

Effect of Information Booklet On Attitude and Coping Skills Among Primary Infertility Couples Undergoing Assisted Reproductive Technology in the Fertility Center at Selected Hospital, Coimbatore

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Abstract: Infertility treatment is a source of stress that could threaten the emotional status of the infertile couples, but the magnitude of its effects relies on the attitude towards Assisted Reproductive Technology & personal coping strategies adopted. Thus couples undergoing Assisted Reproductive Technology are in need of information regarding procedures for burgeoning a positive attitude and cope efficaciously. The aim of the study was to assess the attitude and coping skills of couples with primary infertility, identify the effect of information booklet on attitude and coping skills among primary infertility couples undergoing Assisted Reproductive Technology. The research design adopted for the study was Quasi Experimental Two Group Post-test only with Historical control design. 30 couples with primary infertility in the Historical control and 30 in the Experimental Group undergoing ART were selected by Non probability purposive sampling technique. Level of Attitude was assessed with researcher developed Likert scale and Coping skills of couples with Primary infertility were assessed with modified Ways of Coping Likert scale. Data collection was done for a period of 6 weeks. The results revealed that the mean of attitude in experimental group was highly favourable attitude i.e. 34.63 for men and 34.10 for women. Mean of attitude in control group is Unfavourable attitude i.e. 18.83 for men and 19.67 for women. Among 30 couples with primary infertility, 6.1% (n=2) of men; 12.1% (n=4) of women possessed favourable attitude and 84.8% (n=28) of men; 78.8% (n=26) of women possessed Highly favourable Attitude in the Experimental group. 81.8% (n=27) of men; 69.7% (n=23) of women possessed unfavourable attitude and 9.1% (n=3) of men; 21.2% (n=7) of women possessed favourable attitude in the control group. The mean of coping skills in the experimental group is Effective coping i.e. 100.93 for men and 101.73 for women. Mean of coping skills in the control group is Ineffective coping i.e. 57.73 for men & 58.03 for women. Among 30 couples with primary infertility, 12.1% (n=4) of men; 18.2% (n=6) of women were able to cope moderately effective and 78.8% (n=26) of men; 72.7% (n=24) of women were able to cope effectively with

ART in the Experimental group. 78.8% (n=26) of men; 66.7% (n=22) of women had ineffective coping and 12.1% (n=4) of men; 24.2% (n=8) of women were able to cope moderately effective with ART in the control group. Independent 't' test revealed that there is highly significant improvement in the attitude and coping skills of couples who received the information booklet than those who didn't receive it. The study findings revealed that information booklet improved attitude and coping skills of with primary infertile couples in experimental group.

Keywords: Effectiveness, attitude, coping skills, primary infertility, assisted reproductive technology.

1. Introduction

Reproductive health is an emerging issue in a global health care: the target for Millennium Development Goal is to provide universal access to reproductive health by 2015. Infertility is a critical but much neglected aspect of reproductive health. One in every 4 couples are affected by infertility according to a demographic and health survey from 1990 in collaboration with WHO. Infertility can be classified into primary and secondary infertility. Primary infertility is the inability to conceive even after 1 year of unprotected sexual intercourse. Secondary infertility is the inability to conceive following a previous pregnancy.

The WHO states that 60 to 80 million couples in the world are suffering from Infertility. It varies across the regions of the world. The WHO the overall primary infertility in India is between 3.9 (age standardized to 25-49 years) and 16.8% (age standardized to 15-49 years). The prevalence of primary infertility is 12.6% (Adamson, 2011).

Assisted reproductive Technology can alleviate the burden of Infertility on individuals and families. ART services are

inestimable additions to the armamentarium of treatment modalities for infertility and should be available to couples who have specific indications. According to the 2012 CDC report on ART, the average percentage of ART cycles that led to live birth are 40% in women under age group of 35 years, 31% in women aged 35-37 years, 22% in women aged 38-40 years, 12% in women aged 41-42 years. (CDC,2012).

With the marked inflation of Infertility rate, Infertile couples regard the iterative and long treatment periods as a recurring crisis. Although, the advancements in assisted reproductive techniques have opened new doors for infertile couples. Only 1-4% of all conceptions are due to Assisted Reproductive Technology. Most of the couples under treatment face lot of stress, confusion, uncertainty and fear. Couples with greater knowledge and less stress can contribute to therapeutic decision making and follow the recommended treatment advice more effectively. Thus the couples undergoing ART are in need of information to optimize the efficiency and compliance with treatment. Hence the researcher perceives the need for information regarding Assisted Reproductive Technology to enable the couples to develop a positive attitude and cope with the treatment.

2. Statement of the Problem

A study to assess the effectiveness of information booklet on attitude and coping skills among primary infertility couples undergoing Assisted Reproductive Technology in the Fertility center at selected Hospital, Coimbatore.

