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Research Article

Acceptance of postplacental intrauterine contraceptive device: recent increase in trend

Kanmani K.*, Gokulakrishnan G, Rani P. R.

Department of Obstetrics and Gynecology, Vellore Medical College, Vellore, Tamilnadu, India

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***Correspondence:**

Dr. Kanmani K. Kandasamy,

E-mail: s.k.samy40@gmail.com

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ABSTRACT

Background: IUCD is a temporary method of contraception in use for many years. Our main objective is to find the acceptance of (postplacental intrauterine contraceptive device) PPIUCD in recent years.

Methods: Retrospective Analysis was carried out to collect information regarding IUCD insertion in all women delivered at semi urban based medical college in Tamil Nadu from April 2014 to March 2016.

Results: Total women delivered in our hospital were 20949 over a period of two years. Two year comparative study revealed significant increase in acceptance of PPIUCD insertion among primipara from 39.1% TO 68.9%. Acceptance of PPIUCD in primipara was 51.6% in first year (April 2014 to March 2015) to 87.8% in second year (April 2015 to March 2016). Most of the women were in the age group of 20 to 29 years (81.5%).

Conclusions: The present study being retrospective analysis showed sudden increase in coverage rate of PPIUCD from 2014-2015 to 2015-2016. Though the patients were motivated in the same way throughout the period, training and motivation given to the staff nurses and duty doctors in the labour ward for PPIUCD insertion and daily review instead of weekly had brought the significant increase in the coverage. This clearly shows the role of service provider in the success of a national program though acceptor is always ready in most of the times.

Keywords: PPIUCD, Contraception, Intra caesarean insertion, Counseling

INTRODUCTION

IUCD is one of the most commonly used reversible methods of contraception among women in India for decades. The acceptance of a PPIUCD can help women to achieve a healthy birth spacing interval, thus reducing the morbidity and mortality of mother and new born.¹⁻⁴ Provision of PPIUCD is an example of integration of The National Maternal and Child Health and Family Planning Program in a Facility Based delivery by a skilled birth attendant.⁸ It offers highly effective, long term protection against pregnancy with prompt return to fertility upon removal.⁵ It does not require daily action on the part of user or repeated visits for provider. This study throws light on the role of the health service providers who can

bring about a remarkable change in the coverage rate of PPIUCD.

METHODS

This is a retrospective descriptive study design conducted at Government Vellore medical college and hospital, Adukkamparai, Vellore, Tamilnadu, India from April 2014 to March 2016 two year period. Source of data was collected from case records of maternity department in our hospital, follow up register in family planning out-patient department.

Inclusion criteria

Women delivered by normal vaginal or instrumental delivery or by caesarean section were included. CuT380A was inserted for those who fulfilled the medical eligibility criteria and willing to come for follow up after 3 months.

Exclusion criteria

Women with the following conditions were excluded. History of premature rupture of membranes for >24 hours, women with uterine anomalies, history of recurrent pelvic infection, postpartum haemorrhage and malignancies.

Study parameters

All case records were analysed for the following parameters- total number of deliveries, primipara, multipara, normal vaginal delivery within 10 minutes or 48 hours or by caesarean section, complications and expulsion. Follow up register was verified for presence of IUCD after three months.

Data analysis was done for the above parameters using Microsoft office word, Microsoft office excel software and tabulated.

Insertion Techniques

Following vaginal delivery

Under strict aseptic precautions keeping the necessary instruments like Sims speculum, sponge holding forceps, Kellys forceps, over head lamp, Provide one Iodine, kidney tray, and cotton swabs ready, insertion was performed using modified Kelly’s forceps or manually using hand. The patient was placed in a lithotomy position with buttocks at the edge of the table. Sims speculum was gently inserted into the vagina to visualize the cervix. The anterior lip of the cervix was then gently grasped with the sponge holding forceps. The IUCD was removed from the insertion sleeve and grasped with the modified Kelly’s forceps using no-touch technique. It is inserted in to lower uterine segment and the other hand is placed over the fundus and uterus was pushed gently upward to reduce the angle and curvature between the uterus and vagina. IUCD with forceps was moved upward until it can be felt at the fundus. Then the forceps were opened to release the IUCD and swept to side wall. Uterus was stabilized until forceps removal was complete. The cervical os was then gently inspected for the strings. Sims speculum was removed. Manually hand is inserted up to the fundus and IUCD is left there.

