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A STUDY TO ASSESS THE LEVEL OF STRESS AMONG WOMEN WITH PRIMARYINFERTILITY ATTENDING INFERTILITY CLINIC AT SRM GENERAL HOSPITAL

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ABSTRACT
The main aim of the study was to explore the level of stress among women with primary infertility attending infertility clinic at SRM general hospital. Quantitative approach, non experimental descriptive research design was used for the study. The main study was conducted with 67 samples using non probability purposive convenience sampling technique. Data collection was done for a period of 1 week. The study was conducted at SRM general hospital Kattankulathur, Kancheepuram District. Analysis of the study identified of level of stress of women with primary infertility, association of level of stress among women with primary infertility with their selected demographic variables. The study findings reveals that assessment of level of stress among women with primary infertility attending infertility clinic at SRM general hospital, none of them are having mild level of stress, 57 (85.1%) of the women are having moderate level of stress, 10 (14.9%) of the women are having severe level of stress, assessment of association of level of stress of women with primary infertility with their selected demographic variables women with more age, more years of marital life and who undergone treatment more times are having more stress than others.

KEY WORDS
Level of stress, Women with primary infertility, Infertility clinic.

INTRODUCTION

Fertility is highly valued in most cultures and the wish for a child is one of the most basic of all human motivations. For women, pregnancy and motherhood are developmental milestones that are highly emphasized by our culture (1). When attempts to have a child fail, it can be an emotionally devastating experience. Therefore, it is important for the health care professional to understand the psychological issues surrounding infertility (2). Even though men are also responsible for infertility, the negative social and economical consequences due to infertility mainly affect the women. It is very essential to understand the magnitude of stress of infertile women, as the infertile women try to adapt to the problems of infertility and its treatment. (3)

The World Health Organization (WHO) estimates that 60 to 80 million couples worldwide currently suffer from infertility. Infertility varies across regions of the world and is estimated to affect 8 to 12 per cent of couples worldwide underlying these numbers exists a core group of couples, estimated to be 3 to 5 per cent, who are infertile due to unknown or unpreventable conditions.(4)

Ajeet Vasant saoji (2014) conducted a study to conclude that the significant risk factors for primary infertility among females are higher education, age at marriage >25, postponement of child bearing for ≥1 year, obesity, polycystic ovarian syndrome, irregular menstrual pattern, endometriosis, STI and age at menarche >14 year(5).

Harvard Mental Health Letter (2013) reveals Drugs and hormones used to treat infertility may cause a variety of psychological side effects. For example, the synthetic estrogen clomiphene citrate (Clomid, Serophene), frequently prescribed because it improves ovulation and increases sperm production, may cause anxiety, sleep interruptions, mood swings, and irritability in women. (These side effects have not been documented in men.) Other infertility medications may cause depression, mania, irritability, and thinking problems. Patients and clinicians may find it hard to figure out which reactions are psychological and which are caused by medications —

yet identifying causes is essential for determining next steps (6).

Abdulaziz A flakseir et al (2013) assessed the coping strategies and infertility Stress among a group of women with fertility problem in Shiraz, Iran, found that the majority of infertile women used passive-avoidance coping strategy. Furthermore, those who perceived their infertility problem as meaningful had a low infertility stress, while those who used active-avoidance coping strategies had high infertility stress (7)

Susan C. Klock,(2011) studied that explosion of new technologies to treat and deal with impaired fertility, there has also been an increasing need for an understanding of the psychosocial implications of impaired fertility and its treatment. Fortunately, clinical experience and research have provided a great deal more insight. Healthcare professionals should remember that infertility is a stressful life event for both women and men. Women are more likely than men to report psychological distress in the form of depression and anxiety related to infertility (8).

These studies have confirmed that all women with primary infertility face a lot of stress in their life. The Investigator, also during her clinical posting in obstetrics and gynecology ward, observed women sitting in front of infertility clinic tensed and with sorrowful face, which derived the investigator to assess the level of stress among women attending infertility clinic.

STATEMENT OF THE PROBLEM:

A study to assess the level of stress among women with primary infertility attending infertility clinic at SRM general hospital, Kattankulathur., Kancheepuram District.

OBJECTIVES OF THE STUDY:

- To assess the level of stress among women with primary infertility.
- To associate the level of stress of women with primary infertility with their selected demographic variables.

METHODOLOGY AND MATERIALS

Research approach used in this study was quantitative approach. The study was conducted at SRM general hospital, Kattankulathur, Kancheepuram District.67 women with primary infertility attending infertility clinic at SRM general hospital were selected for the study. Samples were selected using non probability purposive convenience sampling technique. Informed consent was obtained from the samples related to the study purpose, type of data, nature of commitments and participation. The ethical guidelines were followed throughout the study.

