the first one-year birth of baby is known as postpartum family planning (Gadade, 2019). Postpartum period is one of crucial times when women are more accessible to family planning methods. If a contraceptive that can be initiated during the immediate postpartum period and it has no a negative effect on lactation (Deviga et al., 2019).

A study conducted in Nepal showed that Majority of the participants (90.8%) were aware of contraceptive usage. Amongst 60.5% of women who had previously used contraception, OCPs were the commonest one. Maximum number of participants (60.35%) had used modern contraceptives in the past (Bajracharya, 2015).

An intrauterine contraceptive device (IUCD) has several advantages for use in postpartum period, as it is an effective, long term reversible contraception, is coitus independent, and does not interfere with breast-feeding. Postpartum IUCD (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 hr of delivery (Terefe, 2023). There is a gap in knowledge regarding PPIUCD. This knowledge gap needs to be filled in order to improve the welfare of the family and prevention of unintended pregnancy. However, Nepal being a culturally diverse country, awareness and practice of PPIUCD may vary in different communities. Therefore, it is important to identify the knowledge and practice of PPIUD.

METHODOLOGY

A hospital based cross-sectional research design done in AMDA Hospital, Damak, Jhapa from July to October 2022. This study was started after acquiring approval from the Institutional Review Committee of Nobel Medical College. One hundred sixty-four antenatal mothers were taken as a sample by using non-probability convenient sampling technique. Sample size was calculated using the formula was $n = z^2pq / I^2$ (Cochran, 1997) with 5% error, sample size is calculated to be 164. After obtaining the formal permission from the hospital, purpose of the study was explained to the antenatal mothers and they were explained about the study. Following this, an informed consent was obtained from each participant who met the inclusion criteria. Participant's confidentiality was maintained by using coding their personal identity information in all forms. The average time required to complete the interview was about 20-30 minutes with the questionnaire. A face to face interview based questionnaire was used to collect the information regarding the socio-demographic variables of the patient such as age, sex, religion, educational status, marital status, type of family, occupation, type of family, monthly income, parity, previous source of information.

The tool consists of thirty items from all the aspects of immediate PPIUCD. The items were closed ended statements of multiple-choice types. The total score was thirty. Each correct response carried 'one score'. The tool was prepared in English and Nepali.

The knowledge of the respondents was arbitrarily categorized into three categories:

Level of knowledge	Score
Inadequate	0 – 10
Moderate	11-21
Adequate	22-30

The collected data were checked daily and organized for completeness and accuracy. The collected data were then edited, coded, and entered in SPSS version 22. Descriptive statistics such as frequency and percentages were used for categorical variables and mean and standard deviation was used for continuous variables. The relationship of various factors with knowledge and was analyzed using Chi-square test.

RESULTS

One hundred sixty-four antenatal mothers were included in the study. Similarly, the majority of the respondent 39.6 % (65) were in the age group between 26-30 years, 28.7 % (47) were in the age group 20-25 years, 21.3 % (35) were in the age group 31-35 years, and 10.4 % (17) were in the age group above 35 years. Religion most of the respondents 68.9 % (113) were Hindu, 14.6% (24) were Christian, 11.6% (19) were Buddhist and 4.9 % (08) were Muslim. Regarding Educational status majority of respondents 45.7 % (75) has intermediate, 28 % (46) has primary education, 20.1 % (33) has graduate and 6.1 % (10) are illiterate. Similarly Occupation majority of the respondents 51.2 % (84) are housewife, 36.6 % (60) are private employee, 2.4 % (4) are government employee and 9.8 % (16) are self-employed.

Type of family majority of respondents 51.2 % (84) were have joint family, 34.6 % (76) were nuclear family and 2.4 % (4) have extended family. Monthly income that majority of the respondents 38.4

%(63) were have monthly income 15001-20000 respectively, 32.2 %(53) were have monthly income 10001-15000, 20.1 %(33) were have monthly income 5,000-10,000and 9.1 %(15) were have monthly income above 20000.Parity majority of respondents 56.7 %(93) were primigravida and 43.3 % (71) were multigravida. Regarding Source of information shows that majority of the respondents 59 (36.0%) have source of information from Internet/Newspaper 32.3 %(53) were have source of information from family/friends, 44 (26.8%) from books and health personnel respectively, and 4.9 %(8) have the source of information from books.

Table 1: Knowledge regarding PPIUCD

Variables	Frequency	Percentage
Inadequate	23	14.0%
Moderate	121	73.8%
Adequate	20	12.2%

Table 2. Family planning practices (n=164)

Variables	Frequency	Percentage
Not used and used		
Not used	161	98.2%
Used	3	1.8%
Reasons of PPIUCD used		
-	161	98.2%
Safe and reliable	3	1.8%
Reason to denial		
-	3	1.8%
Fear of perforation infection	32	19.5%
Family refusal	24	14.6%
Fear of side effects	74	45.1%
Desire of other family planning method	22	13.4%
Religious belief	9	5.5%

Table 3: Association between demographic variables of Age, Type of family, Religion, Educational qualification, Working experience, Family income and Source of information (n=164)

Variables	Frequency	Percentage (%)	Chi-square value (x) ²	P value
Age				
20- 25 years	47	28.7	24.931	.000*
26- 30 years	65	39.6		
31- 35 years	35	21.3		
Above 35	17	10.4		
Religion				