During caesarean section

Following placental delivery, uterus is stabilized at fundus. IUCD should be inserted into the uterus through uterine incision and released at fundus of uterus. There is

no need to guide the strings to the lower uterine segment. Care to be taken not to include strings during uterine closure.

RESULTS

During the two year study period-April 2014 to March 2016, number of women delivered in our semi urban based medical college were 20949. During the study period of two years total number of women delivered in first year (2014-2015) were 9990 and in the second year (2015-2016) were 10959. Acceptance of PPIUCD in the first year was 39.3% (3922), where as in the second year it was 68.9% (7550) which shows an increase in the acceptance (Table 1 and Figure 1).

Table 1: Acceptance of PPIUCD.

	Delivery No (100%)	PPIUCD No	Percentage
2014-2015	9990	3922	39.30%
2015-2016	10959	7550	68.90%

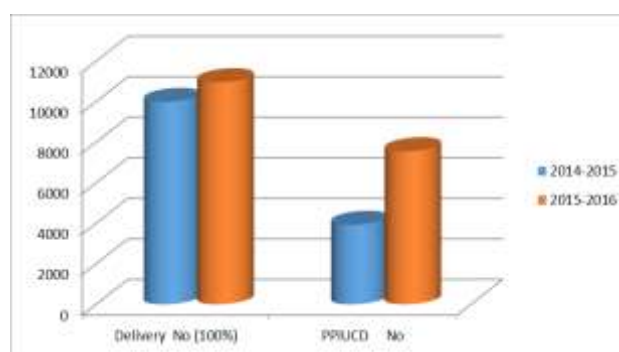


Figure 1: Acceptance of PPIUCD.

In comparing the acceptance of PPIUCD with parity following observation were made. In the first year Total number of deliveries in primipara were 5721 out of which 2953 (51.6%) accepted PPIUCD. In second year total number of deliveries in primipara were 6091 out of which 5345 (87.8%) accepted PPIUCD who made the major contribution for the increase in acceptance (Table 2, Figure 2).

Table 2: Parity distribution.

	PPIUCD No	Delivery No	Percentage
2014-2015			
P1	2953	5721	51.60%
P2	969	4269	22.70%
2015-2016			
P1	5345	6091	87.80%
P2	2205	4868	45.30%
Total	7550	10959	

Age wise comparison shows women between 20-29 years in the first year who accepted PPIUCD were 81.5%

(3186) and in the second year were 81% (6167) who mostly prefer temporary method of contraception in this age.

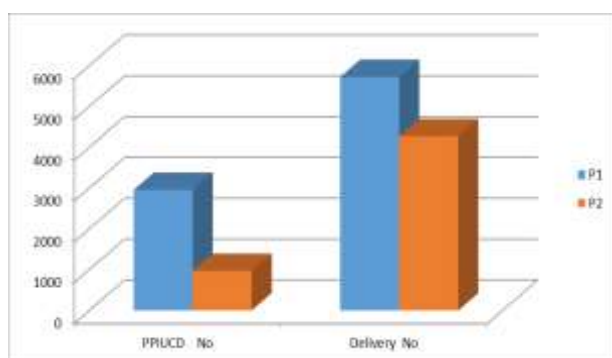


Figure 2a: Parity Distribution from 2014-2015.

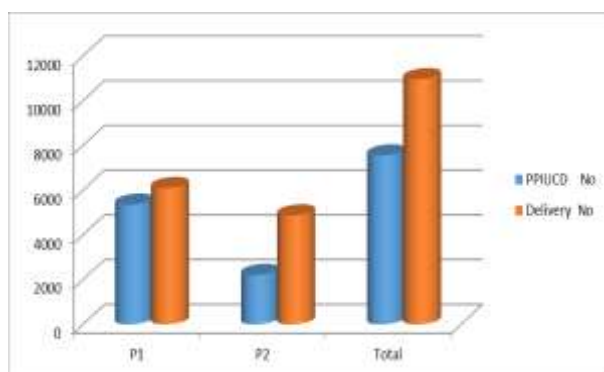


Figure 2b: Parity Distribution from 2015-2016.

