

# Knowledge and Attitude Regarding Infertility Among Couples: Effectiveness of Selected Interventions

Gitty George

Research Scholar, Department of Nursing, Shri Venkateshwara University, Amroha, India

**Abstract:** This paper presents an overview on knowledge and attitude regarding infertility among couples.

**Keywords:** infertility, attitude, knowledge

## 1. Introduction

Childbirth is the most joyous event in every woman's life. Parenthood is viewed in most cultures as an entry into adulthood, and also an important part of status. Some couple delay pregnancy due to the changing lifestyle and career involvement. At the same time, many couples experience difficulty in conceiving and carrying a child. Infertility may be perceived as a tragedy in the lives of many women in developing countries. It is considered as the responsibility of the females to give birth to their own children. Women without children may be stigmatized and isolated from the society. Childlessness leads to an increased incidence of domestic violence in female partner and remarriage in male partner.

The desire for children is strong in many couples. If a couple did not achieve pregnancy or produce a living child as expected, the man and woman often experience psychological distress. They may feel unlovable or unappealing to their mates.

On the basis of current world population (2006-2007) 68, 72.4 million people were infertile and of these 40.5 million were seeking infertility medical care. According to Delhi IVF Fertility Research centre (2006) 81 infertility affects as many as 1 in 6 couples and 8-10 million infertile couples were estimated in India.

Fertility and reproductive health are largely neglected areas in health education. Knowledge about the biological process of reproduction (eg.: when is a woman fertile, how long sperm survive) and the definition and prevalence of infertility are important as they help people to understand when is the optimal time for unprotected intercourse and the likelihood of having difficulties in conceiving. However equally important is knowledge about the factors that may reduce the chances of conception because lack of knowledge in these areas may mean that people unintentionally contribute to their own fertility problems.

Researcher feels that the knowledge is a key factor associated with fertility self-care i.e., knowing about their own

fertility potential and the initiation of treatment when needed concluding that education about fertility issues is needed to prevent fear and unnecessary delay in seeking help when faced with problems in conceiving. The investigator personally witnessed the couples with primary infertility and has taken up the present study to create awareness and improve their knowledge and to develop a positive attitude towards primary infertility.

## 2. Methodology

### A. Research Design

One group pre test - post test within subject's design.

### B. Setting

The study was conducted in the following villages namely, Thumpamon, Elavumthitta, Pathanamthitta dist., Kerala state.

### C. Samples

100 couples who fulfilled the sample selection criteria formed the samples for the study.

### D. Intervention

Administration of multimedia educational package to the couples regarding infertility using the compact disc which includes images and video clippings on general information on fertility, causes, diagnostic evaluation and treatment for infertility and the lifestyle modifications to be followed by the couples to enhance fertility.

### E. Measurements and Tool

The level of knowledge of couples was assessed by using structured interview schedule and attitude by using modified 4 point Likert scale. Descriptive and inferential statistics were used to analyze the data.

## 3. Result and discussion

The pre and post-test level of knowledge and attitude of couples regarding infertility. In assessing the pre-test level of knowledge, majority (79%) of husbands and wives had inadequate knowledge, (10%) of husbands and (6%) of wives had moderately adequate knowledge and none of the husbands

and (5%) of wives had adequate knowledge regarding infertility.

The analysis on pre-test level of attitude among couples revealed that (55%) of husbands and (30%) of wives had unfavourable attitude, (45%) of husbands and (67%) of wives had moderately favourable attitude and none of the husbands and (3%) of wives had favourable attitude regarding infertility.

This finding was supported by a cross sectional study conducted by Sumera Ali et. al. (2011)<sup>56</sup> on knowledge, perceptions and myths regarding infertility among the patients at two tertiary care hospitals, Pakistan. A total of 447 adults were included in this study. The study results revealed that 25% of the subjects identified that infertility is pathological and 78% remain unfamiliar and unacceptable to IVF.

This in turn highlights the importance of education program among couples to improve their knowledge and attitude towards infertility.