Development, description and interpretation of the tool

Structured questionnaire, THE FERTILITY PROBLEM INVENTORY (FPI) by **Newton, Sherraed, and Glavac (1999)** was used as a tool for data collection. The fertility problem inventory is designed to measures the distress, beliefs, and attitudes related to infertility. The structured interview method was used to assess the level of stress among women with primary infertility attending infertility clinic at SRM general hospital, kattankulathur.

Section A

Structured questionnaire were used to assess demographic variables such as age, education, occupation, religion, family income per month , family type, years of marital relationship, type of treatment undergone, number of times undergone treatment, supportive system.

Section B

Assessment check list was used to assess the level of stress

RESULT AND DISCUSSION

An interview with structured questionnaire, the fertility problem inventory (FPI) by newton, sherraed, and glavac (1999) was used. The collected data were analyzed by descriptive and inferential statistics.

Table 1 Data pertaining to demographic variables
N=67

Demographic variables		No. of women	%
Age	20 -24 yrs	22	32.8%
	25 -29 yrs	32	47.8%
	30 -34 yrs	11	16.4%
	35 -39 yrs	2	3.0%
Education	No formal education	9	13.4%
	Primary School	11	16.4%
	Middle School	7	10.4%
	High School	12	17.9%
	Higher Secondary	15	22.4%
	Graduate	10	14.9%
	Post graduate	3	4.5%
Occupation	Government	7	10.4%
	Private	32	47.8%
	Business	7	10.4%
	Coolie	1	1.5%
	House wife	17	25.4%
	Others	3	4.5%
Religion	Hindu	39	58.2%
	Christian	14	20.9%
	Muslim	14	20.9%
Income	> Rs. 32,050	20	29.9%
	Rs.16,020-32,049	24	35.8%
	Rs.12,020 -16, 019	15	22.4%
	Rs. 8,010 -1 2,019	8	11.9%
Family type	Nuclear family	49	73.1%
	Joint family	18	26.9%
Years of marital relationship	1-5 years	42	62.7%
	6-10 years	11	16.4%
	11-15 years	14	20.9%
Type of treatment undergone	Allopathy	45	67.2%
	Siddha	15	22.4%
	Allopathy and siddha	7	10.4%
Number of tiimes undergone treatment	1- 2 times	23	34.3%
	3- 4 times	29	43.3%
	5- 6 times	14	20.9%
	>6 times	1	1.5%
Supportive system	Spouse	55	82.1%
	Family members	11	16.4%
	Friends	1	1.5%

Table 2 Frequency and Percentage distribution of level of stress among women with primary infertility

N=67

Level of Stress	Frequency	Percentage
Mild	**0**	**0.0%**
Moderate	**57**	**85.1%**
Severe	**10**	**14.9%**
TOTAL	**67**	**100.0%**

In accordance with demographic variables, majority of the women with primary infertility 33(47.8%) are in the age group of 25 -29 years, 15 of them (22.5%) had higher secondary level of education, 32 (47.8%) Working in private sector, most of them 39(58.2%) are Hindus, 24(35.8%) of their monthly income between 16,020-32,049 rupees, 49(73.1%) belongs to nuclear family, 42(62.7%) years of marital life between 1-5 years, 45(67.2%) undergone Allopathy treatment, 29 (43.3%) Undergone treatment for 3-4times and 55(82.1%) are supported by their spouse.

Data pertaining to assessment of level of stress among women with primary infertility attending infertility clinic at SRM general hospital, kattankulathur, kancheepuram district

Table 2 reveals that the level of stress among 67 women with primary infertility attending infertility clinic at SRM general hospital. None of the patients are having mild level of stress, 57 (85.1%) of the women are having moderate level of stress and 10 (14.9%) of the women are having severe level of stress.

Table 3 Association of level of stress of women with primary infertility with their demographic variables N=67

