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A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNEDTEACHING PROGRAMME ON HYPOTHYROIDISM AND ITS EFFECTS ON INFERTILITYAMONG THE WOMEN ATTENDING SELECTED INFFERTILITYCLINIC, BENGALURU"

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INTRODUCTION :

Motherhood is the most desired, aspect of womanhood almost every woman craves for that special moment1.Becoming a mother is the most amazing feeling a woman can ever experience. It is usually said a girl is born thrice during her lifetime, once, when she herself is actually born, second, when she gets married and third when she gives birth to a child .At present the women experiencing a lot of difficulties in conceiving the child.
When a woman delivers a child, her whole universe changes. Holding the baby in her hands, touching its tiny fingers, his little nose, small feet and the feeling that the tiny creature actually came from within her is incredible.

When a woman is not able to become pregnant will lead to emotional problems. Women are typically seen, by others as well as themselves, as the emotional caretakers or providers of the relationship. Women typically feel responsible not only for everyone's bad feelings, but also for anything bad that happens to her.

A well-functioning thyroid gland helps to conceive a healthy child. There is a direct interaction between the thyroid gland and the reproductive organs (the testes in men and ovaries in women).Hypothyroidism is common in women of reproductive age and its affects both female and male, but the incidence is more in female.4 Hypothyroidism (under active thyroid) is a condition in which the thyroid gland doesn't produce enough of certain important hormones such as thyroid stimulating hormone.5 A common cause of hypothyroidism is the presence of elevated level of anti-thyroid antibodies. Failure of the pituitary gland to secret a hormone (TSH or thyroid stimulating hormone) to stimulate the thyroid gland (secondary hypothyroidism) is a less common cause of hypothyroidism.

The variety of symptoms affects the all body functions. In mild cases, there may be no symptoms at all. In more severe cases, the body's metabolism slows, causing mental and physical sluggishness and a variety of other symptoms like fatigue, weight gain, and early puberty, menstrual
Irregularities.

Thyroid hormone also affects prolactin levels, the hormone that stimulates milk production by the breasts for breastfeeding. Too much prolactin cause irregular menstrual periods, prevent ovulation and make it more difficult to conceive.

Most experts believe that hypothyroidism makes it more difficult for a woman to conceived, and there is a link between hypothyroidism and infertility .Many studies shows that the incidence of infertility is greatly increased in women with very mild or sub clinical hypothyroidism.

Infertility is defined as the inability to conceive after one year of regular intercourse without contraception. It is one of the medical, social and psychological burdens. About 18–20% of couples in reproductive age are infertile. . About 20% of cases of infertility are due to a problem in the man, 40% to 50% of cases of infertility are due to a problem in the woman and about 30% to 40% of cases of infertility are due to problems in both the man and the woman.

NEED FOR THE STUDY :

Childbearing and rising of children are extremely important events in every human's life and are strongly associated with the ultimate goals of

completeness, happiness and family integration. It is widely accepted that human existence reaches completeness through a child and fulfils the individual's need for reproduction

Thyroid diseases are, arguably, among the commonest endocrine disorders worldwide. India too, is no exception. According to a projection from various studies on thyroid disease, it has been estimated that about 42 million people in India suffer from thyroid diseases[20]. A recent 10 years study have concluded influence of thyroid auto antibodies in normal beginning, development and growing up of pregnancy

Hypothyroidism has emerged as the leading disorder worldwide affecting more than 200 million people. A Study on Gonadotropin levels in hypothyroid women of reproductive age group in india.The Subclinical hypothyroidism is one of the major etiological factors of infertility. Auto antibodies against thyroid should be searched for in cases of female patients with infertility

Changing in thyroid dysfunction is associated with an increase risk of sub fertility. The disturbances in thyroid autoimmunity have associated with a significantly increased risk of recurrent pregnancy loss

India has a high prevalence of hypothyroidism, which affects one in 10 people[24]. Bindiya Chari et al says that Goa has 7% prevalence of hypothyroidism which was comparable with other South Indian states including Bangalore (9.23%) and Hyderabad (8.88%). 60% of the patients were not aware of their disease. Screening for thyroid disorders is essential for early detection, treatment and management of the disease

According to World Health Organization approximately 8-10% of couples are facing some kind of infertility problem. Globally, this means that 50-80 million people are facing the problem of getting an integrated family. In USA, approximately 5 million people have infertility problems, while in Europe the incidence is estimated around 14%. In a recent study in North America shows thyroid disease account for considerable morbidity in the United States. Thyroid dysfunction is four to five times more common in females than in male. The annual incidence of hypothyroidism in adults is 10% to 20%. It has significant effects on menstrual function and fertility. 24-44% of the female infertility is due to an ovulation

OBJECTIVES :

1. To assess the pre-test knowledge of the women attending selected infertility clinic.
2. To assess the post test knowledge of the women attending selected infertility clinic.
3. To determine the effectiveness of planned teaching programme by comparing the pre and post test knowledge scores of women attending selected infertility clinic.
4. To determine the association between the selected demographic variables such as age, sex, religion, age at marriage, occupation years of married life and exposure to mass media and the knowledge level of the women attending selected infertility clinic.

