



“An exploratory study to assess the level of stress and quality of life of infertile women in selected infertility clinic’s / hospital of Himachal Pradesh

Mrs. Agnus**, Ms. Nitika*, Ms. Nivedita*, Ms. Parul*, Ms. Pratibha*, Ms. Snehlata* Akal College of Nursing, Eternal University, Baru Sahib, HP

***Assistant Professor, Akal College of Nursing, Eternal University*

**B.Sc. Nursing, Interns, Akal College of Nursing, Eternal University*

Abstract

This exploratory study was conducted among 58 infertile women age group 20-49 years at Kamla Nehru state Hospital, Shimla. Non-probability convenience sampling technique was used for the study. Data was collected by using socio-demographic data and standardized tools. The result of the study showed that in terms of level of stress 19.0% of infertile women have mild stress followed by 67.2% were moderately stressed while 13.8% were severely stressed and quality of life of 3.4% infertile women were excellent, 67.2% were good and 29.3% were having average quality of life.

Key words: Quality of life, level of stress, infertile women

Introduction

Infertility is a disease of the male or female reproductive system defined by the failure to achieve a pregnancy after 1 year or more of regular unprotected sexual intercourse. Infertility affects millions of people and has an impact on their families and communities. Estimates suggest that approximately one in every six people of reproductive age worldwide experience infertility in their lifetime. Infertility can be primary or secondary. Globally is 17.5% of adult population experience infertility. National Survey of Family Growth (NSFG) data indicate that 15.5% of all women who intend to become pregnant are infertile (unable to conceive after 1 year of trying) and 6.7% of married women aged 15 to 44 years are infertile. The stigma surrounding infertility can make it difficult for couples to seek help, and many suffer in silence for years before seeking medical assistance. While infertility affects both men and women, in India, it is often women who are blamed for the problem. This male dominated society the woman are suppressed and blamed for reason for infertility. This lead to development of anxiety and stress among the woman counterpart. The society seeks answers from woman to produce justification for her condition. The stigma associated with infertility leads to

deteriorate quality of life of the infertile female.¹⁰ As per **WHO** data, In India the estimated prevalence of infertility among reproductive age group women in India is 11.8%. Within **India** woman infertility rate was the highest in west Bengal i.e. 13.9% and the lowest in Meghalaya i.e. 2.5%.The level of infertility is 5% in **Himachal Pradesh**.

Objectives

- To assess the level of stress among infertile women.
- To assess the quality of life among infertile women.
- To co-relate level of stress and quality of life of infertile women
- To find out association between level of stress and quality of life with in selected demographic variables.

Methodology

A quantitative approach was adopted for this study. This exploratory study was conducted among 58 infertile women age group 20-49 years at Kamla Nehru state Hospital, Shimla who had fulfilled inclusive criteria. Non Exploratory research design was adopted to assess quality of life and level of stress in infertile women. Non-probability convenience sampling technique was used for the study. the Standard FertiQol and Modified perceived stress scale was used to collect data and data has been collected in the first two weeks in the month of July 2023.Ethical permission granted from concerned authorities of Kamla Nehru State Hospital Shimla and from the principal of Eternal University, Baru Sahib HP.

Description of tools-

Based on the objectives of the study the Standard FertiQol and Modified perceived stress scale was used to collect data.

The standard Fertiqol tool and modified perceived stress scale tool for data collection was divided into 3 major sections .These are as follows :

• SECTION – A Socio – Demographic Variables :

The demographic variables include the information about the respondent such as age, education , family , occupation , area , income , religion , duration of marriage and type .

• SECTION – B Standard FertiQOL Tool :

Consist of 36 questions for assessing the quality of life among infertile women out of which each category contains 6 questions that is emotional , mind/body , relational , social , environment and 4 questions comes under tolerability. For each correct response score “4” was given and for every incorrect response score “0”was given. **Maximum score – 144**

Minimum score –1**Scoring key to assess the Quality of Life among infertile women :**

Sr.no	Quality of Life	Scores
1	Excellent	109-144
2	Good	73-108
3	Average	37-72
4	Poor	1-36

- SECTION – C Modified Perceived Stress Scale :**

It consist of 20 questions for assessing the level of stress among infertile women .Each question has 4 options out of which one is the correct response . For each correct response score “4” was given and for every incorrect response score “1” was given.

