

Effectiveness of multicomponent intervention programme on psychosocial wellbeing and coping strategies among couples seeking infertility treatment.

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Abstract- The present study investigated the effectiveness of multicomponent intervention programme on psychosocial wellbeing and coping strategies among couples seeking infertility treatment. In view of the nature of the problem, quasi experimental pre-test post test control group research design was used for the study. The theoretical framework of the study was based on Roy's adaptation model. 60 newly registered couples seeking infertility treatment from Fertility unit, Govt. Medical College Hospital, Kottayam, were selected by non-probability purposive sampling, 30 each in control and experimental group. The tools used for data collection were socio demographic data sheet, psychosocial assessment scale and coping strategy assessment scale. Multicomponent intervention programme includes breathing exercise and jacobson's progressive muscle relaxation. Multicomponent intervention programme given for the experimental group on the first day after pre test and post test was given on day seven. Data was analyzed using descriptive and inferential statistics. Study results showed that multicomponent intervention programme was effective among couples in experimental group. Study also inferred that significant association between psychosocial wellbeing of females and age at marriage and also between psychosocial wellbeing and duration of infertility treatment of couples.

Key words: Multicomponent intervention programme; Psychosocial wellbeing; Coping strategies; Couples seeking infertility treatment.

Background of the problem

In the beginning of history, the phenomena of reproduction have been the essence in the continuity of human race. Parenthood achievement is one of the major life goals for most men and women. In planning a life together, most of the couples have a vision about how their life should be, and most of them wish to have children of their own for the future life. When fertility fails, the couples become depressed psychologically and can experience a wide range of emotions. Couples may blame themselves even though it is not a personal failure or punishment. Childless women will undergo varied psychological distress and in order to overcome psychological distress and maintain their quality of life they need to use appropriate coping strategies.¹¹ This study aims to identify the psychosocial wellbeing and coping strategies among couples seeking infertility treatment. Infertility causes psychological and emotional tension in the couples and makes severe stress on infertile men and women.

Need and significance

Infertility is considered a crisis with various biological, psychological, economic, ethical, and cultural consequences. Infertile women will undergo varied psychological distress and to overcome psychological distress and maintain their quality of life they need to use appropriate coping strategies. Coping strategies refer to the specific efforts, both behavioral and psychological, that people employ to master, tolerate, reduce, or minimize stressful events. According to World Health Organization Psychosocial wellbeing is defined as "A person's physical health, mental health, emotional life (feelings, thoughts, beliefs, attitudes) and social life (relationships, attitudes, cultural values and the influences of family, school, peers and community) all affect psychosocial wellbeing."¹⁵ Nurses can provide couples education on infertility treatment, as well as assist in improving psychosocial wellbeing and promote effective coping skills. The study proposes to determine whether the relaxation technique is effective in improving the psychosocial wellbeing and coping strategies among couples seeking infertility treatment.

Statement of the problem

Effectiveness of multicomponent intervention programme on psychosocial wellbeing and coping strategies among couples seeking infertility treatment from a tertiary care hospital, Kottayam.

Objectives

- To assess the psychosocial wellbeing among couples seeking infertility treatment.
- To identify the coping strategies among couples seeking infertility treatment.
- To evaluate the effectiveness of multicomponent intervention programme on psychosocial wellbeing among couples seeking infertility treatment.
- To evaluate the effectiveness of multicomponent intervention programme on coping strategies among couples seeking infertility treatment.

- To find out the association between psychosocial wellbeing among couples seeking infertility treatment and selected variables.

Operational definitions

Effectiveness

Refers to change in psychosocial wellbeing and coping strategies among couples seeking infertility treatment after a multicomponent intervention programme.

Multicomponent intervention programme Refers to

1. Introductory session: It is a short interaction session for about 10 minutes between the researcher and research participants to ventilate the feelings of couples seeking infertility treatment.
2. Breathing exercise: Deep breathing exercise is done by keeping the couples in sitting position and instruct to close the mouth and inhale quickly through nose to a mental count four. Then hold breath for a count of seven. Exhale completely through the mouth to a count of eight. It should be done daily morning for 5 minutes for seven consecutive days with the assistance of a prerecorded audio instruction.
3. Progressive muscle relaxation: Audio assisted Jacobson's progressive muscle relaxation technique by tightening and relaxing specific muscle groups in sequence for about minutes. It should be done by the participants daily morning for 15-20 minutes for 7 consecutive days with the assistance of a prerecorded audio instruction.

