

“A Study to assess the effectiveness of health care package in terms of knowledge, attitude and practice on management of Infertility among the infertile Women ” at Selected Hospital of Delhi”

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I. Introduction

Infertility affects both men and women of reproductive age in all parts of the world. In some regions infertility is found to be widespread and its prevalence reaching such proportions that it can be considered a public health problem affecting the life of the whole society. Recently published studies revealed that infertility affects about one in six couples during their lifetime and is more frequent in obese. On the other hand the mood disorders may exacerbate the hormonal disturbances and worsen the effectiveness of infertility management.¹ Study done on quality of life (QOL) and its related factors in infertile couples and it was found that self-esteem scores were lower in the couples with longer infertility duration. Previous failed efforts for treatment of infertility were adversely associated with the lower social support and sexual satisfaction (Keramat et al. 2014).² The study demonstrated that the ovarian response to controlled ovarian stimulation depends on a women's age and on the pool of recruit able follicles, which may be indirectly measured using two hormonal markers of ovarian reserve and sensitivity, namely AMH and FSH (A La Marca, et al. 2012).³

Findings of the study revealed that even though women's had little knowledge about the treatment modalities, still they had favorable attitude towards the same. The study also brought about the need for further teaching, guidance and counseling of the women or couples diagnosed with infertility (Shanthi Priya 2014).⁴ Providing information, counseling and support are also an integral part of the management to help the couple to cope with the stress of treatment and the possibilities of failure. Therefore, effective intervention like use of health care package is needed to improve knowledge, attitude and practice among infertile women.

Objectives: 1. To develop health care package for the infertile women regarding management of infertility 2. To assess and evaluate knowledge, attitude and practice on management of infertility among the infertile women before and after administration of health care package

II. Methods and materials

2.1 Design and setting

Experimental study pre-test - post-test control group design was used for this study. The purposive sampling technique with random assignment was adopted and 60 infertile women (30 in experimental and 30 in control group) who visited infertility clinic in selected hospitals of Delhi were enrolled. Data was collected from June to December 2014. Ethical clearance for the study was obtained from institute ethics committee.

2.2 Procedure for data collection

The purpose of the study was explained to the group and confidentiality of their responses was assured. Signed informed consent was taken from the subjects. The sample included 60 infertile women, 30 each in experimental group and control group. Purposive sampling technique followed by random assignment by every fourth case coming to the infertility clinic was selected during data collection. Pre-test was taken first for both experimental and control group on Day 1 and the health care package on management of infertility was administered only to the experimental group on the same day. Post-test was taken on the seventh day for both experimental and control group.

2.2.1. Description of Health Care Package (HCP)

The first draft of health care package was prepared by researcher on the basis of blue print, criteria rating scale, review of research and non-research material on management of infertility with the opinion of experts. The title of health care package was health care package on management of infertility. The health care package covers the area like introduction on infertility, definition, risk factors, and causes of infertility,

diagnostic tests available and the management on infertility. It consisted of elements like planned teaching programme to improve the knowledge of infertile women, basal body temperature chart which containing columns for marking it on daily basis, information booklet to provide information on management of infertility and pictorial cards with pictures on step of in vitro fertilization procedure. For content validity the health care package with the criteria rating scale was submitted to experts for validating its content. There was 100% agreement on content of health care package.

2.2.2. Measures: Three different tools were used to assess knowledge, attitude and practice.

Tool 1: Structured knowledge questionnaire to assess the knowledge on management of infertility. It comprised of the items seeking information on personal data and contains 30 knowledge items covering the areas like introduction, causes, diagnostic tests and management available for infertility. Reliability evaluated as 0.80.

Tool 2: Likert scale to assess the level of attitude level on management of infertility. The attitude scale will consist of 20 items on five point rating scale. There were 10 positive items and 10 negative items. Total score of the attitude scale ranged from 20-100. Maximum score was 100 and minimum score was 20. Neutral point will be at 60. Reliability evaluated as 0.74.

Tool 3: Rating scale on expressed practice to assess the expressed practice on management of infertility. The express practice scale will consist of 20 items on three point rating scales. There were 10 positive items and 10 negative items. It covers the areas like family support, life style changes, sexuality, management related to infertility. Reliability evaluated as 0.76.

