



EFFECT OF RELAXATION TECHNIQUE ON STRESS AMONG PRIMARY INFERTILE WOMEN UNDERGOING INTRAUTERINE INSEMINATION: AN EXPERIMENTAL STUDY.

Nursing

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ABSTRACT

The study was conducted to rule out effect of relaxation technique on stress among primary infertile women undergoing intrauterine insemination. 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 to assess Stress. Research proposal was approved by research degree committee of JJJ University, Rajasthan prior to the study. To execute the study, the investigator obtained official permission from the medical officer of fertility centre. The Paired't' value is 12.63 * which is significant at $p < 0.001$. In Control group mean value were 24.25 with standard deviation 8.36 in pretest and mean value were 25.02 with standard deviation 8.18 in posttest respectively. The Paired't' value is 0.06# which is non significant at $p > 0.001$. Results show that relaxation technique was effective in reducing the level of stress among Primary infertile women undergoing intrauterine insemination.

KEYWORDS

Stress, Relaxation technique, Infertility, Intra uterine insemination.

INTRODUCTION

Infertility in humans is defined as the inability to become pregnant after one year of sexual activity with a male and female partner without the use of contraception. Infertility can be caused by a variety of factors, some of which can be treated with medical intervention. According to estimates from 1997, roughly 5% of all heterosexual couples worldwide have an unsolved infertility problem. However, many more couples go through involuntary childlessness for at least a year: estimates range from 12% to 28%. Male infertility accounts for 20–30% of infertility cases, whereas female infertility accounts for 20–35%, and combined issues in both partners account for 25–40%. In 10–20% of cases, no reason is discovered. 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 (Kumar N, 2015).

Infertility-related stress has been linked to age at diagnosis, duration of infertility, reason of infertility, recurrent pregnancy tests, treatment failures, psychiatric illness, coping capacities, social support, stigma, and psychological therapies received, according to studies. Furthermore, reviews back up the link between stress and psychiatric morbidity. Women are vulnerable to the onset of psychiatric morbidity due to their desire to become pregnant and their inability to do so. Furthermore, studies show that after 4–6 years of infertility, anxiety and sadness may develop. In addition, the peak of psychological morbidity may occur during the third year of infertility, and after six years, women may have a reduction in psychological symptoms. Infertile women in India have been shown to have poor subjective well-being, a high level of psychological distress, socio-cultural stresses, and considerable coping challenges, according to cross-sectional studies (Patel, 2016).

The findings of numerous studies reveal that infertility stress, its predictors, and mediators are involved in a perplexing, dynamic, and complicated interplay. Because infertility-specific stress is common among couples seeking assisted reproductive treatments, normal clinical care for such patients should include psychological/psychiatric consultations to screen for and treat any such morbidity. Identifying the group at risk of acquiring such morbidity appears to be critical, as this group frequently includes individuals whose physical and mental health is failing, as well as those whose reproductive prospects are deteriorating. This group of patients should be seen by a reproductive psychologist, psychiatrist, or psychiatric social worker as soon as possible, and particular evidence-based therapies should be used. The purpose that the investigator selected this topic for research is that stress should be dealt accordingly in infertile women. The researcher wants to know the effect of relaxation technique on level of stress among primary infertile women.

MATERIALS AND METHODS

The study was conducted to rule out effect of relaxation technique on stress among primary infertile women undergoing intrauterine

insemination. 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 (100 in study group and 100 in control group) 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. Research proposal was approved by research degree committee of JJJ University, Rajasthan prior to the study. To execute the study, the investigator obtained official permission from the medical officer of fertility centre.

RESULTS

Socio demographic data of study subjects

- Distribution of Primary infertile women undergoing intrauterine insemination according to the age in the study group reveals that majority 54(54%) were 21–30 years of age, 41(41%) were 31–40 years. In control group majority 61(61%) were 21–30 years of age, 36(36%) were 31–40 years of age.
- According to education majority 55(55%) belongs to Graduates, 32(32%) belongs to Higher secondary education in study group and in control group majority 57(57%) belongs to Graduates, 29(29%) belongs to Higher secondary education.
- Considering the occupation in the study group, majority 52(52%) are housewife, 35 (35%) are private employee and in control group majority, 48(48%) are housewife ce 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 and in control group majority 62 (62%) belongs to nuclear family, 38(38%) belongs to joint family.
- According to religion in study group revealed that 48(48%) belonged to Hindu, 41(41%) belonged to Christian and in control group 45(45%) belonged to Hindu, 42(42%) belonged to Christian.
- According to Area of living majority 69(100%) were rural area, 29(29%) were semi urban area in study group and in control group majority 64(64%) were rural area, 31(31%) were semi urban area.
- 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 and in control group majority 55(55%) had a monthly income of Rs.10,001–20,000/month and 24 (24%) had a monthly income of Rs. > 20,001/month.

Clinical data of study subjects

- Data analysis reveals that the distribution of Primary infertile women undergoing intrauterine insemination according to the

- duration of infertility in the study group majority 51(51%) had 6-10 years, 30(30%) had 3- 5 years and in control group majority 49(49%) had 6- 10 years, 32(32%) had 3- 5 years of infertility.
- According to the family history of infertility in study group, majority 74(74%) were no family history of infertility, 26(26%) had family history of infertility and in control group, majority 76(76%) were no family history of infertility, 24(24%) had family history of infertility.
 - According to duration of treatment for infertility in the study group majority 39(39%) had taken treatment less than 2 years ,31(31%) had not taken treatment for infertility and in control group, majority 35(35%) had taken treatment less than 2 years, 34(34%) had not taken treatment for infertility
 - According to medical illness in study group, majority 66(66%) had no medical illness, 29(29%) had other illness and in control group majority 63(63%) had no medical illness, 32(32%) had other illness.

Table 1: Mean, SD, MD and t value

Variable	Group		Mean	SD	MD	t value
Level of stress	Study Group	Pretest	24.08	8.28	10.40	12.63*
		Posttest	13.68	4.62		P<0.001
	Control group	Pretest	24.25	8.36	-0.77	0.66
		Posttest	25.02	8.18		NS

Data in table 1 shows that relaxation technique was effective in reducing the level of stress among Primary infertile women undergoing intrauterine insemination.

DISCUSSION

Results show that relaxation technique was effective in reducing the level of stress among Primary infertile women undergoing intrauterine insemination. Valiani (2010) conducted a semi-experimental and clinical trial investigation to determine the effect of relaxation techniques on stress. Participants were randomised into two groups at random. The stress levels of both groups were initially examined using Newton's infertile stress questionnaire. The stress levels of the individuals were assessed, and then the relaxation technique was used on the intervention group. This procedure was carried out over the course of twelve sessions. After the embryo was implanted to the uterus (after 2 weeks) and before the pregnancy test, all questionnaires were completed under the observation of the researcher. Before the intervention, an independent t-test revealed no significant difference in overall stress ratings between the two groups ($p > 0.05$), but an independent t-test revealed a significant difference in stress scores between the two groups after the intervention ($p 0.05$). As a complementary and alternative medicine strategy, relaxation techniques can help infertile women reduce their stress levels.

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