Scoring key to assess the level of stress among infertile women :

Sr.no	Level of Stress	Score
1	Mild	20-40
2	Moderate	41-60
3	Severe	59-80

Plans for data analysis:

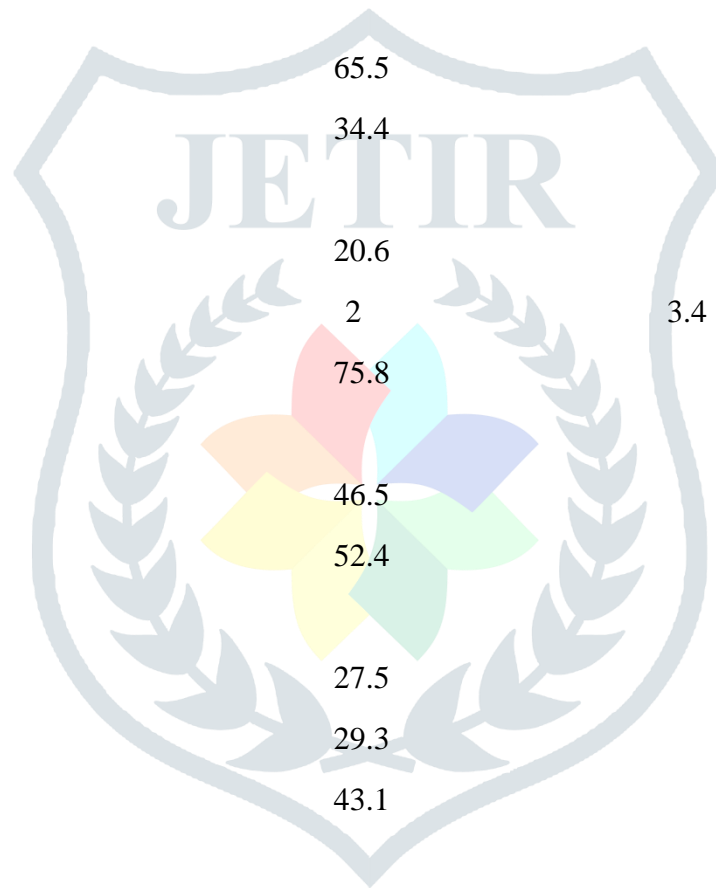
It include analysis and interpretation of data in accordance with objectives of the study .Both descriptive statistics was used for the analysis of data.

Findings**Findings about socio-demographic factors-**

n=58

Variable (f)	%age
Age (in year) 21	36.2
20 -25 23	39.6
26-30 8	13.7

31-35	6	10.3	
36 and above			
Education			
Primary	8	13.7	
Secondary	13	22.4	
High secondary	15	25.8	
Graduate	17	29.3	
Post graduate	5	8.6	
Family			
Joint	38	65.5	
Nuclear	20	34.4	
Occupation			
Private job	12	20.6	
Government job	2	3.4	
Homemaker	44	75.8	
Area			
Urban	28	46.5	
Rural	30	52.4	
Income			
<10,000	16	27.5	
10,000-20,000	17	29.3	
>20,000	25	43.1	
Religion			
Hinduism	55	94.8	
Sikhism	2	3.4	
Islam	1	1.7	
Duration			
1-4	39	67.2	
5-9	12	20.6	
10 -15	6	10.3	
>15	1	1.7	



Type

Primary	48	82.7
Secondary	10	17.2

According to age in years, 36.2% of infertile women belonged to the 20–25 age group, 39.6% to the 26–30 age group, 13.7% to the 31–35 age group, and 10.3% to the 36–plus age group. 13.7% of infertile women had completed their basic education, 22.4% had completed their secondary education, 25.8% had completed high school, 29.3% had completed their undergraduate degree, and 8.6% had completed their graduate degree. The majority of infertile women (65.5%) came from mixed families, whereas 34.4% came from nuclear families. In terms of employment, there are 75.8% infertile women who stay at home, 20.6% infertile women in the private sector, and 3.4% in the public sector. Regarding location, 52.45 percent of infertile women live in rural areas, compared to 46.5% in urban areas. According to monthly income in rupees, 27.5% had income under \$10,000, 29.3% had income between \$10,000 and 20,000, and 43.1% had income beyond \$30,000. In terms of religion, the majority of women (94.8%) identify as Hindu, whereas 1.7% of infertile women identify as Muslim and 3.4% as Sikh. 67.2% of infertile women go into the category of marriages lasting 1-4 years, 20.6% of infertile women belong into the category of marriages lasting 5-9 years, 10.35% of infertile women fall into the category of marriages lasting 10-15 years, and 1.7% of infertile women fall into the category of marriages lasting more than 15 years. Type-wise, 82.7% of women had primary infertility and 17.2% women had secondary infertility.

Findings related to quality of life of infertile women. –

48.3% infertile women had good social response and 5.4% of infertile women had excellent and poor social response. Infertile women were emotionally healthy in 44.9% of cases, whereas they were emotionally deficient in 6.8% of cases. While 4.8% of infertile women had poor mental health, 34.4% of them had average mental health. Maximum 37.9% of infertile women had good tolerability, while the minimum

15.5% had poor tolerability. In terms of physical health, the majority 43.1% of infertile women had good level of physical health and 12.1% of infertile had poor level of physical health.

Findings related to level of stress in infertile women

67.2% of infertile women had moderate level of stress, 19.0% of infertile women had mild stress level and 13.8% of infertile women had severe degree of stress.

