ORIGINAL ARTICLE

# Effectiveness of Structured Teaching Programme on PPIUCD (Post-Placental Intrauterine Contraceptive Device among Primigravida Mothers in Selected MCH Centre, Tirupati

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#### **Abstract**

The present study was designed to enhance the effectiveness of structured teaching programme on PPIUCD (post-placental intrauterine contraceptive device) among primigravida mothers in selected MCH (Maternal and child health) Centre. An evaluative research design and Quasi-experimental one group pretest post-test design was adapted to conduct the study, a pre-test questionnaire was used to assess the knowledge, structured teaching programme was conducted with the help of Flexies. The results revealed that there is a significant difference in pre-test and post-test knowledge scores. Pre-test mean score was 15.09, standard deviation was 3.340 and in post test mean was 25.75, and standard deviation was 2.238. paired't' test values shows that it is invariably significant at p<0.01. A significant Association was found between the knowledge on demographic variables such as with the c² value 4.828, which is significant at the level of 0.05 in pre-test, where as in post-test knowledge scores the demographic variables such as occupation with the c² value 24.40, which is significant at 0.005 and income with c² value of 13.81, which is significant at 0.001.

**Keywords:** Contraception; PPIUCD; MCH centre; Primigravida mothers.

#### Introduction

India is the second most populous country in the world, sustaining 17.01% of world population on 2.4% of world's surface area. According to Census 2011 the population of India on 19 September 2013 was 1,270,272,105. In spite of availability of wide range of contraceptives, the unmet need for family planning is estimated to be 12.8%. The common reasons for unmet need are unsatisfactory services, lack of information, and fear about side effects of contraceptive method. Studies show that pregnancies taking place within 24 months of previous birth have higher risk of adverse outcome like abortion, premature labour, postpartum hemorrhage, low birth weight babies, fetal loss, and maternal death. Apart

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from lactational amenorrhea, the methods which can be used by the women during postpartum period are barrier methods, progesterone only pills, sterilization (puerperal tubectomy) and IUCD (postpartum IUCD).[1] IUCD insertion has many advantages over other methods like simplicity, minimal motivation, reversibility, free of cost availability, virtually no systemic side-effects, and continuation rates.[2]

Proportions of PPIUCD Acceptors among institutional deliveries 2013 are Assam 27%, Madhya Pradesh 14%, Punjab 12%, Tamilnadu 11%, Haryana 9%, Uttarakhand 9%, Delhi 8%, Orissa 6%, Jharkhand 6%, Gujarat 5%, Uttar Pradesh 5%, WestBenga 15%, Bihar 5%, Karnaka 4%, Maharashtra 4%, Meghalaya 4%, Chhattisgarh 4%, Rajasthan 2%, Andhra Pradesh 2%.[4] In the Andhra Pradesh among the couple who utilizes family planning services the female sterilization contributes 63%, male sterilization contributes 3% and all spacing methods put together 1.1%. The age at marriage of the State 16.1 years and 18% of the women become pregnant before 19 years are the major concerning

factors of the state. Hence the state now formulating the new Population Policy by focusing holistic need based Family Planning methods to sustaining the TFR at the present level and giving more emphasis on Age at Marriage/spacing and limitation method/ Advise on sterility/Planning for arrival of the 1st child/ Sex Education /Education of parenthood / Nutrition/ Genetic/Marriage Counseling. Keeping these factors, the present study was designed to enhance the knowledge of primigravida mothers about PPIUCD (post-placental intrauterine contraceptive device), as the increasing knowledge of the mothers, help to have more positive attitude towards the insertion of PPIUCD.

# Objectives of the Study

- To assess the effectiveness of structured teaching programme on PPIUCD (post-placental intrauterine contraceptive device) among primigravida mothers.
- To identify association between knowledge of primigravida mothers on PPIUCD with selected demographic variables.

## Methodology

Research Approach

Evaluative research approach, Quasi-experimental one group pre-test and post-test design.

Sampling Technique

55 primigravida mothers were selected by using non-probability purposive sampling technique.

Setting of the Study

The study was conducted in MCH centre Tirupati.

Description of the Data Collection Tool and Techniques

The tool consists of 2 sections:

Section I: consists of questions to collect demographic data of mothers.

Section II: Knowledge Questionnaire regarding

PPIUCD (post-placental intrauterine contraceptive device) Which Consists of 21 multiple choice closed ended questions with a single most appropriate response and dichotomous Questions with more than one response.

The tool was sound and highly reliable and valid. Pilot study was conducted before main study to assess the feasibility.

## Procedure for Data Collection

Formal permission was obtained from municipal health officer, the purpose of the study is explained and written consent is taken and data was collected from primigravida mothers and Pre-tested structured questionnaire was administered. After completion of pre test a structured teaching was given on PPIUCD (post-placental intrauterine contraceptive device) about half an hour by using Flexies. After 1 week, the feedback was obtained on knowledge regarding PPIUCD by administering post-test for each mother who took pre test.

Table 1 shows that age of mothers in years, it is observed that majority of mothers 32 (58.2%) belongs to the age group of 22-23. Pertaining to religion, majority of mothers 41 (74.5%) are Hindus. Education is also a major factor in fertility control. 17 (30.9%) are graduated and 12 (21.8%) had primary education. In relation to occupation 50 (91%) were belong to the group of home makers and 5 (9%) were private employees. With regard to type of family, majority belong to belongs to joint family 29 (50.9%). In relation to family income, majority of 34 (56.4%) belongs to Rs.5001-6000, while 16 (34.5%) are in the group of Rs.>6001, and 5 (9%) were in group of Rs.<5000.

