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ORIGINAL ARTICLE

Effectiveness of Antenatal Counselling in Increasing the Acceptability and Insertion of Post Placental Intrauterine Contraceptive Device in Postpartum Women

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ABSTRACT

Aim: To evaluate effectiveness of antenatal counselling in increasing the acceptability and insertion of Post Placental Intrauterine Contraceptive Device in postpartum women
Study design: Prospective study.
Place and duration of study: Department of Obstetrics & Gynaecology, Hayatabad Medical Complex, Peshawar from 1st April 2022 to 30th September 2022.
Methodology: Fifty pregnant women were enrolled. The age of the pregnant women was taken within 18-43 years. The couples were counselled for the uptake of PPIUCD through gynaecological professional assistance. The counselling was done at 28 weeks followed by at 36 weeks. The misconceptions and myths were eradicated through the use of one-to-one interview as well as focus group discussions. The fears of the patients and their spouse were addressed through detailed discussion.
Results: The mean age was 24.8±4.06 years. There were 70% of the pregnant women who agreed to get PPIUCD inserted, however only 42% actually underwent the procedure. Majority of the cases were within the age group of 18-28 years. The reasons recorded for not getting PPIUCD insertion previously presented data where 23% of the pregnant women had no awareness provided about PPIUCD before while 13% preferred other contraceptive methods.
Conclusion: The outcomes of the antenatal counselling are higher uptake of post placental intrauterine contraceptive device with a rate of 42% increase in post-partum women. There is an evident reduction in misconceptions and myths about post-placental intrauterine contraceptive device through antenatal counselling.
Key words: Antenatal counselling, Outcome, Intrauterine contraceptive device, Post-partum

INTRODUCTION

Unwanted pregnancies are considered as a significant cause of mother and child mortality. The undesirable pregnancies can be prevented through the application of contraceptives within the post-partum period. The application of such can extend the duration of next pregnancy after a gap of two years giving a complete healthy chance of recovery and growth in mother and her newborn[1].

Within the various kinds of contraceptive devices, the most efficient is the application of post placental intrauterine contraceptive devices (PPIUCD). The PPIUCD substantially decreases the risk of unwanted pregnancy. The PPIUCD insertion is managed through post-partum family planning department in coordination with the gynaecological department assistance[2,3].

As per WHO criteria the insertion of intrauterine contraceptive device can be conducted within initial 48 hours of post-partum[2]. The efficacy of the device has been reported up to 5 years of time. The period of effectiveness has been reported up to a decade in some researches[3,4]. The neighbouring country has reported that 66.6% of the post-partum women were not applying nay contraceptive method while a desire of contraception was shown by 75% of the post-partum women[5-7].

Recent studies have reported that antenatal counselling increases the uptake of PPIUCD by tenfold through antennal counselling. The professionalism in this context needs to specify the dire need and rectify any misconceptions as well as myths for proper counselling and convincing[8-10].

The present study was conducted for evaluating the outcomes of Antenatal Counselling in augmenting the uptake of post placental intrauterine contraceptive device in post-partum women. The result of the study clearly indicates the importance of antenatal counselling in reducing the risk of mother and child mortality an improving health care system.

MATERIALS AND METHODS

This prospective study was conducted at Department of Obstetrics & Gynaecology, Hayatabad Medical Complex, Peshawar from 1st April 2022 to 30th September 2022. A total of 50 pregnant women were enrolled. The inclusion criteria consisted of all women who came for their antennal visit and were healthy for PPIUCD. Unbooked women delivering in the targeted clinical setting was also included in the study post their eligibility assessment for PPIUCD. The exclusion criteria consisted of chorioamnionitis or puerperal sepsis, prolonged rupture of membranes of >18hrs, extensive genital trauma, unresolved PPH, any anomaly of uterus or a large fibroid distorting its cavity, pelvic inflammatory disease, malignant or benign trophoblastic disease or/and HIV/AIDS. The sample size was generated through WHO sample size calculation software using 80% power of test and 95% Confidence of interval having 5% margin of error. The age of the pregnant women was taken within 18-43 years. The couples were counselled for the uptake of PPIUCD through gynaecological professional assistance. The counselling was done at 28 weeks followed by at 36 weeks. On request of many women the counselling of their spouse was also conducted separately through one-to-one discussion. The misconceptions and myths were eradicated through the use of one-to-one interview as well as focus group discussions. The fears of the patients and their spouse were addressed through detailed discussion. Demographic details as well as other details including clinical history, education levels, socioeconomic status were documented on a well-structured questionnaire. All the reasons for not up taking the PPIUCD by couples were also recorded. There were various groups generated on basis of the information received. One group was named as agreed for PPIUCD while the other comparative group was disagreed for PPIUCD, another third group where PPIUCD inserted was also made. The acceptor who was counselled and agreed for PPIUCD received the intrauterine contraceptive device (Cu 375) within first 48 hours of the vaginal delivery or through the trans-caesarean insertion in case of abdominal delivery. Data was analyzed through SPSS-26.0 where Chi square tool analyzed the result in terms of significance/ P value <0.05 was taken as significant.