III. Results

Data was collected from 60 subjects i.e. 30 in experimental and 30 in control group. Maximum, 33 % were in the age group of 25-29 years, out of which 33 % were in the experimental group and the control group respectively. Majority of the infertile women, 43% were married for less than 5 years in which 47 % of the couples were from the experimental group and 41% from the control group. In type of infertility, highest 83 % of the infertile women (87% in experimental and 80% in control group) were affected with primary infertility. According to the causes of infertility, 80 % of the couple was suffering due to the female factors.

3.1 Effects of health care package (HCP) on knowledge, attitude and practice

Figure 1 shows that the mean pre test knowledge scores of 14.3 in experimental group and 14.2 in control group revealed that the groups' knowledge were similar initially. The mean post test knowledge score 25.7 ± 2.7 is higher than the mean pre test knowledge score of 14.3 ± 3.5 after administration of health care package (HCP) among infertile women in experimental group. The mean post test knowledge score was 14.3 among infertile women in control group without HCP. These findings show that the health care package was effective in increasing the knowledge among infertile women (experimental group) on management of infertility.

Figure 2 revealed that the mean post test attitude score 74.3 ± 3.0 was higher than the mean pre test attitude score of 63.3 ± 4.3 after administration of HCP among infertile women in experimental group. In control group, pre test and post test attitude score was approximately similar i.e. 63.3 ± 4.4 and 64.3 ± 4.2 without administration of HCP. There was a gain in favorable attitude regarding management of infertility. These findings show that the health care package was effective in increasing the attitude among infertile women (experimental group) on management of infertility.

Figure 3 shows that the mean post test practice scores 51.8 ± 3.8 was higher than the mean pre test practice score of 34.6 ± 4.2 after administration of HCP among infertile women in experimental group. In control group, pre test and post test practice score was 34.1 ± 4.0 and 34 ± 3.9 respectively without HCP. This indicates that health care package was effective in improvement of practices among infertile women (experimental group) on management of infertility. A significance effects on knowledge, attitude and practice were seen in experimental group as compared to control group at 0.05 levels. The $p < 0.03$, signifies that, health care package have significant effect to improve knowledge, attitude and practices among infertile women on management of infertility.

IV. Discussion

The present study findings showed that the women had knowledge, attitude and practice deficit. These findings are consistent with the study conducted by **Gundla Sowjanya (2011)**,⁵ a study describes the knowledge and attitude of infertile women regarding assisted reproductive techniques (ART). There was a statistically significant association found between level of knowledge, attitude and demographic variables such as education, occupation, past obstetrical history and type of infertility. This study revealed that infertile women have moderate knowledge and neutral attitude towards ART. Hence, the nurses in infertility clinics should concentrate on health education.

The results of the present study also revealed that health care package have significant effect to improve knowledge, attitude and practices among infertile women on management of infertility. The above findings were similar to the study conducted by **Carolyn Emslie et al (1993)**⁶ to assess the infertile couple on practice that is “Do clinical guidelines improve general practice management and referral of infertile couples?” Improvements were greater when general practitioners used the disease specific reminder. Receiving guidelines led to improvements in the process of care of infertile couples within general practice. This effect was enhanced when the guidelines were embedded in a structured infertility management sheet for each couple.

The present study suggests that there is a need to plan and prepare materials for educating the women on management of infertility. The findings of all these studies are in consonance with the findings of our present study that showed that women had lacked adequate knowledge, unfavorable attitude and practice on management of infertility.

4.1 Study limitation

The study was confined to small sample size and limited to the development of health care package on management of infertility and assesses the effectiveness of HCP on management of infertility among infertile women.

4.2. Future recommendation

The study can be replicated on a large sample to validate the findings and make generalizations. Further studies must be focused the other components of the family, the community and institution. The similar studies can be conducted using more effective strategies in the health care package like videos, and multi media.

4.3. Conclusion

Based on the findings of the study it is concluded that there was a knowledge deficit existed among infertility women on management of infertility. The present study identified poor comprehensive knowledge, negative attitude and improper practices on management of infertility. The health care package was effective to increase knowledge, attitude and practices regarding management of infertility among the infertile women. Thus, continuous reinforcement is needed by the health professionals by giving health education through various means will improve the knowledge, develop favorable attitude and practice on management of infertility.

