

A Study to Evaluate the Effectiveness of Planned Teaching Programme on Knowledge Regarding Assisted Reproductive Technology among the Infertile Couples in Selected Hospital at Gonda, UP

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Abstract: This study was conducted to evaluate the effectiveness of planned teaching programme on knowledge regarding Assisted Reproductive Technology among the infertile couples in selected hospital at Gonda. The study was conducted in S.C.P.M. Hospital Gonda. 50 infertile participants were selected. A structured questionnaire was developed to assess the pretest and posttest knowledge of infertile couples. Planned teaching program was conducted after administering the pretest. Posttest was administered after one week. Two sections of questionnaire were used one is socio demographic variables and another one is knowledge questionnaire on assisted reproductive technology. Pilot study was conducted with 5 samples and the main study was conducted with permission from the hospital authority and from each sample. In pretest only 11 (22%) samples had adequate knowledge, but after administration of STP the posttest was showing that 33 (66%) samples had adequate knowledge. It shows that the STP was effective in case of knowledge on assisted reproductive technology. There is significant association between pretest and posttest knowledge scores as the calculated 't' test was higher than the tabulated value at 0.05 level of significance. Therefore, the H_1 is accepted. There is a significant association between sociodemographic variables such as "knowledge assisted reproductive technology" and the knowledge values. Therefore, the H_2 is accepted at 0.05 level of significance.

Keywords: Infertility, Infertile couples, planned teaching program, Assisted Reproductive Technology

1. Introduction

The clinical definition of infertility, according to the World Health Organization (WHO) is the inability to conceive after one year of natural, unprotected sexual intercourse. Although, the birth of the first child could be an accident that poses crisis but infertility is considered one of the critical issues in infertile couple's lives.¹ About 60 to 168 million people in the world will experience some forms of infertility during their reproductive period. Infertility is a medical problem that affected nearly one out of every six couples. Pregnancy is a unique, exciting and often joyous time in a woman's life, as it highlights the woman's amazing, creative and nurturing powers while providing bridge to the future.²

In Asia, being infertile causes many negative repercussions for women as they bear the blame for the couple not having children. Researchers have reported that infertile women may experience depression, stigma, physical violence and threats of abandonment and divorce.³ The reason for these consequences is the lack of knowledge and awareness about infertility and its treatment.⁴ In developing countries, people do not recognize infertility as a health disorder and therefore may never seek treatment.⁵

Objectives

- 1) To assess the knowledge of infertile couple regarding assisted reproductive technology before administration of planned teaching program.

- 2) To assess the knowledge of infertile couple regarding assisted reproductive technology after administration of planned teaching program.
- 3) To evaluate the effectiveness of planned teaching program by comparing pretest and posttest knowledge score of infertile couple.
- 4) To associate the pretest level of knowledge of infertile couple regarding assisted reproductive technology with selected demographic variables.

Hypotheses

H₁: There will be significant difference between mean pretest knowledge scores and mean post-test knowledge scores regarding assisted reproductive technology.

H₂: There will be significant association between mean pretest knowledge scores regarding assisted reproductive technology and the selected socio - demographic variables.

2. Methods and Materials

Experimental research approach was used, and the research design was quasi experimental pre-test and post-test design. The dependent variable was knowledge regarding assisted reproductive technology. The independent variable was planned teaching program. The study was conducted in S.C.P.M hospital at Gonda. 50 samples attended this study and these samples were taken based on the purposive sampling technique for this study.

3. Results

Table 1: Frequency and Percentage distribution of socio demographic variables, n=50

S.No.	Variables	Frequency	Percentage
1	Age (years)		
	a) 20-25	21	42.0
	b) 26-30	15	30.0
	c) 31-35	8	16.0
	d) 36-40	6	12.0
2	Gender		
	a) Male	32	64.0
	b) Female	18	36.0
3	Occupation		
	a) Housewife	16	32.0
	b) Private job	24	48.0
	c) Government job	5	10.0
	d) Business	5	10.0
4	Educational status		
	a) Primary education	9	18.0
	b) Higher education	10	20.0
	c) Graduate	17	34.0
	d) Postgraduate	14	28.0
5	Monthly income in Rupees		
	a) <10000	10	20.0
	b) 10000-20000	9	18.0
	c) 20001-30000	20	40.0
	d) >30000	11	22.0
6	Husband work experience in years		
	a) < 1	9	18.0
	b) 2 to 4	20	40.0
	c) 5 to7	15	30.0
	d) > 7	6	12.0
7	Duration of marriage in years		
	a) <6	5	10.0
	b) 6	32	64.0
	c) 8	8	16.0
	d) >8	5	10.0
8	Knowledge on respiratory distress		
	a) Yes	22	44.0
	b) No	28	56.0
9	If yes, the mode of knowledge		
	a) Health workers	10	20.0
	b) Relatives	12	24.0
	c) No knowledge	28	56.0