Table 2 shows the mean and mean percentage was significantly high in post test than pre test score in all areas of knowledge on PPIUCD indicates that there was improvement in knowledge of primigravida mothers. Paired't' test values shows that it was found to be invariably significant at p<0.01 level in all areas of overall knowledge on PPIUCD. It evidences that structured teaching programme was significantly effective in improving the knowledge regarding PPIUCD among primigravida mothers.

Table 3 shows that There is significant association between demographic variables and knowledge scores on PPIUCD (post-placental intrauterine

Table1: Frequency Percentage Distribution of Demographic Characteristics of Sample

Sl. No.	Demogra	phic Variable	Frequency	Percentage	
	Age in years	<22	6	10.9	
1		22-23	32	58.2	
		>24	17	30.9	
		Hindu	41	74.5	
2	Reli gion	Muslim	7	12.7	
		Christian	7	12.7	
		Secondary education	12	21.8	
		Intermediate	26	47.3	
		Graduate	17	30.9	
4.	Occupation	Home maker	50	91	
		Private employee	5	9.1	
5.	Type of family	Nuclear	26	47.3	
		Joint	29	52	
6.	Income in rupees	< 5000	5	9.1	
		5001-6000	34	56.4	
		>6001	16	34.5	

Table2: Comparison of Pre-Test and Post-Test Mean, Mean Percentage Standard Deviation & Paired 't' Test Values Knowledge Variables on PPIUCD among Primigravida Mothers

A on a star of low and a doc	Pre test			Post test			't' test	Davalua	
Aspects of knowledge	Mean	Mean%	SD	Mean	Mean%	SD	(paired)	P value	
Level of knowledge on PPIUCD	15.09	27.43	3.34	25.75	46.81	2.238	38.418**	P<0.01 df=54(2.26)	

NS= not significant \*=significant at 0.05 level \*\*= significant at 0.01 level.

Table3: Association between Demographic Variables with Pre-Test and Post-Test Knowledge Scores on PPIUCD (Post-Placental Intrauterine Contraceptive Device) among Primigravida Mothers

Sl. No	Demographic variables	Inadequate <50%		Moderate 50-75%		Adequate >75%		Chi-sq uare	Sig
		No	%	No	%	No	%		
	Occupation							24.404	
	Home maker	16	94.4	19	86.4	14	87.5		Sig
1	Daily wage eamer	0	0	1	4.5	0	0		at
	Private employee	1	5.6	2	9.1	2	12.5		0.006
	Income								
2	< 5000	1	1.59	4	18.2	0	0	13.816	Sig
	5001-6000	12	70.6	11	50	11	68.8		at
	>6000	4	23.5	7	31.8	5	31.2		0.03

contraceptive device) In post-test occupation (p<0.01) and income in rupees (P<0.05), whereas not significant between age, religion, education type of family.

#### **Discussion**

The study revealed that the Pre-test knowledge scores shows that 27 (49%) had inadequate knowledge, 18 (32.7%) had moderate knowledge and

10(29%) had adequate knowledge. The post-test knowledge scores 11 (20%) had inadequate knowledge 14 (25.5) moderately adequate 30 (54.5) had adequate knowledge. The paired 't' test was carried out and it was found to be invariably significant at P<0.01 level.

The study was supported by Muhimbili National Hospital (MNH) Tanzania in December 2011 Contraceptive counseling was given to 369 eligible parturients after delivery during their postpartum hospitalization. A pretested structured questionnaire

was administered to all participants. Women who accepted the PPIUCD during their postpartum care were inserted with the device before discharge (within 48 hours). These women were followed up at 4 weeks for complications. The acceptance rate of PPIUCD and the percentage of actual insertions were recorded. The reasons for both acceptance and decline were also recorded. Of the 369 women counseled, a total of 102 (27.6%) were inserted with PPIUCD. Parturients who had a short duration from their last child birth (less than 2 years) were significantly associated with greater acceptance of the PPIUCD (p d" 0.05). Parturients who had previously used the interval IUCD were significantly associated with greater acceptance of PPIUCD (p =0.005).[3]

The demographic variables like occupation (P<0.05), income (P<0.05) were significant where as age, religion educational status, type of family had no significant association with the pre test and post knowledge.

The supported by teaching hospital of western U.P Total acceptance rate of PPIUCD in our study was 14.4%. Majority of the cases who accepted PPIUCD belonged to the age group 20-25 years (15.7%). This was probably because most of the patients who came to the hospital for delivery also belong to age group 20-25 years. Alvarez Peyalo *et al.*[1]

#### Limitations

- The study is limited to primigravida mothers.
- The mothers who are in third trimester and who come for MCH centre.

## Nursing Implications

The findings of the study have following implications for nursing practice, nursing education, nursing research and nursing administration.

- The present study revealed that most of the primigravida mothers had inadequate knowledge regarding PPIUCD. Increased efforts are needed by all the nurses to increase awareness regarding use and insertion of PPIUCD.
- Imparting information with help of pamphlets, booklets, self instructional modules, handouts, flip charts are to be given community.

- Nurse administrator should plan and organize continuing nursing education programme on importance of insertion of PPIUCD.
- The students of nursing schools, colleges, and other nursing educational institutions should adequately be prepared to provide health education to the primigravida mothers about PPIUCD as a birth spacing method.
- The present study findings serves as the basis for professionals and the student nurses to conduct further studies on PPIUCD among primigravida mothers with different research designs.

#### Recommendations

- A descriptive study can be conducted on Knowledge about PPIUCD (post-placental intrauterine contraceptive device).
- Replication of study can be proposed on large sample for generalization of finding.
- A similar study would be conducted by administering self instructional materials on PPIUCD.
- A comparative study can be done on Knowledge about PPIUCD between urban and rural primigravida mothers.
- Longitudinal studies may be conducted to determine the effectiveness of structured teaching programme over a period of time.

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