HYPOTHESIS :

1. **H1:-** There will be significant difference between pre test and post test knowledge score among women attending selected infertility clinic regarding hypothyroidism and its effects on infertility.
2. **H2:-** There will be significant association between per test knowledge score and demographic variable such as age at marriage, sex, religion year of married life and exposure to mass media.

RESEARCH VARIABLE :

1. **Independent variable:** In this study the independent variable is the planned teaching programme on hypothyroidism and its effects on infertility.
2. **Dependent variable:** In this study the dependent variable is the knowledge level of women attending infertility clinic.
3. **Extraneous variables:** In this study the extraneous variables is the demographic variable such as age at marriage, sex, religion years of married life and exposure to mass media.

ASSUMPTION :

- Women will have basic knowledge about hypothyroidism and its effects on infertility.
- Women may not have adequate knowledge about hypothyroidism.
- Planned teaching programme will improve the knowledge about hypothyroidism and its effects on infertility.

LIMITATIONS :

1. The study is limited only to women who are attending infertility clinic.
2. Women who are willing to participate in the study.
3. Women who are available at the time of data collection.

RESEARCH METHODOLOGY :

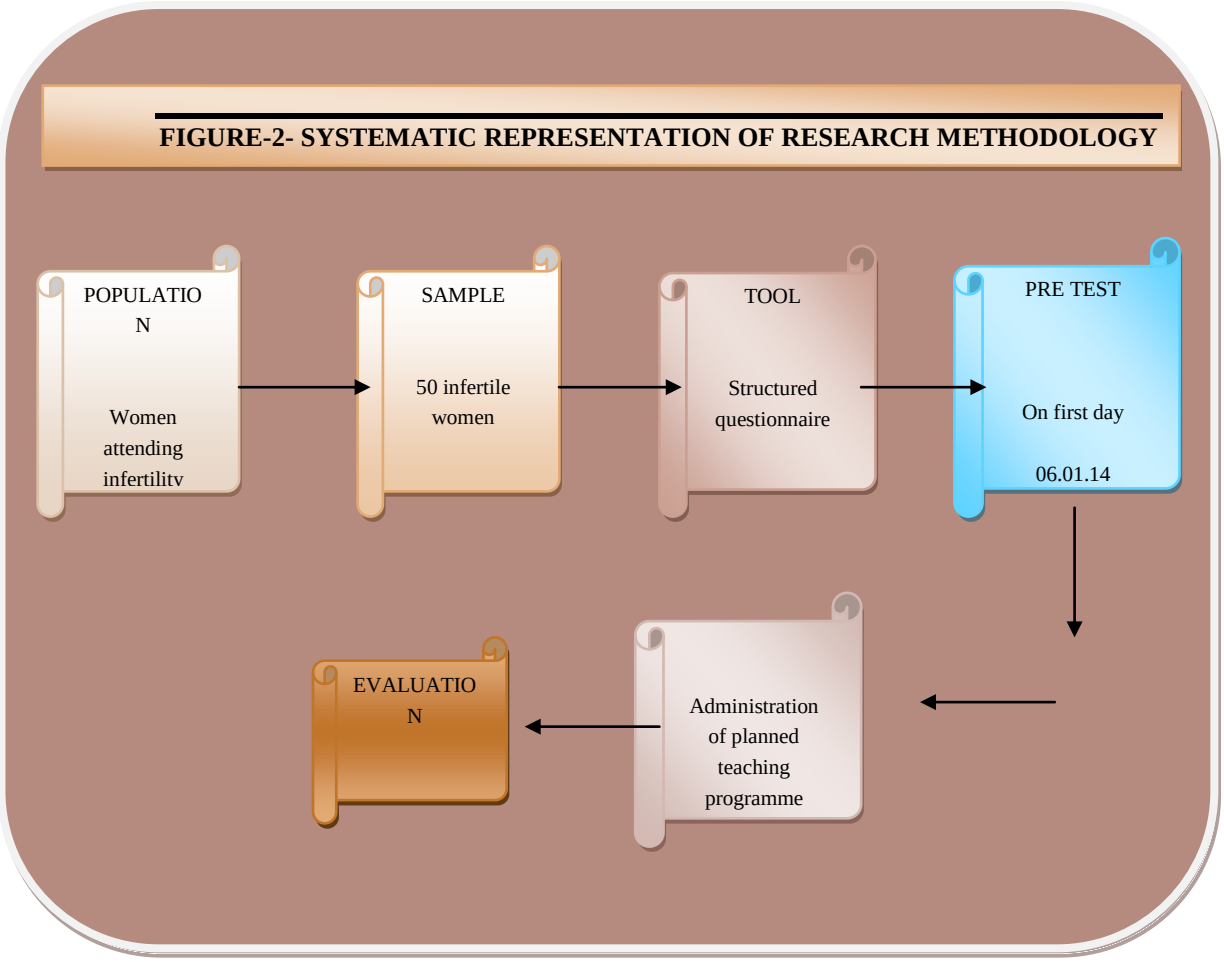
RESEARCH APPROACH

A research approach tells the researcher what data to collect and how to analyze it.[39] It suggests possible conclusion to be drawn from the data. An evaluative research approach was used for the present study.

RESEARCH DESIGN

Research design is the researcher's overall plan for obtaining answers to the research Hypothesis. The research design used was pre-experimental research design, which includes one group pretest and post test. The schematic representation of study design is presented

FIGURE-2- SYSTEMATIC REPRESENTATION OF RESEARCH METHODOLOGY



RESEARCH SETTING :

It is the physical location and conditions in which data collection takes place in a study.[39]
The research was conducted in Garbhagudi IVF Center, Bangalore. This IVFcenter was selected for the study based on the

- Feasibility of conducting the study
- Availability of the sample during the time of the study

VARIABLES UNDER STUDY :

Variable is "An attribute of a person or object that varies, that is taken on different values". [39]

- **Independent variables:** The variable that is believed to cause or influence the dependent variable.
- In this study The independent variables is planned teaching programme on hypothyroidism and its effects on infertility
- **Dependent variables:** The variable that is hypothesized to depend on or be caused by another variable.[39]
