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Research Article

Quality of Life of Infertile Women Attending Infertility Clinic Skims, Soura

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A B S T R A C T

Background: Infertility affects millions of people of reproductive age worldwide, and it has an impact on their families and communities. The absolute number of couples affected by infertility increased from 42.0 million in 1990 to 48.5 million in 2010. Disrupting fertility ultimately leads to stress for the woman. We conducted the study to assess the quality of life of infertile women.

Methodology: A quantitative research approach with descriptive design was used to select 80 infertile women through non-probability convenient sampling. Assessment of Quality of Life was done by using self-structured interview schedule and FertiQol. Setting of the study was Infertility Clinic, SKIMS, Soura.

Results: The findings of the present study revealed that higher number of respondents (60%) had low QoL, whereas 26.3% had good QoL and minimum number of respondents 13.8% had better QoL. The mean score of fertiQoL domains which was the most affected with lowest score were emotional domain (32.9± 18.1) and mind body domain (35.8 ± 16.6) compared to relational, social domain (68.2 ± 10.0 and 42.1 ± 12.6) Enviroment (62.4 ± 10.1) and Tolerability (64.1 ± 16.5) respectively. There is a significant relationship between respondents' quality of life scores and socio-demographic and clinical variables for age, place of residence, duration of marriage, duration of childlessness, and infertility treatment initiation (p-value = 0.05).

Conclusion: All infertile women experienced a reduction in their Quality of Life. The maximum number of respondents had a low quality of life due to trauma from childlessness, emotional instability, stress, and an inability to cope with the condition. The emotional and mind-body domains were the most affected across all domains, suggesting a need for significant improvement in specific counselling modalities to enhance treatment.

Keywords: Infertile women, Quality of life, Infertility Clinic, FertiQol, Infertility treatment

Introduction

Infertility refers to the inability to conceive after 12 months or more of regular, unprotected sexual activity [1]. Infertility affects millions of people of reproductive age worldwide, and it has an impact on their families and communities. he absolute number of couples affected by infertility increased from 42.0 million in 1990 to 48.5 million in 2010 [2]. Although not a fatal medical condition, infertility does have negative ramifications on various psychological, emotional, social, and financial aspects of the life of an individual suffering from it, as shown by ample studies conducted worldwide. [1]

Most infertile individuals experience stress and tension and are less satisfied with their lives than their fertile counterparts [2]. Infertility has negative consequences for mental, interactive, and sexual health. Today, nearly every fifth couple of reproductive age experiences problems having children, and the World Health Organisation considers infertility a social disability [3]. In every society, there are certain norms according to which its members should act. From a sociological perspective, society treats childlessness as a deviation from the norm, leading to a negative assessment of infertility. The couple's thoughts about marriage are directly impacted. Being childless is considered a reason for marriage to be dysfunctional.

A cultural, social, and environmental context embeds the subjective evaluation of quality of life. Several factors, including individual and societal ones, influence the quality of life. The welfare and tranquility of life, the potential economic, social, and physical symptoms, and the presence of a disability or disease can all be considered aspects of quality of life[4].

The fertility rate for India in 2023 was 2.139 births per woman, a 0.93% decline from 2022. In 2022, it was 2.159 births per woman, a 0.92% decline from 2021. In 2021, it was 2.179 births per woman, a 0.95% decline from 2020. In 2020, it was 2.200 births per woman, a 0.9%decline from 2019 [5].

Need For The Study

The incidence of infertility is increasing rapidly worldwide. According to Katoleet al. [6], it affects almost 10% of the world's population; there are 15–20 million people who are suffering from infertility in India. According to World Health Organisation (WHO) statistics, large numbers of people are affected by infertility in their lifetime. According to anew report published on April 4, 2023, around 17.5% of the adult population roughly 1 in 6 people worldwide experiences infertility[7]. According to Yazdi et al. 2020, 186 million people are suffering from infertility worldwide [8]. Approximately 27.5 million couples who are actually trying to conceive suffer from infertility in India. In Jammu and Kashmir, the prevalence of infertility is 15% [9].

Bayoumi, Koert, Boivin, Viswanath, and McConnell (2021)[10] conducted an explanatory sequential design in a fertility clinic in Sudan on 102 participants to assess the quality of life. The study results revealed that the mean FertiQoL core score was 76.02 ± 16.26, with domain scores as emotional (71.61 ± 22.04), relational (78.06 ± 16.62), mind/body (74.06 ± 22.53), and social (78.88 ± 18.24). The study concluded that infertility negatively impacted the QoL of participants in this study, and women were worse off. We should encourage infertile individuals to seek social and professional support, as cognitive appraisal, social support, and pressure may be key factors influencing their Quality of Life.