RESULTS

The mean age was 24.8±4.06 years. Those cases which agreed to PPIUCD were not ascertained for its insertion as well. Therefore another group was created which included only those cases which practically got PPIUCD inserted after showing their agreement. However the number of cases which actually got the insertion was

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lower than those who initially showed agreement for its insertion. There were 35 of the pregnant women who agreed to get PPIUCD inserted, however out of these only 21 women actually got PPIUCD inserted. Majority of the cases were within the age group of 18-28 years. Women who agreed for PPIUCD were mostly having and inter degree, while low educational women mostly disagreed. There was a significant difference of education within agreed and disagreed cases of PPIUCD as well as those which actually underwent inserting it. Most of the women were Muslims. However out of the total 5 non-Muslim women 4 cases agreed for PPIUCD and within those 4/5 agreed for the process while 3/5 got it inserted (Table 1).

Within the live births of each pregnant woman, it was observed that those having null parity were significantly disapproving the PPIUCD (P value 0.021) while those pregnant women having more than 1 parity had increased trend of agreeing to the procedure and also getting PPIUCD inserted. Additionally, it was observed that within those 17 cases which already have conducted family planning 7 disagreed to repeat the contraception (Table 2).

The reasons recorded for not getting PPIUCD insertion previously presented data where 23% of the pregnant women had no awareness provided about PPIUCD before while 13% preferred other contraceptive methods. The most important reason for not opting PPIUCD was refusal from the family (Fig. 1).

There was no significant difference within women having counselling during antenatal visits or during delivery in a hospital in terms of women who agreed to PPIUCD. However, those who disagreed, a significant number of cases were those which just turned in the hospital for delivery (Fig. 2).

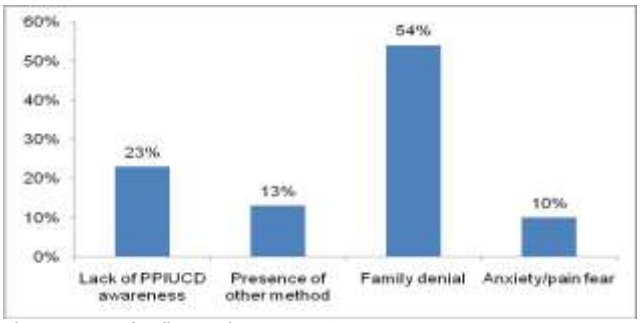

Fig. 1: Reason for disagreeing to PPIUCD

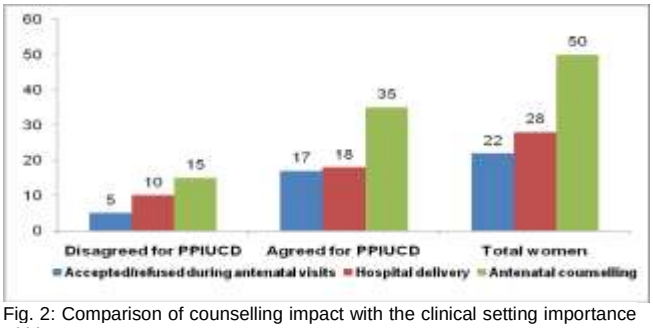

Fig. 2: Comparison of counselling impact with the clinical setting importance within groups

Table 1: Outcomes of antennal counselling comparison with age and sociodemographic variable

