ORIGINAL RESEARCH PAPER

Volume-8 | Issue-1 | January-2019 | PRINT ISSN No 2277 - 8179

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

A STUDY TO ASSESS EFFICACY OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE AND ACCEPTANCE OF PPIUCD AMONG ANTENATAL MOTHERS

Gynecology

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ABSTRACT

Introduction: Family planning is one of the most basic and essential healthcare services that can promote and ensure reproductive health. IUCDs are considered to be the most cost-effective method of long-term contraception available in both the developed & developing world. IUCDs are used by only 2% of current users of contraception in India. This study was aimed at assessing the efficacy of a structured teaching programme on knowledge and acceptance of PPIUCD as compared to routine antenatal counselling about contraception among antenatal mothers attending antenatal OPD of a selected tertiary care hospital.

Materials and Methods: An experimental two group pre test post test design was adopted for the study. Registered term antenatal mothers who completed 37 weeks of gestation who were fit as per WHO Medical Eligibility Criteria (MEC) and were willing to participate in the study were included for the study.100 antenatal mothers were recruited using simple random sampling from the accessible population and subsequently were randomly allocated into two groups. The knowledge and acceptance of PPIUCD was assessed in the pre-intervention phase using a knowledge questionnaire containing 20 items and the acceptance was assessed using a five point Likert scale. Structured teaching on PPIUCD was then administered and post interventional knowledge and acceptance level were assessed after one week using the same tool. Data was analyzed using SPSS version 21.

Result: The study revealed significant difference between the mean pre and post test knowledge score in the interventional group (2.68 + 2.45 and 17.24 + 1.79 respectively) as compared to the mean pre and post test knowledge score in the control group(3.64 + 2.64 and 3.88 + 3.1 respectively) at a level of significance of P=0.05 which confirmed that the structured teaching on PPIUCD was effective in increasing the knowledge of PPIUCD among interventional group. There was a significant increase in the mean acceptance level of interventional group as compared to the control group as evidenced by tabulated Z value of 4.52 which is more than the table value of 1.96 at a level of significance of P=0.05, which confirmed that the structured teaching on PPIUCD was effective in increasing the acceptance of PPIUCD among the interventional group. There was no association of demographic variables with the knowledge and acceptance of PPIUCD.

KEYWORDS

PPIUCD, Structured teaching Programme, Antenatal mothers, Contraception.

Introduction

Maternal health as per WHO refers to the health of women during pregnancy, childbirth and after delivery. While motherhood is often a positive and fulfilling experience but for a large section of women it is associated with suffering, ill-health and even death. Family planning is one of the most basic and essential healthcare services that can promote and ensure reproductive health, yet 12% of women in most regions of the world have an unmet need for family planning[1]. The World Health Organization estimates that 214 million women of reproductive age in low- and middle-income countries would like to stop childbearing but are not using contraception[2]. In 1952, the Indian Government was one of the first in the world to formulate a national family planning program which was later expanded to encompass maternal and child health, family welfare, and nutrition[3] In India, the 2005–2006 National Family Health Survey (NFHS) reported that 61% of births were spaced less than three years and that 22% of married women had an unmet need for family planning. A subsequent stratified analysis suggested that 65% of women in the first year postpartum had an unmet need for family planning. A woman's ability to space and limit her pregnancies has a direct impact on her health and well-being, as well as on the outcome of each pregnancy. IUCDs are considered to be the most cost-effective method of long-term contraception available in both the developed & developing World. IUCDs are used by only 2% of current users of contraception in India. PPIUCDs are still emerging as a relatively new contraception choice in India. Many studies have been conducted to assess the knowledge and acceptance of IUCD and all have recommended for need of antenatal education and counselling to increase the acceptance. The concept of PPIUCD is new in the community and there is a strong need to increase the knowledge and awareness about this by health education and counselling. Despite making contraception widely available, there is a poor acceptance of contraceptive methods either due to ignorance or fear of complications using them. Inadequate knowledge about contraceptive methods and incomplete/erroneous information about their use or where to procure them are probably the main reasons for non-acceptance of family planning measures. This study was aimed at assessing the efficacy of a structured teaching programme on knowledge and acceptance of PPIUCD as compared to routine antenatal counselling about contraception among antenatal mothers

Objectives of the Study

1. Assess the knowledge & acceptance level of PPIUCD among antenatal mothers attending antenatal OPD of a selected tertiary care hospital.
2. Administer structured teaching regarding PPIUCD to the study group and antenatal counselling about contraception to the control group.
3. Assess the post intervention the knowledge & acceptance level of PPIUCD among mothers of both study and control group
4. Determine the association of Knowledge and acceptance level of PPIUCD with selected demographic variables.