Demographic variables		Level of stress				Total	Chi square test
		Moderate		Severe			
		n	%	n	%		
Age	20 -24 yrs	21	95.4%	1	4.6%	22	
	25 -29 yrs	28	87.5%	4	12.5%	32	**χ2=14.73 p=0.01 ** DF=3 significant**
	30 -34 yrs	8	72.7%	3	27.3%	11	
	35 -39 yrs	0	0.0%	2	100.0%	2	
Education	No formal education	8	88.9%	1	11.1%	9	
	Primary School	8	72.7%	3	27.3%	11	
	Middle School	6	85.7%	1	14.3%	7	
	High School	12	100.0%			12	χ2=4.56 p=0.60 DF=6 not significant
	Higher Secondary	13	86.7%	2	13.3%	15	
	Graduate	8	80.0%	2	20.0%	10	
	Post graduate	2	66.7%	1	33.3%	3	
Occupation	Government	6	85.7%	1	14.3%	7	
	Private	27	84.4%	5	15.6%	32	
	Business	7	100.0%			7	χ2=2.93 p=0.71 DF=5 not significant
	Coolie	1	100.0%			1	
	House wife	13	76.5%	4	23.5%	17	
	Others	3	100.0%			3	
Religion	Hindu	32	82.1%	7	17.9%	39	
	Christian	13	92.9%	1	7.1%	14	χ2=0.95 p=0.62 DF=2 not significant
	Muslim	12	85.7%	2	14.3%	14	
Income	> Rs. 32,050	19	95.0%	1	5.0%	20	
	Rs.16,020-32,049	21	87.5%	3	12.5%	24	χ2=3.93 p=0.27 DF=3 not significant
	Rs.12,020 -16, 019	11	73.3%	4	26.7%	15	
	Rs. 8,010 -1 2,019	6	75.0%	2	25.0%	8	

Family type	Nuclear family	40	81.6%	9	18.4%	49	$\chi2$=1.70 p=0.19
	Joint family	17	94.4%	1	5.6%	18	DF=1 not significant
Years of marital relationship	1-5 years	40	95.2%	2	4.8%	42	**$\chi2$=9.45 p=0.01****
	6-10 years	7	63.6%	4	36.4%	11	**DF=2 significant**
	11-15 years	10	71.4%	4	28.6%	14	
Type of treatment undergone	Allopathy	41	91.1%	4	8.9%	45	$\chi2$=3.94 p=0.13
	Siddha	11	73.3%	4	26.7%	15	DF=2 not significant
	Allopathy and siddha	5	71.4%	2	28.6%	7	
Number of times undergone treatment	1- 2 times	21	91.3%	2	8.7%	23	
	3- 4 times	26	89.6%	3	10.4%	29	**$\chi2$=8.93 p=0.05***
	5- 6 times	10	71.4%	4	28.6%	14	**DF=3 significant**
	>6 times	0	0.0%	1	100.0%	1	
Supportive system	Spouse	47	85.5%	8	14.5%	55	
	Family members	10	90.9%	1	9.1%	11	$\chi2$=5.50 p=0.07
	Friends			1	100.0%	1	DF=2 not significant

*** Significant at P≤0.05 ** highly significant at P≤0.01 *** very high significant at P≤0.001**

Table 3 shows Women in the age group of 35-39 yrs were found to have significant association with level of stress($\chi2$=14.73 p=0.01, DF=3, Significant) statistical significance was calculated using chi square test. Similar result was proved by the study conducted by **Mascarenhas MN et all.(2012**) a study to estimate prevalence of and trends in infertility in 190 countries and territories. Among women 20-44 y of age who were exposed to the risk of pregnancy, 1.9% (95% uncertainty interval 1.7%, 2.2%) were unable to attain a live birth (primary infertility)(9).**Paul C. Adamson et all** conducted a study on Prevalence & correlates of primary infertility among young women in Mysore, India. The mean age of the women was 25.9 yr (range: 16-30 yr) and the prevalence of primary infertility was 12.6 percent (10).

Likewise women with more years of married life and more time undergone treatment were also shown significant association with level of stress. Rest of the variables like education, religion, occupation, income, family type, type of treatment and supportive system does not show significant association with level of stress.

CONCLUSION

All over the world, infertility was experienced by individuals and couples as a stressful situation. All cultures and societies perceive infertility as a problem. Infertility signifies the most severe emotional crisis. Attention has been increased on the impact of infertility on the psychological well being of couples. A woman suffering from infertility faces complex issues of biological, Psychological, social and ethical domains. Therefore discussion of these issues in counseling is often beneficial for women with infertility, support from physician, nurses and all people involved in treating the infertile couple is essential to help them cope with various aspects of the condition. Counseling helps in contact with other infertile couple and patient association can help outside the medical treatment. Intervention programs to stress should be given to all infertile women as a regular practice alongside their treatment for infertility.

RECOMMENDATIONS

- The following studies can be undertaken to assess the psychological impact of infertility
- Similar study can be conducted on larger samples.
- Comparative study can be conducted between urban and rural women.
- Comparative study can be conducted between man and women with infertility.
- Study can be conducted on women with secondary infertility.
- Interventional study can be conducted to assess the significant physiological changes associated with infertility and stress.

- Similar study can be conducted on other psychological aspects like anxiety, depression Establishment of educational programs to enlighten infertile couples about treatment options and answer their questions and different coping strategies.
- Train nurses working in fertility clinics to enable them to provide proper counseling services for the infertile couples.
- Further studies are still needed to determine the effect of communication and different coping strategies on stress level for infertile couple.

Conflict of Interest: There is no conflict of interest in this study.

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