Features	Total Counselled	Agreed for PPIUCD	Disagreed for PPIUCD	PPIUCD inserted (Outcome)	P value
Total No. (%)	50 (100%)	35 (70%)	15 (30%)	21 (42%)	<0.05
Age (years)					
Mean±SD	24.8±4.06	24.5±4.2	25.3±3.9	24.6±4.1	
18-28	29 (58%)	22 (62.9%)	7 (46.6%)	9 (42.8%)	0.044
29-38	19 (38%)	12 (34.3%)	7 (46.6%)	8 (38.1%)	0.032
>39	2 (4%)	1 (2.8%)	1 (6.8%)	1 (4.7%)	0.65
Educational history					
None	15 (30%)	10 (28.5%)	5 (33.3%)	2 (9.6%)	<0.05
Matric	18 (36.5%)	11 (31.4%)	7 (46.7%)	7 (33.3%)	
Intermediate	10 (20%)	8 (22.8%)	2 (13.2%)	7 (33.3%)	
Graduate or higher	7 (14%)	6 (17.3%)	1 (6.8%)	5 (23.8%)	0.56
Religion					
Muslim	45 (90%)	31 (88.6%)	14 (93.2%)	18 (85.7%)	<0.05
Other religion	5 (10%)	4 (11.5%)	1 (6.8%)	3 (14.3%)	

Table 2: Outcomes of antennal counselling comparison with parity and history of family planning within groups of PPIUCD

Features	Total Counselled	Agreed for PPIUCD	Disagreed for PPIUCD	PPIUCD inserted (Outcome)	P value
Total Number	50 (100%)	35 (70%)	15 (30%)	21 (42%)	
Parity					
0	12 (24%)	5 (14.4%)	7 (46.6%)		
1	24 (48%)	21 (60%)	3 (20%)	8 (38.1%)	0.035
2	13 (26%)	12 (34.2%)	1 (6.6%)	12 (57.1%)	0.021
≥3	1 (2%)	1 (2.8%)	-	1 (4.8%)	0.032
History of family planning					
Yes	17 (34%)	10 (28.6%)	7 (46.7%)	10 (47.6%)	0.001
No	33 (66%)	25 (71.4%)	8 (53.3%)	11 (52.4%)	0.002

DISCUSSION

In the current study the counselling technique has led to 70% of the cases to agree for the PPIUCD insertion. There were 42% those who actually underwent its insertion. The results of this study have evidently proven that antenatal counselling augments the application of PPIUCD insertion in postpartum women. Research by Hamid and his colleague[11] from Pakistan have also reported similar result where the antennal counselling has led to higher uptake of PPIUCD. Met analysis from African regions have detailed in their systematic reviews that the prevalence of acceptance PPIUCD utilization within Ethiopian women was 21.63% and ranged between 14.46% to 28.81%.[12] Similarly, a meta-analysis research conducted in Uganda and Sub Saharan Africa also reported then antennal counselling outcomes with an uptake of PPIUCD with a prevalence of 16.3% and 41.2% respectively[13,14].

It has proven that if a contraceptive method is provided prior to hospital discharge then there is a high reduction in unwanted pregnancies and subsequently decreases in mother and child life threatening outcomes. PPIUCD has been reported as the most efficient device based interventional technique within all the contraceptive methods[7,15,16].

The antenatal counselling as provided in this research have a great advantage in increasing the acceptance for insertion of PPIUCD. As it assists in clearing all the misconception, fear and myths related to PPIUCD insertion. The counselling sessions

brings a complete awareness about the PPIUCD functions and safety. These antenatal counselling facilitates the women in making right decision on timely basis for the future health of their newborns and themselves[18]. Research from India and Egypt supports similar finding where it has been justified that antenatal visit increased the likelihood of PPIUCD insertion[15-17].

An important finding of this study was also the impact of education of the uptake and understanding of the women towards insertion and PPIUCS for their health benefits. Women who were more educated had a higher uptake response. The impact of families also influenced the uptake. Those women who were having a pressure from family including spouse or other members of their family required further counselling. The family members counselling becomes necessary for making the women decide in such scenarios[18,19]. Women having more live births increased trend of agreeing to the procedure and also getting PPIUCD inserted. Similar has been reported in previous research[20].

CONCLUSION

The antenatal counselling is directly associated with reduction in the myths and misconceptions about contraception in pregnant women. The outcome of the antenatal counselling is higher uptake of PPIUCD with a rate of 42% increase in post-partum women.