- In this study the dependent variable is the knowledge level of women attending infertility clinic.

Extraneous variables: In this study the extraneous variables is the demographic variable such as age at marriage, sex, religion years of married life and exposure to mass media.

POPULATION:

The entire set of individuals having some common characteristics, some time referred to as universe.
The population for the present study will be women attending infertility clinic in Bangalore.

SAMPLE & SAMPLING TECHNIQUE:

Sample: Sample consists of a sub set of a population selected to participate in a research study. [39]
50 infertile women from Garbhagudi IVF center were taken as sample for the study.
Sample size: The total sample of the study consisted of 50 infertile women.
Sampling technique:
For selection of the sample convenient sampling technique was used.
SAMPLING CRITERIA
Sample were selected with the following pre determined set criteria

Inclusion Criteria:

1. The women attending selected infertility clinic in Bangalore.
2. The women who are willing to participate in the study.
3. The women who are available during the study period.

Exclusion Criteria:

1. The women who are suffering with co morbid disease conditions like hypertension, diabetes etc.
2. The women who are already taking treatment for hypothyroidism or thyroid disorders.

DEVELOPMENT OF THE TOOL:

Selection of the tool:

A structured questionnaire was felt to be appropriate method to assess the knowledge of infertile women regarding effect of hypothyroidism on infertility**.**

Construction of the structured questionnaire:

A structured questionnaire was prepared to assess the knowledge of infertile women on Hypothyroidism and its effects on infertility.

Following steps were used to prepare the tool:

Review of literature:

Text books, journals, report, articles, published and unpublished related studies were reviewed to develop the tool.
Preparation of the blueprint:

The blue print on items pertaining to the cognitive domain was prepared as per objectives and conceptual framework. The blueprint consisted of 62.22% knowledge items, 24.44 % comprehension items and 13.34 % problem solving items.

- Consultation with experts from the field of obstetrics:
  Guide and experts in the field of obstetrics were consulted during the preparation of the structured questionnaire.

RESULTS :

Mainly dealt regarding the statistical analysis of the data. Both descriptive and inferential statistics were used for the data analysis. The sample characteristics were explained with the help of descriptive statistics. Association between pre- test and post-test knowledge scores was calculated by using paired't' test and association between pre-test knowledge scores and demographic variables was calculated by using Chi square test. All the calculated values were also tabulated under various headings.