The analysis on post test level of knowledge among couples revealed that (12.67%) of husbands and (3.33%) of wives had inadequate knowledge, (55.33%) of husbands and (60%) of wives had moderately adequate knowledge and (36.67%) of husbands and (32%) of wives had adequate knowledge regarding infertility.

The analysis on post test level of attitude among couples showed that (27.67%) of husbands and (54.33%) of wives had favorable attitude, (73.33%) of husbands and (45.67%) of wives had moderately favorable attitude and none of them had unfavorable attitude regarding infertility.

The findings showed that the information obtained from health care workers and through mass media has greater influence on the knowledge and attitude of infertile couples which showed a drastic improvement in the level of knowledge and change in attitude regarding infertility. On the other hand, the number of questions framed on lifestyle modification component is given greater concern as it develops a good practice to achieve fertility.

Compare the pre and post test level of knowledge and attitude of couples regarding infertility. The analysis on comparison of pre and post test level of knowledge of husband revealed that the pre-test mean value was 11.89 with standard deviation 1.77. The post test mean value was 20.31 with standard deviation 2.98. The calculated 't' value was 13.66, which was greater than the table value and this indicated that there was statistically high significant difference at  $P < 0.001$  level.

Comparing the pre and post test level of knowledge of wife, the pretest mean value was 11.45 with standard deviation 3.20. The post test mean value was 19.12 with standard deviation 1.99. which was greater than the table value and this indicated that there was statistically high significant difference at  $P < 0.001$  level. This indicates that the multimedia educational package is highly effective.

The present study was consistent with the research conducted by Maria. V. D, et. al. (2011)<sup>46</sup> on effectiveness of planned teaching programme for improving the knowledge of

couples on reproductive health and sexual awareness among 50 couples who have registered their names at family life service center. The results of the study found that the pre-test mean value for husband was 11.84 and wife was 13.68. The post test mean value for husband was 30.46 with a 't' value of 30.86 and the post test mean value for wife was 33.18 with a 't' value of 37.96. The study concluded that the teaching programme has been very effective in changing the knowledge of the couples on various issues related to reproductive health and fertility.

Hence the null hypotheses (NH1) stated earlier that there is no significant difference between pre and post test level of knowledge regarding infertility among couples at the level of  $p < 0.05$  was rejected.

Comparison of pre and post test level of attitude of husband revealed that the pre-test mean value was 33.44 with standard deviation 5.51. The post test mean value was 61.22 with standard deviation 3.58. The calculated 't' value was 11.99, which was greater than the table value and this indicated that there was statistically high significant difference at  $P < 0.001$  level.

Comparing the pre and post test level of attitude of wife, the pre-test mean value was 41.2 with standard deviation 5.73. The post test mean value was 66.11 with standard deviation 6.33. The calculated 't' value was 14.89, which was greater than the table value and this indicated that there was statistically high significant difference at  $P < 0.001$  level. This indicates that the multimedia educational package is highly effective.

The finding was supported by the descriptive cross sectional study conducted by Mashid Aryanpur, et. al. (2010)<sup>47</sup> to assess the effectiveness of educational material package among primary infertile couples with smoking in Avicenna Infertility clinic. The results of the study found that the mean knowledge level was  $0.57 + 0.79$  and mean attitude score was  $18.50 + 2.95$ . 41(63%) husbands quitted smoking unrelated to cessation factors. Hence the educational package has been very effective in changing the knowledge and attitude of the couples regarding infertility. Hence the null hypotheses (NH2) stated earlier that there is no significant difference between pre and post test level of attitude regarding infertility among couples at the level of  $p < 0.05$  was rejected.

Correlate the overall mean difference in the knowledge score with attitude score of couples regarding infertility. The calculated 'r' value was 0.44, at  $p < 0.01$  which showed that there was positive correlation indicating an increase in the level of knowledge with attitude. While analyzing the level of knowledge of wife. The calculated 'r' value was 0.51 at  $p < 0.01$ , which showed that there was positive correlation indicating an increase in the level of knowledge with attitude. Hence the null hypotheses (NH4) stated earlier that there is no significant relationship between the mean difference in the knowledge score with attitude score regarding infertility among couples at the level of  $p < 0.05$  was rejected.