Hypothesis

H01: There is no significant difference between the mean pre and post interventional PPIUCD knowledge score among mothers attending antenatal OPD of the selected tertiary care centre

H 02: There is no significant difference between the mean pre and post interventional PPIUCD acceptance score among mothers attending antenatal OPD of the selected tertiary care centre

Material and Method

An experimental two group pre test post test design was adopted for the study. Registered term antenatal mothers who completed 37 weeks of gestation who were fit as per WHO Medical Eligibility Criteria (MEC) and were willing to participate in the study were included for the study.100 antenatal mothers were recruited using simple random sampling from the accessible population and subsequently were randomly allocated into two groups. The knowledge and acceptance of PPIUCD was assessed in the pre-intervention phase using a knowledge questionnaire containing 20 items and the acceptance was

assessed using a five point Likert scale. Structured teaching on PPIUCD was then administered and post interventional knowledge and acceptance level were assessed after one week using the same tool. Data was analyzed using SPSS version 21.

Result

Description of Socio Demographic Characteristics

Table 1: Description of Socio demographic Characteristics of Study Population

n1=50, n2=50

Deographic Variable		Interventional (n1=50)		Control (n2=50)	
		F	%	f	%
Gravida	Primi	26	52	21	42
	Multi	24	48	29	58
Educational status	Primary	2	4	1	2
	Secondary &Higher secondary	28	56	31	62
	Graduate & above	20	40	18	36
Religion	Hindu	38	76	36	72
	Muslim	11	22	12	24
	Others	1	2	2	4
Monthly income of Family (Rs)	<5000	3	6	1	2
	5000 – 15000	35	70	40	80
	>15000	13	26	9	18
Type of family	Joint	30	60	24	48
	Nuclear	20	40	26	52
Decision Maker in family	Husband	20	40	21	42
	Self	1	2	1	2
	Mother in law/father in law/others	10	18	15	30
	Both husband & wife	19	38	13	26
Sources of information on family planning	Media (TV/Radio/NP	21	42	25	50
	Relative/friend/Neigh/Others	11	22	11	22
	Health care workers	1	2	6	12
	None	16	32	12	24
Awareness about methods of family planning	Contraceptive pills	15	30	15	30
	Condoms	24	48	25	50
	IUCD (Copper T)	11	22	9	18
	Tubectomy /Vasectomy	3	6	2	4
	Others	0	0	1	2
	None	12	24	15	30
History of contraceptive use	Yes	14	28	17	34
	No	36	72	33	66
If yes, specify (n=14) (n=17)	Condoms	9	64.29	13	76.48
	Copper T	1	7.14	2	11.76
	Pills	4	28.57	2	11.76

26 (52%) women in the interventional group & 21 (42%) women in the control group were primi gravida. 2% in the interventional group and 1 % in the control group had primary education rest all were educated either upto higher secondary or graduation and more. A substantial percentage of women in both the interventional & control groups were Hindus (76% & 72% respectively). 60% subjects in the interventional group belonged to joint family; whereas 52% subjects in control group hailed from nuclear family. Media emerged as the major source of information on family planning amongst women in both the groups (42% & 50 %). Study reveals participation of both husband and wife in taking family decisions in only 38% in interventional group and 26% in control group. In both groups maximum (interventional 48% and Control 50%) were aware about condom as method of contraception, but majority had never used any contraceptives (72% in interventional group and 66% in control group).

Pre Interventional Knowledge and acceptance of study population

96% subjects of interventional group and 86% subjects of control group had poor knowledge score and no subjects in the interventional or control group had good or excellent knowledge score.

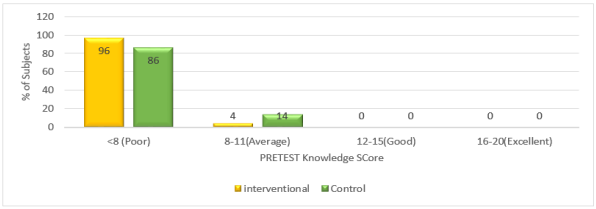


Fig 1: : Pre Interventional knowledge score of study population

The frequency distribution of pre interventional acceptance of PPIUCD showed maximum subjects (Interventional group 98% and control 92%) in both groups were unwilling to accept PPIUCD as a method of contraception

Table 2 : Pre Interventional acceptance level of PPIUCD

n1=50,n2=50

Level of acceptance	Interventional group n=50 f (%)	Control group n=50 f (%)
Accepted	1 (2)	4 (8)
Not accepted	49 (98)	46 (92)

Effectiveness of structured teaching on Knowledge and acceptance of PPIUCD among Study participants

Table 3: Comparison of Pre and post interventional knowledge score

n1=50,n2=50

Knowledge score	Interventional Gp(n=50)		Control Gp(n=50)		MW test Z Value	P Value
	Mean	SD	Mean	SD		
Pre test	2.68	2.245	3.64	2.648	2.16	0.031
Post test	17.24	1.791	3.88	3.108	8.66	<0.0001