3. Objectives

- Assess the attitude and coping skills of couples with primary infertility.
- Identify the effect of information booklet on attitude and coping skills among primary infertility couples undergoing Assisted Reproductive Technology.
- To associate the attitude and coping skills of primary infertility couples with the selected demographic and clinical variables.

4. Hypotheses

- H1: There will be a significant improvement in the attitude of couples with primary infertility who received information booklet than those who didn't receive it.
- H2: There will be a significant improvement in the coping skills of couples with primary infertility who received information booklet than those who didn't receive it.

5. Methodology

The research design adopted for this study was Quasi Experimental Two Group Post-test only with Historical control design. Study population comprised 30 couples with the primary infertility in the Historical Control Group and 30 in the study group undergoing ART. Data collection was done for a period of 6 weeks with historical control group in the Fertility center at selected Hospital. Study participants were selected by

Non probability purposive sampling technique. After establishing a good rapport, required demographic and clinical data were collected from the Historical control and experimental group. Couples were counselled regarding ART and an Information booklet on assisted reproductive technology was issued on their ART Planning visit to the experimental group whereas Historical control group received conventional care. On the day of Performance of ART, an Attitude Likert Scale and modified ways of coping Likert scale were administered to the couples with primary infertility in both the groups and they were asked to code their degree of agreement or Disagreement.

6. Results and Discussion

A. *Distribution of Couples with primary infertility as per their demographic and clinical variables in the Experimental and Control Group*

1) Demographic variables of Men

On the basis of age group, 33.3 % (n=11) were between 36-40 years in the Experimental group remaining were in other age groups and 45.5% (n=15) were between 31-35 years in the control group. As per religion, majority of them 78.8% (n=26) & 75.8% (n=25) were Hindus in the Experimental group and control group respectively. Out of 30 infertile men, 39.4% (n=13) underwent undergraduate programme in the experimental group and 42.4% (n=14) underwent undergraduate programme in the control group. All of them were employed 100% (n=30) in both the groups.

2) Clinical variables of Men

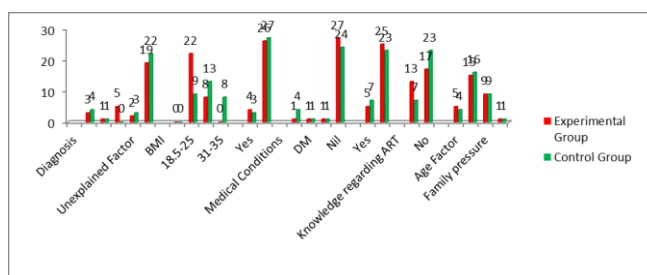


Fig. 1. Clinical variables of men

3) Demographic variables of Women

On the basis of age group, 36.4% (n=12) were between 26-30 years in the Experimental group remaining were in other age groups and 30.3% (n=10) were between 26-30 years in the control group. As per religion, majority of them 81.8% (n=27) & 72.7% (n=24) were Hindus in the Experimental and control group respectively. Out of 30 women with primary infertility, 42.4% (n=14) underwent undergraduate programme in the experimental group and 48.5% (n=16) underwent undergraduate programme in the control group. Out of 30 women with primary infertility, 27.3% (n=9) of them were employed in the experimental group and 33.3% (n=11) were employed in the control group. Majority of couples with primary infertility hail from nuclear family, 63.6% (n=21) & 66.7% (n=22) in the experimental group and control group respectively. Among 30 couples, 69.7% (n=23) of them are Non-consanguineously married in the experimental group

and 66.7% (n=2) of them are Non-consanguineously married in the control group.

4) Clinical variables of Women

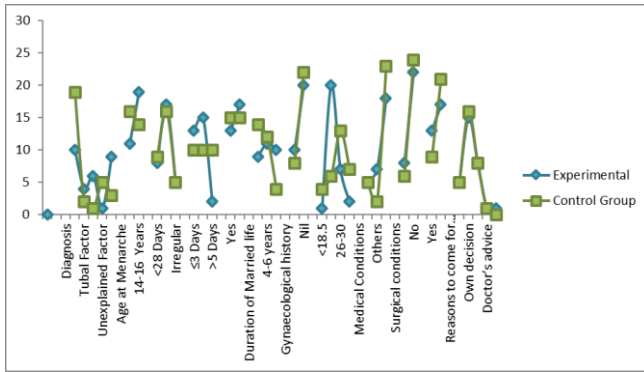


Fig. 2. Clinical variables of women

B. Distribution of level of attitude among couples with primary infertility undergoing Assisted Reproductive Technology in the Experimental and Control group