Psychosocial wellbeing: It refers to couple's state of wellbeing in terms of personal, marital, sexual, social, spiritual and emotional domains of couple's seeking infertility treatment.

Coping strategies: It refers to both behavioral and psychological measures employed by the couples seeking infertility treatment to adjust with the situations.

Couples seeking infertility treatment: Refers to newly registered couples in OPD after completed two or more years of unprotected intercourse and seeking various treatments for infertility.

Selected variables

It includes age, gender, education, occupation, duration of married life and duration of infertility treatment of couples seeking infertility treatment.

Methodology

Research Approach: Quantitative research approach was adopted for the study.

Research design: The design was quasi experimental research design. A pretest post test control group design was adopted.

Variables

Independent variable: Multicomponent intervention programme

Dependent variable: Psychosocial wellbeing and coping strategies among couples seeking infertility treatment

Sample and sample size

Considering the study objectives and duration of the study, 60 couples seeking infertility treatment who are newly registered in the Fertility unit OPD were selected. There were 30 couples seeking infertility treatment in each control and experimental group.

Sampling technique: Non probability purposive sampling technique was used.

Setting of the study: The study was carried out in the Fertility unit, Obstetrics and Gynecology Department, Govt. Medical College Hospital, Kottayam.

Inclusion criteria

- ✓ Couples with infertility,
- ✓ Who are newly registered at fertility unit
- ✓ Who are willing to participate in this study
- ✓ Present at the time of study
- ✓ Who can read and write Malayalam

Exclusion criteria

- ✓ Any one or both of the couples have history of psychiatric illness and undergoing treatment for same.
- ✓ Couples with infertility who were already practicing relaxation techniques.

Tools and techniques

Tool 1: Socio demographic data sheet

It is a structured questionnaire consists of socio demographic data of couples seeking infertility treatment. Socio demographic data of couples includes age, gender, education, occupation, family type, age at marriage, duration of married life and duration of infertility treatment.

Tool 2 : Psychosocial wellbeing assessment scale

It is a four-point scale to assess the psychosocial wellbeing among couples seeking infertility treatment. It consists of 40 items under seven main domains. The seven main domains are personal, marital, sexual, social, familial, emotional and religious/spiritual wellbeing. The data were collected separately from husband and wife. Items are rated along a four-point scale (Strongly disagree, disagree, agree and strongly agree). Maximum score is 160.

The total score was categorized as:

Poor	:	1-40
Average	:	41-80
Good	:	81-120
Very good:		121 - 160

Tool 3: Coping strategy assessment scale

It is a four-point scale used to assess the coping strategies used by the couples seeking infertility treatment. It consists of 30 items under five domains such as self acceptance, social support, self-adaptation, refusal/avoidance, diversional activities. Items are rated along a fourpoint scale (never, sometimes, most of the time and always). The total score was categorized as:

Poor	:	1-30
Average	:	31-60
Good	:	61-90
Very good :		91-120

Content validity

To ensure the content validity, the tools were submitted to experts in the field of Obstetrics and Gynaecology. The tool was translated to Malayalam and retranslated back to English to confirm the validity. The tool was submitted to experts in the field of Malayalam, English and necessary modifications were made.

Reliability of tools

Reliability of the psychosocial wellbeing assessment scale (tool 2) was determined by test-retest method and was found to be 0.82. Reliability of coping strategy assessment scale (tool 3) was determined by Cronbach's alpha and was found to be 0.92. All the above values show that the tools had good level of internal consistency.

Data analysis

- Level of psychosocial wellbeing and coping strategies among couples seeking infertility treatment will be analyzed using frequency, percentage, mean and standard deviation.
- Effectiveness of multicomponent intervention programme on psychosocial wellbeing and coping strategies among couples seeking infertility treatment between experimental and control group will be analyzed using Mann-Whitney U test.
- Association between psychosocial wellbeing and selected variables among couples seeking infertility treatment will be analyzed using Chi square test.