Hindu	113	28.7	63.190	.000*
Muslim	8	39.6		
Buddhist	19	21.3		
Christian	24	10.4		
Educational status				
Primary education	46	28.0	40.497	.000*
Intermediate	75	45.7		
Graduate	33	20.1		
Illiterate	10	6.1		
Occupation				
Housewife	84	51.2	5.302	.506
Private employee	60	36.6		
Government employee	4	2.4		
Self employed	16	9.8		
Type of Family				
Nuclear	76	46.3	35.863	.000*
Joint	84	51.2		
Extended	4	2.4		
Monthly income				
5,000- 10,000	33	20.1	26.319	.000*
10,001- 15,000	53	32.3		
15,001- 20,000	63	38.4		
Above 20,000	15	9.1		
Parity				
Primigravida	93	56.7	3.149	.207
Multigravida	71	43.3		
Source of information				
Internet/ newspaper	59	36.0	34.337	.000*
Family/ Friends	53	32.3		
Books	44	26.8		
Health personnel	8	4.9		

*p-value significant at (p<.05)

Table 1 represents the knowledge level moderate 73.8%, inadequate 14.0% and 12.2%. Table 2 represents the practices of family planning used 1.8% not used 98.2%, reason of used unknown 8.1%, safe and reliable 1.8% and reason for denial unknown 1.8%, fear of perforation infection (19.5%) family refusal (14.6%) fear of side effects 45.1%, desire of other family planning method (13.4%) and religious belief (5.5%).

Table 3 presents factors associated (p value < 0.05) with knowledge there was significant association between age (p = 0.000), Religion (0.000), educational status (p = 0.000), type of family (p = 0.000), monthly income (p = 0.000), and source of information (p = 0.000). Further no significant between occupation (p = 0.506), parity (p = 0.207)

DISCUSSION

Postpartum family planning is a prevention of unintended and closely spaced pregnancies in the first 12 months after delivery. During the postpartum period, there is a high chance of having unplanned pregnancy which has an adverse outcome like abortion, premature labor, postpartum hemorrhage, low birth weight baby, fetal loss and maternal death (Terefe et al., 2023).

The study demonstrated out of respondents, 121 antenatal mothers (73.8%) had moderate, 20 antenatal mothers (12.2%) had adequate and 23 antenatal mothers (14%) had inadequate knowledge. A similar study reported that including 350 antenatal women, 126 women (36%) had knowledge, (30%) of women had previous knowledge about PPIUCD and 10% women practiced in past. After counseling 18% women agreed for insertion of PPIUCD after this delivery (Asnani et.al. 2019).

However, a study conducted by Nigam 550 women, which show the overall contraceptive knowledge, was 94.4 % (Nigam et al., 2018). Although 48.4 % women were aware of Cu T as a method of contraception, only 21.9 % of 48.4 %, however, were aware of PPIUCD. None of the women had ever used it before. The commonest prevalent myths regarding Cu T were fear of malignancy (38%) and fear of menorrhagia (36.4 %). The husband and mother-in-law played important roles in decision regarding PPIUCD insertion and refused the same in 59 % of cases. Similarly study in Mangalore, Karnataka 300 antenatal women, 82% had knowledge regarding family planning methods of which 124(41%) had knowledge of PPIUCD. Only 12% of these women had used PPIUCD in the past by valliappan et.al.¹¹ 101 women were enrolled, their ages ranging from 18–58 years with a mean of 31.7 ± 8.8 years. (96%) of these women had already heard about family planning. Almost all respondents (98 %) were aware of at least one contraceptive method, the most cited being the male condom (96 %), the safe period (86.1 %), injectable (76.2 %) and oral pills (75.2 %), 66 women (65.3 %) were currently practicing at least one contraceptive method, and the 3 prevailing methods used were: the safe period (50 %), the male condom (34.8 %), and injectable (12.1 %). The main reasons precluding women from practicing contraception were lack of knowledge (31.4 %), uselessness (31.4 %) and unbearable side effects (8.6 %). 14 of these women (42.4 %) expressed the willingness to start practicing contraception if they received more information about the subject. Decision on the number of children to have was made by both the man and the woman in 59.5 % of cases. The practice of contraception had been decided by the couple in 39.6 % of cases, and 9.4 % of men were not aware that their wives were currently practicing contraception (Nansseu et.al, 2015).

In Present study, knowledge was significant association between age ($p = 0.000$), Religion (0.000), educational status ($p = 0.000$), type of family ($p = 0.000$), monthly income ($p = 0.000$), and source of information ($p = 0.000$). Further no significant between occupation ($p = 0.506$), parity ($p = 0.207$). A similar study reported that including 100 postnatal mothers there is no any association between knowledge score and demographic variable except source of information at 0.05 level of significance (Gadade et.al, 2019)

CONCLUSION

The findings of the study concluded that scores for knowledge were higher in antenatal mothers but the usage is low. However, there was a significant association between knowledge with age, sex, religion, educational status, marital status, type of family, occupation, type of family, monthly income, parity, pervious source of information. Therefore, many educational and motivational activities are needed.

RECOMMENDATIONS

Several studies have been conducted on prevalence on unwanted pregnancies and acceptance of contraceptive devices but knowledge assessment of antenatal mothers regarding IUCD's have not been studied so extensively, Further studies to with large population on knowledge and practice regarding antenatal mothers.

LIMITATION OF THE STUDY

Despite the fact, our study also has few limitations; there is a lack of control group for comparison. The Antenatal mothers who are available at the time of study have been included in this study.

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CONFLICT OF INTEREST

There are no conflicts associated with this research study.

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