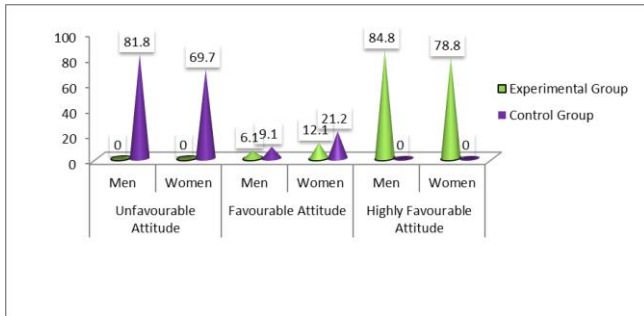


Fig. 3. Distribution of level of attitude

Among 30 couples with primary infertility, 6.1%(n=2) of men ;12.1%(n=4) of women possessed favourable attitude and 84.8%(n=28) of men; 78.8% (n=26) of women possessed Highly favourable Attitude in the Experimental group.81.8% (n=27) of men; 69.7% (n=23) of women possessed unfavourable attitude and 9.1% (n=3) of men; 21.2% (n=7) of women possessed favourable attitude in the control group.

C. Distribution of level of coping skills among couples with primary infertility undergoing Assisted Reproductive Technology in the experimental and control group

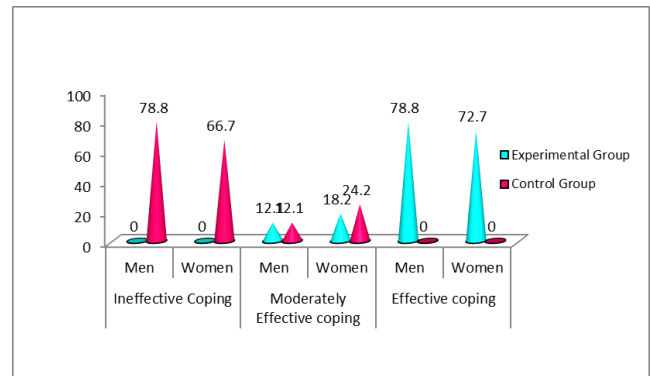


Fig. 4. Distribution of level of coping skills

Among 30 couples with primary infertility, 12.1% (n=4) of men; 18.2% (n=6) of women were able to cope moderately effective and 78.8% (n=26) of men; 72.7% (n=24) of women were able to cope effectively with ART in the Experimental group.78.8% (n=26) of men; 66.7% (n=22) of women had ineffective coping and 12.1% (n=4) of men; 24.2% (n=8) of women were able to cope moderately effective Coping with ART in the control group.

D. Comparison of mean attitude and coping skills of couples with primary infertility undergoing ART in the Experimental and Control group

The table 1 describes that the ‘t’ value of mean attitude and coping skills of couples with primary infertility are highly significant at p<0.001 level of significance. Thus indicating that the couples from the experiment group when provided with informational booklet regarding ART have highly significant improvement in their attitude and coping skills than the control group.

E. Association of level of attitude of couples with primary infertility undergoing ART with selected demographic and clinical variables in the experimental and control group

In the experimental group, there is an association between religion and medical conditions of men with attitude at 0.05. There exists a significant relationship between demographic variables of women like religion, type of marriage and clinical variable like BMI and attitude at 0.05. In the Control group of couples with primary infertility, there is significant relationship between medical conditions of men and attitude at 0.05.

In the experimental group, there is significant relationship between surgical conditions of men & coping skills at 0.05 level of significance and there also exists a relationship between Gynaecological history and BMI of Primary infertility women

Table 1

S. No.	Variables		Experimental Group (N=30)		Control Group (N=30)		‘t’ Value
			MEAN	S.D	MEAN	S.D	
1.	MEN	Attitude	34.63	2.34	18.83	2.43	12.80 ***
		Coping	100.93	8.03	57.73	3.99	13.91 ***
2.	WOMEN	Attitude	34.10	2.73	19.67	2.30	11.08 ***
		Coping	101.73	8.61	58.03	3.23	14.29 ***

*** =Significant at p<0.001

with level of coping skills at 0.05. There is significant relationship between medical conditions of men with primary infertility and coping skills in the control group.

7. Conclusion

With the marked inflation of Infertility rate, ART services which are inestimable additions to the armamentarium is a treatment of choice. Infertility couples regard the iterative and long treatment periods as a recurring crisis. Knowledge of infertile couples regarding ART is a fundamental parameter to optimize the efficiency and compliance with infertility treatment. With considerable amount of knowledge couples develop favourable attitude and engage in a variety of coping strategies in an attempt to master control over their agony and rebalance. The study findings revealed that information booklet improved attitude and coping skills of couples with primary infertility. Midwives possess a vital role in addressing infertile couples. They should enlighten the couples with copious

amount of knowledge regarding infertility and its revolutionized treatment modalities.

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