A study to assess the effectiveness of multimedia educational package regarding infertility among couples at selected villages in Indore.

Mrs Deepali Sachan, Research Scholar, Malwanchal University

Prof. Dr. Jinu K Rajan, Research Supervisor, Malwanchal University

Introduction

Childbirth is the most joyful experience a woman can have. In most cultures, becoming a parent is seen as both an entry into adulthood and an important part of one's social status. Some couples postpone pregnancy due to changes in their lifestyle and involvement in their careers. At the same time, many couples struggle with conceiving and carrying a child. Infertility is often viewed as a tragedy in the lives of women in developing countries. Females are expected to bear the responsibility of giving birth to their own children. Women who do not have children may be stigmatised and isolated from society. Childlessness increases the likelihood of domestic violence in the female partner and remarriage in the male partner.

Many couples have a strong desire to have children. If a couple fails to conceive or have a living child as expected, the man and woman frequently experience psychological distress. They may believe they are unlovable or unappealing to their peers.

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

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

The researcher believes that knowledge is a key factor associated with fertility self-care, i.e., knowing about one's own fertility potential and initiating treatment when necessary, concluding that education about fertility issues is required to prevent fear and unnecessary delay in seeking help when having difficulty conceiving. The investigator personally observed the couples suffering from primary infertility and has undertaken the current study to raise awareness, improve their knowledge, and foster a positive attitude toward primary infertility.

METHODOLOGY

Research Design

One group pre test - post test within subjects design.

Setting

 The study was conducted in the selected villages in Indore Dist.

Samples

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

study.

Intervention

Administration of a multimedia educational package on infertility to couples via compact disc, which includes images and video clips on general information on fertility, causes, diagnostic evaluation, and treatment for infertility, as well as lifestyle changes to be followed by the couples to improve fertility.   **Measurements and Tool**

Couples' knowledge was assessed using a structured interview schedule, and their attitudes were assessed using a modified 4-point Likert scale. The data was analysed using descriptive and inferential statistics.

Result and discussion

The level of knowledge and attitude of couples toward infertility before and after the test. In terms of pre-test knowledge, the 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 about infertility.

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

This finding was supported by a cross-sectional study conducted by Sumera Ali.et al. (2011)56 on infertility knowledge, perceptions, and myths among patients at two tertiary care hospitals in Pakistan. This study included a total of 447 adults. According to the findings of the study, 25% of the subjects believe infertility is pathological, and 78 percent are unfamiliar with and unwilling to try IVF.

This, in turn, emphasises the importance of educating couples in order to improve their knowledge and attitude toward infertility.

The analysis of post-test knowledge levels among couples revealed that (12.67 percent) of husbands and (3.33 percent) of wives had insufficient knowledge, (55.33 percent) of husbands and (60 percent) of wives had moderately adequate knowledge, and (36.67 percent) of husbands and (32% of wives) had adequate knowledge about infertility.

The analysis of post-test level of attitude among couples revealed that (27.67%) of husbands and (54.33%) of wives had favourable attitude, (73.33%) of husbands and (45.67%) of wives had moderately favourable attitude, and none of them had unfavourable attitude regarding infertility.

The findings revealed that information obtained from health care workers and through mass media has a greater influence on the knowledge and attitude of infertile couples, resulting in a significant improvement in knowledge and a shift in attitude toward infertility. On the other hand, as it develops a good practise to achieve fertility, the number of questions framed on the lifestyle modification component is given greater concern.

Compare the level of knowledge and attitude of couples toward infertility before and after the test. The analysis of the husband's pre- and post-test knowledge level revealed that the pre-test mean value was 11.89 with a standard deviation of 1.77. The mean post-test value was 20.31, with a standard deviation of 2.98. The calculated 't' value was 13.66, which was higher than the table value, indicating a statistically significant difference at the P 0.001 level.

When the pre and post test levels of knowledge of the wife were compared, the pretest mean value was 11.45 with a standard deviation of 3.20. The mean post-test value was 19.12, with a standard deviation of 1.99. which was greater than the table value, indicating a statistically significant difference at the P 0.001 level. This demonstrates that the multimedia educational package is extremely effective.