Table 3: Age wise PPIUCD insertion.

Age group	April 2014 - March 2015	April 2015 - March 2016
<19	118 (3.1%)	365 (4.8%)
20-29	3186(81.5%)	6167(81.6%)
30 above	603 (15.4%)	1018(13.6%)
Total	3907	7550

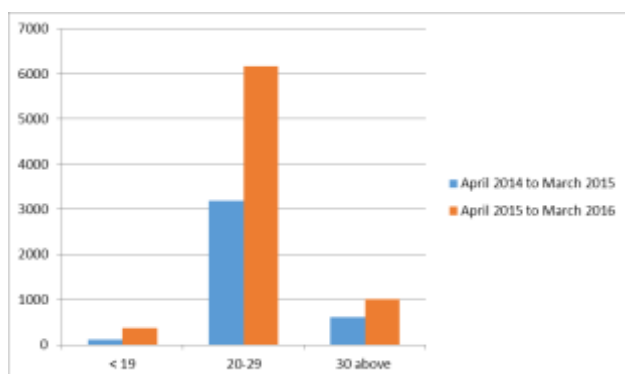


Figure 3: Age wise PPIUCD insertion.

DISCUSSION

The copper T380 A is a highly effective (>99%) effective method of family planning. There are 0.6 to 0.8 pregnancies/100 women in the first year of use. Most of the patients were primipara in the age group between 20 to 29 years to accept the contraceptive device which is a onetime use, lasting for 10 years, independent of coital activity and requires neither a separate visit for insertion nor wait for the menstrual cycle to be resumed. It also has the advantage of being independent of lactation and partner’s cooperation and if any complication arises like pain or excessive bleeding it can be removed at any time. It must be inserted after the patients were counselled and informed consent being obtained during the antenatal period itself. Most of the patients are referred and their consent is recorded in the antenatal case record. The coverage rate was low in the first year compared to second year of the study period between which a training program was conducted for the staff nurses, medical officers, and interns. Misconceptions and myths were removed and it was explained that effectiveness is not affected by insertion in postpartum period within 10 minutes following vaginal delivery or while doing caesarean section. Insertion either manually or using Kelly’s forceps is not going increase the expulsion rates.^{6,7} Continuous motivation was provided and their work were supervised by checking the PPIUCD insertion compared to the number of deliveries on day to day basis instead of weekly review. This showed more than double fold increase in acceptance of PPIUCD.

Vidyarama et al in her experience at a tertiary care centre as a LARC showed an acceptance rate from 2 to 15% which varied according to age, parity, literacy.¹ Our study showed higher acceptance in primi gravida which correlated with their study whereas age wise acceptance did not correlate. They also share that there is need to strengthen our counselling services and motivate trained personnel to improve the acceptance rate which is very well correlated with our study.

Mishrasujnanendra et al in her study on evaluation of safety, efficacy, and expulsion of post-placenta and intra-caesarean insertion of intrauterine contraceptive devices (PPIUCD) states the importance to arrange training on PPIUCD in order to increase knowledge and skills among healthcare providers.² This will also further promote PPIUCD use and aid in reduction of the expulsion rates. Cash incentives to the acceptor, motivator and of course provider would bring about a substantial progress in the PPIUCD use in developing countries like India.

Someshkumar et al studied 2733 married women and observed that the mean age of acceptance was 24 years and high acceptance in primipara and 3.8% expulsion which correlates with our study.¹⁻⁴

CONCLUSION

PPIUCD is known as an effective, safe, cost effective, long lasting and reversible contraception for many years. Counselling given in the antenatal period will increase the acceptance rate but the roll of health care provider and supervision of their work on day to day basis will increase the acceptance. Understanding this issue Government of India has announced a cash incentive of Rs.150 for the provider which definitely increase the overall rise throughout the country. Most of the primi gravida are referred to tertiary care centres for safe confinement and we should not miss the opportunity of providing them the family planning service to be rendered which will significantly help in reducing the maternal and neonatal morbidity and mortality.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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