Collected data was analyzed using descriptive and inferential statistics. "t" test was calculated to analyze the difference in pre test and post test knowledge score after administering planned teaching programme. During the pre test, the mean knowledge score of 44.36 was increase to the post test mean knowledge score of 79.11. Hence, there was increase in knowledge of women regarding hypothyroidism and its effects on infertility after administering planned teaching programme.

The chi square test reveals a significant association between pretest knowledge score and previous knowledge of the respondents at 0.05 level of significance .Other demographic variables such as association between age, education of women, religion, types of family, monthly family income, women occupation and residential status, source of information, duration of marital life were not significantly associated with the pre test knowledge score.

DISCUSSION :

This chapter deals with the discussion of the findings based on the result obtained on statistical analysis of collected data with the objectives of the study hypothesis. Statement of the problem was 'the effectiveness of a planned teaching programme on hypothyroidism and its effects on infertility among the women attending selected infertility clinic in Bangalore'.

Findings shows that the overall mean knowledge score 79.11% in post test is higher than the mean pre test knowledge score 44.36% with "t" value (20.792%) after administering planned teaching programme. Therefore t value is statistically significant. This indicates that the women gain knowledge in post-test. Thus the planned teaching programme was effective in increasing the knowledge of women regarding infertility.

This study findings is in consistent with another study conducted by Jabade mangesh vilinikaran., regarding the effectiveness of the Teaching Programme and the results showed 84% of the study subjects gained knowledge regarding obesity.

CONCLUSION :

The main objective of the study was to assess "the effectiveness of a planned teaching programme on hypothyroidism and its effects on infertility among the women attending selected infertility clinic in Bengaluru.

The objectives of the study were:

1. To assess the pre-test knowledge of the women attending selected infertility clinic.
2. To assess the post test knowledge of the women attending selected infertility clinic.
3. To determine the effectiveness of planned teaching programme by comparing the pre and post test knowledge scores of women attending selected infertility clinic.
4. To determine the association between the selected demographic variables such as age, sex, religion, age at marriage, occupation years of married life and exposure to mass media and the knowledge level of the women attending selected infertility clinic

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The study attempted to examine the following hypothesis :

- **H_1**: There will be significant increase in post test knowledge scores among women attending selected infertility clinic
- **H_2**: There will be a significant association between the mean pre-test knowledge scores with previous knowledge regarding hypothyroidism and its effects on infertility.

Conceptual framework:

The conceptual framework adopted for this study was based on the General system's theory by Von Bertelanffy. It provided the comprehensive outlook for the study.

The review of related research and non research literature helped the investigator to develop the conceptual framework, structured questionnaire, planned teaching programme and to plan for the data analysis.

Methods:

Research approach adopted for the study was evaluative research approach. Research design used was pre-experimental research design, to assess effectiveness of planned teaching programme.

The study was conducted in Garbhagudi IVFcenter Bangalore. Sample of the study consisted of 50 infertile women. The tool used to collect data was structured questionnaire. It consists of two parts:

Part-1: include items related to the demographic variables of the respondents about age, religion, education, family income, and source of information.
Part-2: A structured questionnaire Consists of multiple choice questions to assess the knowledge before and after administering planned teaching programme on hypothyroidism and its effects on infertility.

Ten experts validated the tool. The tool was found to be reliable and valid. The reliability of the tool was found to be 0.832 and it was obtained by Spearman Brown Prophecy formula.

Pilot study was conducted from 15 / 12/2013 to 30 /12 / 2013 in Nandi hospital Bangalore. The finding of the pilot study reveals that the study was feasible. The final study was conducted from 6-1-2014 to 21-1-2014 in Garbhagudi IVF center, Hanumanth nagar Bangalore.
Pre test was done on day 1 and the planned teaching programme was given. Post test was done on 15^{th} day after the intervention .The data was coded, grouped and tabulated and interpreted according to the objectives, descriptive and inferential statistics was used to analyze the data.
The finding shows that there is a significant association between pretest knowledge score and previous knowledge of the respondents at 0.05 level of significance hence the research hypothesis is accepted and null hypothesis is rejected. There is no significant association between age, education of women, religion, types of family, monthly family income, women occupation and residential status, source of information, duration of marital life. Hence the null hypothesis is accepted and research hypothesis is rejected in these variables.

SUMMARY :

The conceptual framework adopted for this study was based on the General system's theory by Von Bertelanffy. It provided the comprehensive outlook for the study.

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