The current study was consistent with the findings of Maria.V.D, et al. (2011)46, who investigated the effectiveness of a planned teaching programme for improving couples' knowledge of reproductive health and sexual awareness among 50 couples who had registered their names at a family life service centre. According to the study's findings, the pre-test mean value for husband was 11.84 and 13.68 for wife. The husband's post test mean value was 30.46 with a 't' value of 30.86, and the wife's post test mean value was 33.18 with a 't' value of 37.96. According to the study, the teaching programme was very effective in changing the knowledge of the couples on various reproductive health and fertility issues.

As a result, the null hypothesis (NH1) that there is no significant difference in pre and post test level of knowledge about infertility among couples at the level of p0.05 was rejected.

When the pre-test and post-test levels of husband's attitude were compared, the pre-test mean value was 33.44, with a standard deviation of 5.51. The post-test mean was 61.22, with a standard deviation of 3.58. The calculated 't' value was 11.99, which was greater than the table value, indicating a statistically significant difference at the P 0.001 level.

When the pre-test and post-test levels of attitude of the wife were compared, the pre-test mean value was 41.2 with a standard deviation of 5.73. The post-test mean was 66.11, with a standard deviation of 6.33. The calculated 't' value was 14.89, which was greater than the table value, indicating a statistically significant difference at the P0.001 level. This demonstrates that the multimedia educational package is extremely effective.

Mashid Aryanpur et al. (2010)47 conducted a descriptive cross-sectional study to assess the effectiveness of an educational material package among primary infertile couples who smoked at the Avicenna Infertility Clinic. According to the study's findings, the average knowledge level was 0.57 + 0.79, and the average attitude score was 18.50 + 2.95. 41 (63 percent) husbands quit smoking for reasons unrelated to cessation factors. As a result, the educational package has been very effective in changing the couples' knowledge and attitude toward

infertility. As a result, the null hypothesis (NH2) that there is no significant difference between pre and post test levels of attitude toward infertility among couples at the p0.05 level was rejected.

Correlate the overall mean difference in knowledge scores with couples' attitudes toward infertility. The calculated 'r' value was 0.44 at p0.01, indicating a positive correlation indicating an increase in knowledge with attitude. While assessing the wife's level of knowledge, The calculated 'r' value was 0.51 at p0.01, indicating a positive correlation indicating an increase in knowledge with attitude. As a result, the null hypothesis (NH4) that there is no significant relationship between the mean difference in knowledge score and attitude score regarding infertility among couples at the p0.05 level was rejected.

Analysis of the association of mean improvement of knowledge score among husbands with selected demographic variables revealed that there was no statistically 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.

The association of mean improvement of knowledge score among wives with selected demographic variables revealed a moderate statistically significant association with education at p0.01 and no statistically significant association with age, religion, education, occupation, number of working hours, food habits, body mass index, age at menarche, nature of menstrual cycle, and duration of menstrual cycle. As a result, the null hypotheses (NH5) previously stated that there is no significant association between the mean improvement of knowledge and attitude score regarding infertility and selected demographic variables at the level of p0.05 were rejected for age of husband with attitude and education of wife with knowledge but accepted for the other demographic variables.

Conclusion

The current study examined the impact of a multimedia educational package on couples' knowledge and attitudes toward infertility. The findings of the study revealed a significant difference in the level of knowledge and attitude of couples, and it was concluded that the Multimedia Educational Package on Infertility was an effective method to improve the knowledge and attitude of infertile couples..

Reference

1.Brugh VM, Lipshultz LI. Male factor infertility Evaluation and management. Med Clin N Am. 2004;88:367–85. [6].

2. Hirsh A. Male subfertility Causes of male subfertility Treatment options for subfertile men. BMJ. 2003;327(7416):669–72. [7].

3.Araoye MO. Epidemiology of infertility: Social problems of the infertile couples. WAJM. 2003;22(2):190–6. [8].

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. [9].

5. Nguefack 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. [10].

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. Available from: http://www.biomedcentral.com/1471-2458/11/760[11].

7. Rouchou B, Forde MS. Infertility Knowledge, Attitudes, and Beliefs of College Students in Grenada. SJPH. 2015;3(3):353–60. [12]. What you never know about fertility. World Fertility Awareness Month . In 2006. [13].

8.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. [14].

9.Ojelabi OA, Osamor PE, Owumi BE. Policies and Practices of Child Adoption in Nigeria : A Review Paper. Mediterr J Soc Sci. 2015;6(1):75–81. [15].

10. 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. [16].

11. 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. [17]. Stefan E. Gender differences in health information behaviour : a Finnish population-based survey. Health Promot Int. 2013;30(3):736–45. [18].