Table value Z = 1.96,P=0.05

Table 4 : Comparison of Pre and post interventional acceptance level

Level of acceptance	Interventional (n=50)		Control (n=50)		MW test Z Value	P Value
	Mean	SD	Mean	SD		
Pre test	2.82	0.48	2.72	0.83	0.50	0.62
Post test	3.46	1.03	2.82	0.39	4.52	<0.0001

Table value Z = 1.96,P=0.05

There was a significant difference in the mean pre and post test knowledge level in the interventional group (2.68$\pm$ 2.245 and 17.24 $\pm$ 1.791 respectively) at a level of significance p=0.001. Post intervention acceptance level increased significantly in the interventional group and 30 subjects were ready to accept PPIUCD postnatally out of which 21 actually actually PPIUCD postnatally.In the control group no participant accepted PPIUCD as the contraceptive method. The findings suggest that 60% of the study participants accepted PPIUCD as contraception of their choice, which ascertains the efficacy of the structured teaching programme. There was no association of the pre-test knowledge and acceptance score with selected demographic variables.

Hypothesis testing

All the hypothesis were tested at 0.05 level of significance. To find out the significance of the test null hypothesis was stated as follows.

H 01: There is no significant difference between the mean pre and post interventional PPIUCD knowledge score among mothers attending antenatal OPD of the selected tertiary care centre.

The test statistics Z value computed using the Mann Whitney Z test was 8.66 in interventional group and 2.16 in control group.The Z value is greater than the table value 1.96 at a level of significance of P=0.05.Thus it can be inferred that the structured teaching has significantly increased PPIUCD knowledge score among mothers

attending antenatal OPD of the selected tertiary care centre..Hence the null hypothesis was rejected.

H 02: There is no significant difference between the mean pre and post interventional PPIUCD acceptance score among mothers attending antenatal OPD of the selected tertiary care centre.

The test statistics Z value computed using the Mann Whitney Z test was 4.52 in interventional group .The Z value is greater than the table value 1.96 at a level of significance of P=0.05.Thus it can be inferred that the structured teaching has significantly increased PPIUCD acceptance score among mothers attending antenatal OPD of the selected tertiary care centre..Hence the null hypothesis was rejected.

Analysis of the data by descriptive and inferential statistics revealed that the sample of both the groups were homogenous.The null hypothesis was rejected and the alternate hypothesis was accepted. Hence it was concluded that the objectives of the study were fulfilled as Structured teaching programme had significantly increase the knowledge and acceptance of PPIUCD among antenatal mothers of selected tertiary care centre.

Discussion

The augmented institutional deliveries serve as a potential opportunity for the health care providers to offer post natal mothers an easy access to immediate PPIUCD services. This mode of contraception (PPIUCD) has already gained its popularity and momentum in nations as diverse as China, Mexico and Egypt[4]. In this study 88% of the samples were less than 30 years of age and 46% of the subjects were primigravida.

The sample characteristics are comparable with that of a similar study conducted by Brig S K Katpalia et al (2015)[5] on awareness about postpartum insertion of IUCD among antenatal cases wherein 87.2% of the sample were less than 30 years of age, 52.6 % were primigravidas.

A study by Takkar N et al[6] on Contraceptive practices and awareness of emergency contraception in educated working women done on 258 women revealed that condom was the most popular method of contraception among 57.8% subjects with Print & electronic media being the commonest source of information on family planning methods in 57% of subjects. These important findings corroborate with the present study findings on similar sociodemographic characteristics. Study findings are consistent with a quasi experimental study done by Gara Manoranjini et al[7] (2014) at Tirupathi on effectiveness of structured teaching programme on PPIUCD among primigravida mothers.

The study reveals that there is a significant difference in pre-test and post-test knowledge scores.Pre-test mean score was 15.09$\pm$ 3.340 and post test mean score was 25.75 $\pm$ 2.238. This study is supported by a pre experimental study done by Janwa D L et al (2016) [8]on effectiveness of video assisted teaching programme regarding knowledge of PPIUCD among antenatal mothers in selected areas at Rajkot Gujarat. The pretest knowledge score is 11.5$\pm$ 3.4 and post test knowledge score is 23.85+ 3.9,with an enhancement of knowledge score by 13.14 with t value of 43.89.

Conclusion

The study concluded that the structured teaching on PPIUCD was effective in increasing the knowledge and acceptance of PPIUCD among antenatal mothers and there was no association of selected demographic variables with the level of knowledge and acceptance.

Recommendations

Structured teaching programme can be included in the antenatal counselling sessions as a module to enhance the acceptance of PPIUCD as a method of contraception. A similar study can be replicated with a larger sample size.

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