Conflict of interest: Nothing to declare

REFERENCES

1. Vernon R. Meeting the family planning needs of postpartum women. Stud Fam Plann 2009; 40(3): 235-45.
2. World Health Organization. Medical eligibility criteria for contraceptive use. 4th ed. Geneva: World Health Organization; 2010.
3. International Institute for Population Sciences (IIPS). The Third National Family Health Survey (NFHS-3), India: 2005–06. Mumbai: International Institute for Population Sciences, 2007.
4. Sebastian MP, Khan ME, Kumai K, Idnani R. Increasing postpartum contraception in rural India: evaluation of a community-based behaviour change communication intervention. Int Perspect Sexual Reprod Health 2012; 38(2): 68-77.
5. Stephenson R, Tsui AO. Contextual influences on reproductive health service use in Uttar Pradesh, India. Stud Fam Plann 2002; 33(4): 309-20.
6. Caleb-Varkey L, Mishra A, Das A, Ottolenghi F, Huntington D, Adamchak S, et al. Involving men in maternity care in India. New Delhi, India, Population Council, 2004.
7. Priya S, Tuteja A, Mittal P, Diwan R, Suri J, Kumar A. Exploring reasons behind Low acceptance for PPIUCD in postnatal women. New Indian J Surg 2011;2(4):246.
8. Speizer IS, Nanda P, Achyut P, Pillai G, Guilkey DK. Family planning use among urban poor women from six cities of Uttar Pradesh, India. J Urban Health 2012;89:639-58.
9. Mishra S. Evaluation of safety, efficacy, and expulsion of post-placental and intra-caesarean insertion of intrauterine contraceptive devices (PPIUCD). JOGI 2014;64(5):337-43.
10. Grimes D, Lopez LM, Schulz KF, Stanwood NL. Immediate post-partum insertion of intrauterine devices. Cochrane Database Syst Rev 2010; 12:CD003036.
11. Hamid S, Qurrat-ul-Ain, Tabbassum A, et al. Antenatal counselling: does it boost the uptake of post placental intrauterine contraceptive Device? J Soc Obstet Gynaecol Pak 2022; 12(2).
12. Kassa BG, Ayele AD, Belay HG, et al. Postpartum intrauterine contraceptive device use and its associated factors in Ethiopia: systematic review and meta-analysis. Reprod Health 2021; 18: 225.
13. Ali M, Mekonnen W, Tekalegn Y. Magnitude and factors associated with intra uterine contraceptive device method utilization among clients attending family guidance association clinics in Addis Ababa, Ethiopia. Clin Mother Child Health 2019;16(4):1-7.
14. Omona K, Namuli W. Factors influencing utilization of intra-uterine device among postpartum mothers at Gombe Hospital, Butambala disrtict, Uganda. Cogent Med 2020; 7(1):1846264.
15. Pradhan S, Kshatri JS, Sen R, Behera AA, Tripathy RM. Determinants of uptake of post-partum intra-uterine contraceptive device among women delivering in a tertiary hospital, Odisha, India. Int J Reprod Contracept Obstet Gynecol 2017;6(20):2320-70.
16. Kant S, Archana S, Singh AK, Ahamed F, Haldar P. Acceptance rate, probability of follow-up, and expulsion of postpartum intrauterine contraceptive device offered at two primary health centers, North India. J Family Med Prim Care 2016;5(4):770-6.
17. Mohamed SA, Kamel MA, Shaaban OM, Salem HT. Acceptability for the use of postpartum intrauterine contraceptive devices: assiut experience. Med Princ Pract 2003;12(3):170-5.
18. Yadav S, Joshi R, Solanki M. Knowledge attitude practice and acceptance of postpartum intrauterine devices among postpartal women in a tertiary care center. Int J Reprod Contracept Obstet Gynecol 2017;6(4):1507-10.
19. Saima, Cullen J, Ali SM. Systematic review of educational interventions to improve the uptake of post-partum intrauterine contraceptive device (PPIUCD). Pak J Public Health 2018; 7(4): 226-31.
20. Gonie A, Worku C, Assefa T, Bogale D, Girma A. Acceptability and factors associated with post-partum IUCD use among women who gave birth at bale zone health facilities, Southeast-Ethiopia. Contracept Reprod Med 2018;3:16.