Analysis regarding the association of mean improvement of knowledge score among husbands with selected demographic

variables showed that there was no statistical significant association with age, religion, education, occupation, number of working hours, food habits, personal habits, body mass index, duration of married life, family history of infertility and co-morbidity and attitude score with selected demographic variables showed that there was low statistical significant association with age at  $p < 0.05$  respectively .

Association of mean improvement of knowledge score among wives with selected demographic variables showed that there was moderate statistical significant association with education at  $p < 0.01$  and the attitude score with selected demographic variables showed that there was no statistical significant association was found with age, religion, education, occupation, number of working hours, food habits, body mass index, age at menarche, nature of menstrual cycle, duration of married life, family history of infertility and co-morbidity. Hence the null hypotheses(NH5) stated earlier that there is no significant association between the mean improvement of knowledge and attitude score regarding infertility with selected demographic variables at the level of  $p < 0.05$  was rejected for age of husband with attitude and education of wife with knowledge and was accepted for the other demographic variables.

#### 4. Conclusion

The present study assessed the effectiveness of Multimedia Educational Package on knowledge and attitude regarding infertility among couples. The study findings revealed that there was a significant difference in the level of knowledge and attitude of couples and concluded that Multimedia Educational

Package on infertility was an effective method to improve the knowledge and attitude of infertile couples.

#### References

- [1] Brugh VM, Lipshultz LI. Male factor infertility Evaluation and management. *Med Clin N Am.* 2004; 88:367–85.
- [2] Hirsh A. Male subfertility Causes of male subfertility Treatment options for subfertile men. *BMJ.* 2003;327(7416):669–72.
- [3] Araoye MO. Epidemiology of infertility: Social problems of the infertile couples. *WAJM.* 2003;22(2):190–6.
- [4] Ekwere P, Archibong E, Bassey E, Ekabua J, Ekanem E, Feyi-Waboso P. Infertility among Nigerian couples as seen in Calabar. *Port Harcourt Med J.* 2007; 2:35–40.
- [5] Nguéfack CT, Ourtching C, Gregory HE, Priso EB. Knowledge, Attitudes and Practices of Infertile Women on Child Adoption in Douala (Cameroon). *Open J Obs Gynecol.* 2014; 4:1065–71.
- [6] Ali S, Sophie R, Imam AM, Khan FI, Ali SF, Shaikh A. Knowledge, perceptions and myths regarding infertility among selected adult population in Pakistan: A cross-sectional study. *BMC Public Health [Internet].* 2011;11(1):760.
- [7] Rouchou B, Forde MS. Infertility Knowledge, Attitudes, and Beliefs of College Students in Grenada. *SJPH.* 2015;3(3):353–60. [
- [8] What you never know about fertility. *World Fertility Awareness Month,* 2006.
- [9] Nwobodo E, Isah Y. Knowledge, Attitude and practice of child adoption among infertile female patients in Sokoto north-west Nigeria. *Niger Postgr Med J.* 2011;18(4):272–5.
- [10] Ojelabi OA, Osamor PE, Owumi BE. Policies and Practices of Child Adoption in Nigeri: A Review Paper. *Mediterr J Soc Sci.* 2015;6(1):75–81.
- [11] Lubega GN, Musinguzi B, Omiel P, Tumuhe JL. Determinants of health seeking behaviour among men in Luwero District. *J Educ Res Behav Sci.* 2015;4(2):37–54.
- [12] Nanakorn S, Osaka R, Chusilp K, Tsuda A, Maskasame S, Ratanasiri A. Gender differences in health-related practices among university students in northeast Thailand. *Asia Pac J Public Heal.* 1999;11(1):10–5.
- [13] Stefan E. Gender differences in health information behaviour: A Finnish population-based survey. *Health Promot Int.* 2013;30(3):736–45.