Assess the Knowledge on Assisted Reproductive Technique Among Infertile Women

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Abstract: *This cross-sectional quantitative study examined the level of knowledge about assisted reproductive techniques among infertile women attending the gynecology outpatient department at St. Joseph's Mission Hospital, Anchal, Kollam. Assisted reproductive technologies refer to fertility treatments in which eggs or embryos are handled outside the body, and growing global infertility rates have made awareness of such options increasingly relevant. Drawing on Nola J Pender's Health Promotion Model, the study explored how individual background and social context relate to understanding of these treatments. Thirty women were selected through convenience sampling between May and June. Data on socio demographic characteristics and knowledge levels were collected and analyzed descriptively. Most participants were between 20 and 29 years of age, had postgraduate education, and lived in semi urban areas. While 40 percent demonstrated very good knowledge and 10 percent showed excellent knowledge, a considerable proportion reported average or poor understanding. No statistically meaningful association was observed between knowledge and selected socio demographic variables. The findings underline the need for structured educational support, and an informational booklet was developed to strengthen awareness and informed decision making among women facing infertility.*

Keywords: Infertility, In Vitro Fertilization, Intrauterine Insemination, Egg retrieval

1. Introduction

1.1 Background of the Study

Assisted reproductive technologies by the American center for disease control negotiation for any fertility related treatments in which eggs or embryo sac manipulated. Procedures where only sperm are manipulated such as intrauterine inseminations are not considered as under these definitions. Additionally, procedures in which the ovarian stimulation is performed without a plan for egg retrieval are excluded from the definition.

Stress and dissatisfaction are common issues among patients undergoing in vitro fertilization process. This can be exacerbated by factors such as length of infertility, the uncertainty of the outcome and the financial burden of treatment.

Large numbers of people are affected by infertility in their lifetime, according to new reported published today by world health organization. Around 17.5% of adult population roughly 1 in 6 worldwide experience infertility, showing the urgent need to increase access to affordable, high quality fertility care for those in need. Lifetime prevalence was 17.8% in income countries and 16.5% in low- and middle-income countries. Despite the magnitude of the issues, solutions for the prevention, diagnosis and treatment of infertility. Including assisted reproductive technology such as In Vitro Fertilization remain under founded and in accessible to many due to high cost, social stigma and limited availability.

1.2 Objectives of the Study

- To assess the knowledge regarding assisted reproductive technique among infertile women.
- To find out association between knowledge on assisted reproductive technique and related socio economic vulnerable of infertile women.

2. Conceptual Framework

Nola J Pender's health promotion model.
- It is a frame work for understanding and promoting healthy behaviors by focusing on an individual's characteristics, experiences and their interaction with the environment.
- The study is focused on assessing the knowledge regarding assisted reproductive technology among infertile women who attended Gynecological OPD.
- This study has been based on Nola J Pender Health Promotion Model.

3. Methodology

Research Approach
Quantitative approach is used to assess the knowledge regarding assisted reproductive techniques among infertile women.

Research Design
In this study, cross-sectional descriptive research design is used.

Population
All women who are seeking or have been diagnosed with infertility.

Sampling Technique
Non probability convenience sampling.

Criteria for Sample Selection

Inclusion criteria
- Women who are unable to achieve pregnancy after 1year or more.
- Women who are willing to participate in the study.
- Women who have one child and facing issue in the second conception.

Exclusion criteria
- Women who are not willing to participate in the study.

4. Data Analysis and Interpretation

1) The socio demographic status of infertile women.
- **Age**: 60% belongs to the age group of 20-29 yrs, 30 % belongs to the age group of 30-39 yrs, and 10% belongs to above 39 yrs of age.
- **Religion**: 53.3% are Christians, 23.3% are Hindus and 23.3% are Muslims.
- **Education**:56.7% are post graduates, 26.7% are undergraduates,13.3% have matriculation, and 3.3% are illiterate.
- **Type of Family**: 50% belongs to the nuclear family, 33.3% belongs to the joint family, and 16.7% belongs to the extended family.
- **Duration of marriage**: 63.3% have married more than 3yrs, 20% have married between 2-3yrs and 16.7% have married between 1-2yrs.
- **Socio-economic status:** 46.7% have income above Rs.10,000, 33.3% have income between Rs.5000-10,000 and 20% have below Rs.5000.
- **Area of living:** 53.3% belongs to semi- urban area, 26.7% belongs to urban area and 20% belongs to rural area.
- **Parity:** 56.7% are nulligravida, 23.3%are multipara, and 20% have complications in pregnancy.
- **Previous knowledge:** 53.3% have knowledge from mass media, 30% from educational classes and 16.7% from magazines and newspapers.

2) The level of knowledge regarding Assisted Reproductive Techniques among infertile women.
Among 30 infertile women, 10% have excellent level of knowledge, 40% have very good level of knowledge, 23.3% have average level of knowledge and 26.7% have poor level of knowledge regarding assisted reproductive techniques.

3) The association between knowledge on assisted reproductive technique and selected socio demographic variable of infertile women.
There is no association between knowledge on assisted reproductive technique and selected socio demographic variable of infertile women.

5. Summary

The main objective of the study to assess the knowledge regarding Assisted Reproductive Technique among infertile women of gynecology OPD at St. Joseph's Mission Hospital, Anchal, Kollam. Nola J Pender's model was choosen for conceptual framework for the study. Data collection was conducted may to June in St. Joseph's Mission Hospital, Anchal. 30 samples were collected by non probability sampling technique. To assess the knowledge regarding assisted reproductive technique among infertile women. The objectives of the study were to assess the knowledge regarding assisted reproductive technique among infertile women and to find out association between knowledge on assisted reproductive technique andselected socio demographic variable of infertile women among infertile women of gynecology OPD at St. Joseph's Mission Hospital, Anchal.

6. Major Findings

- Most of the women (60%) belongs to the age group of20 to29yrs.
- Most of the women (53.3%) belongs to Christian category.
- Most of the women (56.7%) belongs to post graduate.
- Majority of the women (50%) belongs to nuclear family.
- Most of the women (63.3%) more than 3yrs duration of marriage.
- Majority of the women (46.7%) have10000 above socio-economic status.
- Majority of the women (53.3%) living in semi urban area.
- Majority of the women (56.7%) belongs to nulligravida.
- Majority of the women (53.3%) have previous knowledge.

7. Conclusion

Observation in the study was done systematically and helps the investigators to assess the knowledge regarding assisted reproductive technique among infertile women of gynecological OPD at St. Joseph's Mission Hospital, Anchal. The finding of the study reveals that infertile women have moderate level of knowledge about assisted reproductive technique. In order to improve the knowledge regarding assisted reproductive technique, an informational booklet is prepared and provided to the infertile women.

8. Nursing Implications

Nursing Practice
Nurse should aware about causes, risk factors, types and complications about assisted reproductive technique and able to provide treatment process regarding assisted reproductive technique.

Nursing Research
Knowledge about causes, risk factors, types and complications about assisted reproductive technique and able to provide treatment process regarding assisted reproductive technique and improve awareness among infertile women.

Nursing Education
Nurse educators should prepare nurses for health information effectively regarding assisted reproductive technique and assist the infertile women to gain knowledge about assisted reproductive technique.

Nursing Administration
Organize in service education seminars, symposium and mass media programmes regarding assisted reproductive technique.

9. Recommendations

- A similar study can be conducted in other hospitals.
- A similar study can be conducted in large sample.

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