Association of level of stress and quality of life with selected demographical data.

Demographic variables	F	Quality of life		Level of stress		F		P	
		QOL	LOS	QOL	LOS	QOL	LOS	QOL	LOS
		Mean	SD	Mean	SD				
Age									
20 -25	21	85.95	21.53	49.28	10.98	0.73	0.98	0.5	0.4
26-30	23	80.69	16.68	48.47	7.80				
31-35	8	76.12	15.70	54	14.38				
36and above	6	77.83	14.49	54.83	12.82				
Education									
Primary	8	80.12	17.11	47.75	6.34	0.95	1.58	0.4	0.1
Secondary	13	75.46	20.25	54.92	12.31				
High sec.	15	88.53	17.87	48.66	6.46				
Graduate	17	82	17	47.35	11.35				
Post graduate	5	78.6	19.84	56	15.21				
Occupation									
Private job	12	83.58	16.59	45.33	9.49	0.09	0.14	0.91	0.14
Govt job	2	83	4.24	45.5	10.60				
Homemaker	44	81.09	19.17	51.72	10.58				

Family

Joint	38	79.76	19.41	49.52	10.17	0.09	2.00	0.2	0.5
Nuclear	20	85.3	15.51	51.45	11.40				

Area

Urban	28	84.18	16.40	50.03	11.30	0.82	0.49	0.4	0.69
Rural	30	80.68	19.91	49.75	10.11				

Income

<10,000	16	82.31	18.84	49.68	11.94	0.74	0.32	0.48	0.72
10,000-20,000	17	77.29	18.15	51.92	11.00				
>20,000	25	84.24	18.05	49.32	9.57				

Religion

Hinduism	55	82.18	17.91	50.30	10.61	2.19	1.21	0.12	0.30
Sikhism	2	86	14.14	54.5	2.1				
Islam	1	45		35					

Duration

1-4	39	84.48	19.62	49.17	10.92	1.01	0.73	0.27	0.53
5-9	12	77.33	12.97	50.5	8.00				
10-15	6	73.6	16.87	54.5	13.18				
>15	1	72		60	.				

Type

Primary	48	84.2917	17.74	49.5	9.51 6.28	1.19		0.01*	0.02*
---------	----	---------	-------	------	-----------	------	--	-------	-------

Secondary	10	69.1	15.66	53.5	14.77
-----------	----	------	-------	------	-------

Table depict that reveal age, education, occupation, family, income, area, religion, duration of marriage were found to be non-significant whereas type of infertility was found significant at the level of p value ≤ 0.05 in both quality of life and level of stress, as computed by ANOVA.

Hence it was found that type of infertility has definite association with quality of life as well as level of stress.

Discussion

An exploratory study conducted to assess to assess the level of stress and quality of life among infertile women in selected infertility clinics/hospitals of Himachal Pradesh. The result of the study showed that in terms of level of stress 19.0% of infertile women have mild stress followed by 67.2% were moderately stressed while 13.8% were severely stressed and quality of life of 3.4% infertile women were excellent, 67.2% were good and 29.3% were having average quality of life.

Limitation-Due to the sparse and dispersed population in the hilly areas, even though the sample size for the current study was reasonably sufficient, it still does not represent the entirety of the people in Himachal Pradesh. The study sample was confined only to the infertile women.

Conclusion-After the detailed analysis, this study leads to the following conclusion:- level of stress and quality of life among infertile women at Kamla Nehru State Hospital, Shimla shows that reproductive age 20-49 year, large population among the research sample is having good quality of life while they have moderate level of stress.

References

1. World Health Organisation . Infertility . Available on link <https://www.who.int/newsroom/factsheets/detail/infertility>.
2. The American College Of Obstetricians and Gynecologists .Treating Infertility . Available on Link <https://www.acog.org/womens-health/faqs/treating-infertility>
3. World Health Organisation. Infertility. 2023. Available on link <https://www.who.int/news/item/04-04-2023-1-in-6-people-globally-affected-byinfertility#:~:text=Around%2017.5%25%20of%20the%20adult,care%20for%20those%20in%20need> .
4. National Library Of Medicine .Socio- Demographic Correlates Of Women Infertility and Treatment Seeking Behaviour in India 2016. Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/pmc4842234/#:~:text=Result%20show%20that%20womens%20infertility,5%20percent%20and%20Assam%20>
5. .National Library of Medicine. Infertility. Available on link <https://medlineplus.gov/ency/artical/001191>.
6. Kansas city women health &ob Gny .Available on link <https://www.kcobgyn.com/blog>.
7. The pharmacist's resources for clinical excellence. Prevalence of infertility and its treatment among women 2018. Available on link <https://www.uspharmacist.com/article/prevalence-of-infertility-and-its-treatment--among-women>
8. PennMedicine. Female Infertility 2023. Available on Link <https://www.pennmedicine.org/for-patients-and-visitors/patientinformation/conditionstreated-a-to-z/female-infertility>.