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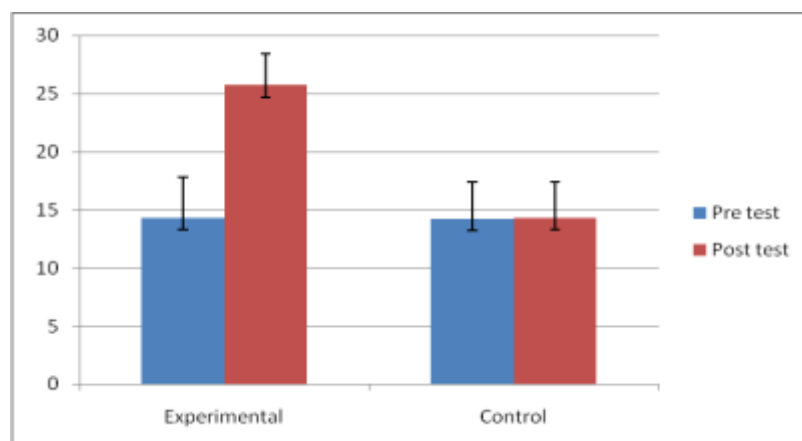


Fig.1: Knowledge score (Mean ± SD) among experimental and control groups

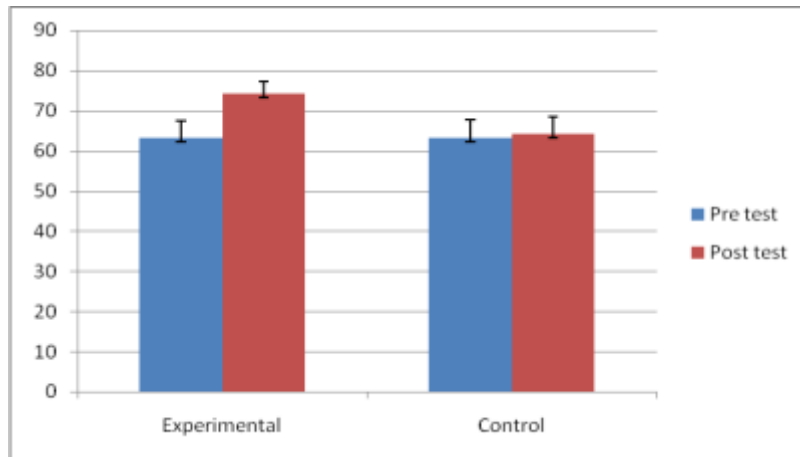


Fig.2: Attitude score (Mean \pm SD) among experimental and control groups

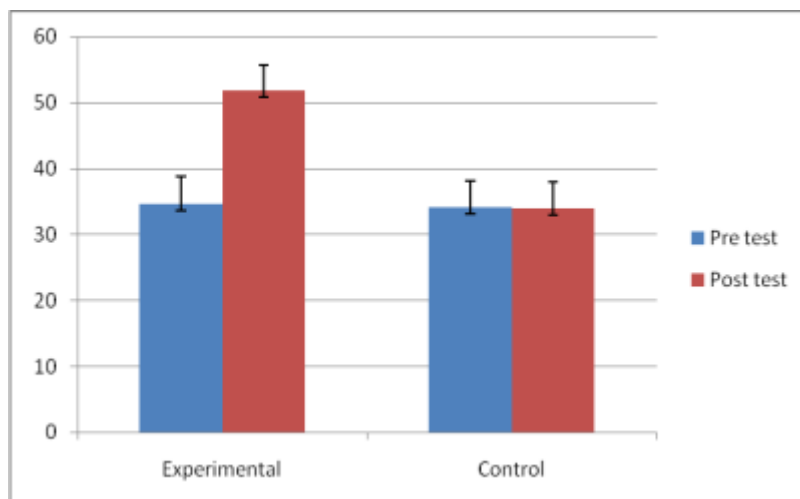


Fig.3: Practice score (Mean \pm SD) among experimental and control groups