Original Research Paper



Nursing

STRESS AND ANXIETY AMONG PRIMARY INFERTILE WOMEN UNDERGOING INTRAUTERINE INSEMINATION: A DESCRIPTIVE STUDY.

M.R. Reena

M.Sc (N), Asst Professor, Global College of Nursing, Marthandam, Tamilnadu.

ABSTRACT The study was conducted in PPK fertility centre which is a private hospital located in Marthandam, Tamilnadu. In this centre artificial reproductive techniques like Invitro Fertilization (IVF), Intra Cytoplasmic Sperm Insemination (ICSI) and Intrauterine Insemination (IUI) are used to treat infertility. The sample of this study was 200 primary infertile women undergoing Intrauterine Insemination in PPK fertility centre.

The seven major variables assessed were age, educational qualification, religion, occupation, family income per month, type of family, residential area. Cohen et al's Standardized Perceived stress scale and The Beck Anxiety Inventory (BAI) was used to assess Stress and anxiety. Research proposal was approved by research degree committee of JJT University, Rajasthan prior to the study. To execute the study, the investigator obtained official permission from the medical officer of fertility centre. This study finding revealed that more than half subjects had moderate level of stress and anxiety. There was significant association between the level of stress and level of anxiety with selected socio demographic variables.

KEYWORDS: Stress, Anxiety, Infertility, Intra uterine insemination.

INTRODUCTION

In humans, infertility is the inability to become pregnant after one year of intercourse without contraception involving a male and female partner. There are many causes of infertility, including some that medical intervention can treat. Estimates from 1997 suggest that worldwide about five percent of all heterosexual couples have an unresolved problem with infertility. Many more couples, however, experience involuntary childlessness for at least one year: estimates range from 12% to 28%. Male infertility is responsible for 20–30% of infertility cases, while 20–35% is due to female infertility, and 25–40% is due to combined problems in both partners. In 10–20% of cases, no cause is found. The most common cause of female infertility is ovulatory problems, which generally manifest themselves by sparse or absent menstrual periods. Male infertility is most commonly due to deficiencies in the semen, and semen quality is used as a surrogate measure of male fecundity.

In India infertility affects 10-15% of couples in reproductive age group. Infertility is called "primary" when there has been no prior conception. Male is responsible for the infertility in about 65%. Female is responsible for the infertility in about 40-50% of the cases. Incidences of infertility in India are 92% primary and 8% secondary.

According to a systematic analysis of national health surveys, in 2010, approximately 10.5% of women around the world experienced secondary infertility, and roughly 2% experienced primary infertility. The prevalence of secondary infertility, in particular, varies widely by region and country, ranging from less than 6% to greater than 16% of women. The majority of researchers agree that infectious disease, which can lead to fallopian tube blockage, contributes largely to variation among populations and changes over time. Since infertility risk tends to increase with age, differences and changes in the age at childbearing likely play a role. Relatively little is known about the specific risk factors for and prevalence of male infertility around the world

A study was conducted to assess the stress level among primary infertile women undergoing intrauterine insemination and to determine the association of stress level with socio-demographic variable, this study was conducted in infertility clinic, PGIMER, Chandigarh. The samples were selected by total enumeration technique. A total of 102 subjects were enrolled for the study. Stress level of primary infertile women related to infertility was assessed and recorded. Stress level assessment was done before intrauterine insemination. As per Newton's fertility problem inventory findings, 35% of the subjects had very high stress, 39% had moderately high stress and 29% had average stress level. While stress does not cause infertility, infertility most definitely causes stress. Infertile women report higher levels of stress and anxiety than fertile women, and there is some indication that infertile women are more likely to become depressed (Manpreet K et al., 2016)

The purpose that the investigator selected this topic for research is that

the investigators have seen the following reasons attracted to make the study. Stress among women with infertility can cause many issues. Women with infertility are neglected by their family and they were isolated. The irrational myths of the society consider them as unlucky and they hesitate to even attend the functions like marriage, baby shower. These painful experiences are very much hurting and cause more stress. And the stress itself leads to hormonal changes, which prevents the conception. This becomes the cycle, and continues to cause extreme heart ache, to many young women who will have to empower the development of our country.

MATERIALS AND METHODS

The study was conducted in PPK fertility centre which is a private hospital located in Marthandam, Tamilnadu. In this centre artificial reproductive techniques like Invitro Fertilization (IVF), Intra Cytoplasmic Sperm Insemination (ICSI) and Intrauterine Insemination (IUI) are used to treat infertility. The sample of this study was 200 primary infertile women undergoing Intrauterine Insemination in PPK fertility centre.