Table 2: Comparison of pretest & posttest knowledge sores, n=50

Posttest Knowledge	Pretest		Posttest	
	Frequency	Percentage	Frequency	Percentage
Inadequate	19	38	6	12
Moderate	20	40	11	22
Adequate	11	22	33	66

Above table 2 depicts that in pretest the only 11 (22%) samples had adequate knowledge, but after administration of STP the posttest was showing that 33 (66%) samples were had adequate knowledge. It shows that the STP was effective in case of knowledge on assisted reproductive technology

Table 3: Assess the effectiveness of structured teaching programme, n=50

Knowledge aspects	Standard Error Mean	Mean±SD	df	Students' paired t-test
Introduction	0.235	1.320±1.659	49	t=-5.626; p=0.05 Significant
Causes of infertility	0.086	420±609	49	t=-4.876; p=0.05 Significant
Assisted reproductive technology	0.259	1.440±1.831	49	t=5.560; p=0.05 Significant
Prevention of infertility	0.115	540±0.813	49	t=4.694; p=0.05 Significant
Promotion of health of couples	0.358	1.920±2.530	49	t=5.366; p=0.05 Significant
Overall	0.981	5.640±6.933	49	t=-5.752; p=0.05 Significant

The above table 3 implies that there is significant association between pretest and posttest knowledge scores as the calculated 't' test was higher than the tabulated value at 0.05 level of significance. Therefore, the H1 is accepted.

Table 4: Association between pretest levels of knowledge with selected socio demographic variables, n=50

Socio demographic Variables		Knowledge Scores		Total	df	χ ²	Inference
		<Median	>=Median				
Age (years)	20-25	11	10	21	3	8.815	(P>0.05) NS
	26-30	5	10	15			
	31-35	7	1	8			
	36-40	1	5	6			
Gender	Male	13	19	32	1	4.937	(P>0.05) NS
	Female	11	7	18			
Occupation	Housewife	7	9	16	3	3.776	(P>0.05) NS
	Private job	12	12	24			
	Government job	1	4	5			
	Business	4	1	5			
Educational status	Primary education	2	7	9	3	14.576	(P>0.05) NS
	Higher education	4	6	10			
	Graduate	11	6	17			
	Postgraduate	7	7	14			
Monthly income in Rupees	<10000	3	7	10	3	2.815	(P>0.05) NS
	10000-20000	6	3	9			
	20001-30000	9	11	20			
	>30000	6	5	11			
Work experience in years	<1	6	3	9	3	3.459	(P>0.05) NS
	2 to 4	7	13	20			

	5 to 7	7	8	15			
	>7	4	2	6			
Duration of marriage in years	<6	4	1	5	3	11.265	(P>0.05) NS
	6	15	17	32			
	8	3	5	8			
	>8	2	3	5			
Knowledge assisted reproductive technology	Yes	12	10	22	1	8.549	(P<0.05) S
	No	12	16	28			
If Yes, the mode of knowledge	Health workers	7	3	10	2	2.249	(P>0.05) NS
	Relatives	5	7	12			
	No one	12	16	28			

S=Significant; NS=Not Significant

The above table 4 implies that there is a significant association between sociodemographic variables such as “knowledge assisted reproductive technology” and the knowledge values. Therefore, the H₂ is accepted at 0.05 level of significance.

4. Discussion

Major finding of the study are maximum 21 (42%) samples were 20-25 years age., 32 (64%) samples were males and the remaining 18 (36%) samples were females, 24 (48%) samples were private job, 17 (34%) samples were graduated, 20 (40%) samples were having Rupees 20001-30000 monthly income, 20 (40%) samples were having 2 to 4 years of work experience, 32 (64%) samples’ duration of marriage was 6 years, 28 (56%) samples were not having knowledge, 28 (56%) samples were not having any mode of knowledge regarding assisted reproductive technology, 7 (3%) samples mode of knowledge were health workers. In pretest the only 11 (22%) samples had adequate knowledge, but after administration of STP the posttest was showing that 33 (66%) samples were had adequate knowledge. It shows that the STP was effective in case of knowledge on assisted reproductive technology. There is significant association between pretest and posttest knowledge scores as the calculated ‘t’ test was higher than the tabulated value at 0.05 level of significance. Therefore, the H₁ is accepted. There is a significant association between sociodemographic variables such as “knowledge assisted reproductive technology” and the knowledge values. Therefore, the H₂ is accepted at 0.05 level of significance.

Similar study was conducted on the topic “Assess the knowledge about assisted reproductive technology among couples who attended infertility clinic in selected hospital”. This study also implies that there was a significant difference between pre-test and post-test knowledge and association between socio demographic variables and the knowledge scores.⁶

Ethical consideration: Written permission was taken from the SCPM hospital, Gonda. Written Informed consent was taken from each study sample.

5. Conclusion

This study concluded that many of the couples who attended in SCPM hospital, Gonda not aware of assisted reproductive technology. The planned teaching programmed was successful in providing adequate knowledge to the couples.

This study shows that the information is very important to the peoples to get knowledge to overcome problems. Therefore, the nurses should participate various teaching programme to aware the needy of the society.

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