Group	Psychosocial wellbeing		U
	Mean Rank	Sum of rank	
Control group	54	4935	840*
Experimental group	77	2325	

*Significant at 0.05 level

Group	Coping strategies		U
	Mean Rank	Sum of rank	
Control group	25	773	308
Experimental group	35	1056	

*Significant at level

Major findings of the study

- Majority of females in control group and experimental group (45%) had good psychosocial wellbeing and 48% of males in the control group and 50% in the experimental group had good psychosocial wellbeing
- Among the females in the control and experimental group had better average pretest level of psychosocial wellbeing in the domain of personal wellbeing.
- Majority of males in the control and experimental group had better average pre test level of psychosocial wellbeing in the domain of personal wellbeing.
- The findings inferred that there was a significant difference in the psychosocial wellbeing scores of couples seeking infertility treatment in control and experimental group. This implies that multicomponent intervention programme was effective in improving the psychosocial wellbeing among couples seeking infertility treatment in the experimental group.
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Nursing implications

Nursing practice

Nurses, as professional health care providers, have a significant role in implementing interventions which offer support, stress management, and an opportunity for spiritual coping in order to improve the psychosocial wellbeing of couples with fertility problems.

- Nurses are the key persons who come in contact with these infertile couples right from the time they are diagnosed with infertility, till the completion of the treatment or the successful outcome of pregnancy.
- Nurses should equip themselves with ability to provide holistic type of care whereby they can also incorporate with the therapeutic counseling and relaxation training which has to been found effective in improving the psychosocial wellbeing and coping strategies of couples with infertility.
- Systematically and orderly planned interventions can be used to improve psychosocial wellbeing and coping of couples seeking infertility treatment.
- The investigator feels that the nurses working in the fertility unit need to get some additional training to enable them to provide more structured psychosocial interventions to the couples seeking infertility treatment.
- The nurses can work diligently to execute effective treatment plans by aiding couples with infertility in scheduling appointments and instructing them on how to comply with the treatment schedule.
- Nurses need to learn the art of incorporating all the aspects of human wellbeing in taking care of couples seeking infertility treatment.
- Nurses can facilitate in the couple's emotional wellbeing and play an important role in supporting couples seeking infertility treatment through the complex journey of infertility to treatment of pregnancy.

Nursing Education

- The Nursing curriculum should focus more on the nursing management aspects and include relaxation techniques and their implications in the study plans.
- Based on the findings of the study, nurse educators can teach the students about the importance of interventions to improve the psychosocial wellbeing and coping strategies among couples with fertility problems.

Nursing administration

- It is the main responsibility of the nursing administrative authority to initiate, conduct and carry out training programmes for nurses in improving the wellbeing and coping among couples with infertility.
- Administrative support can be given to staff nurses to plan and organize training on relaxation techniques and to enhance psychosocial wellbeing and coping strategies among couples with infertility. They can utilize the findings of this study as for providing inservice education.
- Nurses need to develop evidence based midwifery practice and nurse managers could collaborate together to educate nurses to the use of intervention programme for the couples undergoing infertility treatment. They can also organize teaching sessions for individual couples and incorporate such innovations into routine prospect of infertility clinics.

Nursing research

- The research study expedites the gravity of the problem which invites attention to the need for further studies in related areas.
- Through publication of research findings, the practice of breathing exercise and progressive muscle relaxation improve the positive coping behavior towards the treatment of infertility among couples can be improved.
- The findings of the study should be published in national and international journals and dissemination of the findings of the study should be done through the national and international conferences.
- Present study can be used as a reference for the future nurse researches.

Limitations

- Generalization of the research finding is limited since there is only one setting and limited sample size (60) with non-probability purposive sampling technique were used.
- The study was limited to newly registered couples in the OPD department only, not able to include couples who were already registered and came for routine treatment and follow up.
- There may be a tendency of the subjects to give socially acceptable responses.

Recommendations

- A descriptive survey can be conducted to assess the psychosocial wellbeing and coping strategies among couples seeking infertility treatment.
- A comparative study can be done to assess the relationship between anxiety, stress, psychosocial wellbeing and coping among couples seeking infertility treatment.
- An epidemiological survey on the causes of infertility in patients referred to Fertility unit.
- Among the respondents, the majority of females in the control and experimental group had better average post test score in the domain of personal wellbeing.
- Majority males in the control and experimental group also had better average posttest score in the domain of social wellbeing.

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