The seven major variables assessed were age, educational qualification, religion, occupation, family income per month, type of family, residential area. Cohen et al's Standardized Perceived stress scale was used as a tool. Participants completed the 10-item Perceived Stress Scale (PSS; Cohen et al., 1983) to assess participants' perceptions of stress. The Beck Anxiety Inventory (BAI) consists of 21 items with a Likert scale ranging from 0 to 3 and raw scores ranging from 0 to 63 which identifies anxious symptoms and quantifies its intensity. Research proposal was approved by research degree committee of JJT University, Rajasthan prior to the study. To execute the study, the investigator obtained official permission from the medical officer of fertility centre.

RESULTS

- Distribution of Primary infertile women undergoing intrauterine insemination according to the age in the sample reveals that majority 54 (54%) were 21-30 years of age, 41 (41%) were 31-40 years. According to education majority 55(55%) belongs to Graduates, 32(32%) belongs to Higher secondary education in study group.
- Considering the occupation, majority 52 (52%) are housewife, 35 (35%) are private employee and in control group majority, 48(48%) are housewife and 33(33%) are private employee.
 Regarding type of family in the study group majority 58(58%) belongs to nuclear family, 42(42%) belongs to joint family.
- According to religion in study group revealed that 48(48%) belonged to Hindu, 41(41%) belonged to Christian. According to Area of living majority 69(100%) were rural area, 29(29%) were semi urban areas.
- With regard to the Family monthly income, in the study group, majority 58(58%) had a monthly income of Rs.10,001-20,000/month and 23 (23%) had a monthly income of Rs. > 20,001/month.

Table 1: Frequency And Percentage Distribution Of Subjects
Based On Level Of Stress (n=200)

Level of stress	Frequency	Percentage
Low level	38	19%
Moderate level	101	50.5%
High level	61	30.5%

Table 2: Frequency And Percentage Distribution Of Subjects Based On Level Of Anxiety. (n=200)

Level of anxiety	Frequency	Percentage
Mild	25	12.5%
Moderate	135	67.5%
Severe	40	20%

Association between level of stress and anxiety with socio demographic variables.

- Analysis revealed that there is no significant association between
 the level of stress with the selected demographic variables and
 clinical variables like occupation, religion, area of living, family
 monthly income and there is significant association between the
 level of stress with the selected demographic variables and clinical
 variables like age, education, type of family, duration of infertility,
 family history of infertility, duration of treatment for infertility,
 medical illness at (P>0.05) level.
- Shows that there is no significant association between the level of
 anxiety with the selected demographic variables and clinical
 variables like education, occupation, religion, area of living,
 family monthly income and there is significant association
 between the level of anxiety with the selected demographic
 variables and clinical variables like age, type of family, duration of
 infertility, family history of infertility, duration of treatment for
 infertility, medical illness at (P>0.05) level.

DISCUSSION

This study finding revealed that more than half subjects had moderate level of stress and anxiety. There was significant association between the level of stress with the selected demographic variables and clinical variables like age, education, type of family, duration of infertility, family history of infertility, duration of treatment for infertility, medical illness at (P>0.05) level. There was significant association between the level of anxiety with the selected demographic variables and clinical variables like age, type of family, duration of infertility, family history of infertility, duration of treatment for infertility, medical illness at (P>0.05) level.

Sreshthaputra, O., (2008) conducted study on gender differences in infertility-related stress and the relationship between stress and social support in Thai infertile couples. The Fertility Problem Inventory (FPI) and the Personal Resource Questionnaire (PRQ) were used to assess the level of infertility-related stress and perceived social support, respectively, in 238 infertile subjects. The global Fertility Problem Inventory scores for men and women were 154.2 + /-18.3 and 154.7 + /-22.6, respectively (p > 0.05). There was no significant difference in their perceived social support (PRQ scores = 137.8 + 14.0 and 134.0 + /-16.7 respectively). A significant negative correlation (r = -0.1894; p < 0.001) existed between global stress and social support in women, but not in men. Thai infertile couples experienced a high level of stress. Unlike previous studies from Western countries, there were no gender differences in infertility-related stress.

Lamia Yusuf (2016)., Depression, anxiety and stress among female patients of infertility; The purpose of this study was to find out prevalence of depression, anxiety and stress among females suffering from infertility. One hundred females suffering from infertility as study subjects and 100 females accompanying them as controls were randomly selected from infertility clinic at Arif Memorial Teaching Hospital, Lahore, Pakistan. Females with diagnosed mental health issues and those from couples having male factor infertility were not included. There was high prevalence of depression, anxiety and stress among females suffering from infertility compared to females in control group (p < 0.05).

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