Women in Kashmir have experienced a "rise in infertility from 12% to 18% over the past two decades." According to the 2019–2020 National Family Health Survey, the total fertility rate (TFR) in Jammu and Kashmir was 1.4 children per woman, which has declined from 2 children per woman in 2015–16. Indian census data from 2018 also revealed that the fertility rates in Jammu and Kashmir had decreased to 1.6 from 2.3 in 2007. [11]

Women associate childbearing with stabilizing their marriages, forging closer bonds with their families, and anticipating happiness and family harmony. The research studies and the investigators' personal experiences during clinical postings reveal that infertility negatively impacts an infertile woman's quality of life across all domains, including emotional, relational, physical, and social aspects. While infertility is a distressing emotional experience, societal and parental pressure to perpetuate the family name also imposes a psychological burden, impacting the relationship status and physical health of infertile women. Therefore, it has a negative repercussion on the quality of life.

Therefore, the investigator became motivated to conduct a study on the quality of life, which will also serve as a data base for future research in this field.

Methodology

A quantitative research approach with descriptive design was selected to carry out this study. Permission was obtained from the concerned authorities of SKIMS Soura, Srinagar to conduct the final study. Ethical clearance was obtained from Institutional Ethical Committee (IEC). Permission was also obtained by taking informed consent individually from each infertile woman, prior to their inclusion as sample in the study. Privacy, confidentiality, and anonymity were being guarded. Non probability convenient sampling technique was used for selection of 80 infertile women attending Infertility Clinic. Data was collected by using self-structured proforma and FertiQoL. Content validity and reliability of tool was ascertained. Pilot study determined the study was feasible and researchable.

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Results

The age group of 31–40 years accounted for a higher number of respondents (53.7%), while the majority of respondents (76.2%) married between the ages of 20–30 years. Two-thirds (63.7%) of respondents were from rural areas, while one-third (36.3%) were from urban areas. Almost two-thirds of respondents (67.5%) belonged to joint families; the maximum number of respondents (38.7%) had primary educational status; the majority of the respondents (81.2%) were unemployed; and the maximum number of respondents (72.6%) had a family monthly income of Rs. 10,000–20,000. The highest number of respondents had a marriage duration of more than 5 years (33.7%), and an equal number of respondents had a marriage duration of 2 years (26.3%) and 3 years (27.7%). Nearly equal numbers of respondents reported having been childless for 2 years (40%) and for more than 5 years (36.2%). Almostmore than half of the respondents (55%) had co-morbidity, and a higher number of respondents had hypothyroidism (41%), followed by PCOD (20%). The maximum number of respondents (41.2%) had initiated their infertility treatment within 1 year, and the majority of the respondents (92.5%) had undergone pharmacological treatment for infertility. (Tables 1 and 2)

These findings were consistent with the studies conducted by Abbasi and Kousar[12], Bose and Roy [13], Sher, Kausar, Naz, Kausar, Shabir[14], Suleiman, August, Nanyaro, Wangwe, Kikula, Balandya, et al. [15].

The majority of respondents (60%) reported a low quality of life, indicating significant room for improvement in their perceived quality of life. A smaller portion (26.3%) experiences a good or better quality of life, and only 13.8% rate their QOL in the better range. (Table 3)

The study by Sher, Kausar, Naz, Kausar, and Shabir[14] yielded similar findings.

It was found that the most affected domain had the lowest scores in the emotional (32.9± 18.1) and mind/body (35.8± 16.6), social (42.1± 12.6), relational (68.2± 10.0), environment (62.4± 10.1), and tolerance (64.1± 16.5) areas of fertiQoL. This means that the emotional and mind/body areas were the most affected, while the relational and social areas had the highest scores (68.2± 10.0 and 42.1 ± 12.6). (Table 4)

The study by Priangga, Pratama, Maidarti, Harzif, Wiweko[16], Bayoumi, Koert, Boivin, Viswanath, McConnell [17], Dutta, Deepta, Dasgupta, Aparajita, Roy, Soumit, et al. [18] yielded similar findings.

There is a significant relationship between respondents' quality of life scores and socio-demographic and clinical variables for age, place of residence, duration of marriage, duration of childlessness, and infertility treatment initiation (p-value = 0.05). (Table 5)

These findings were consistent with the study conducted by Wdowiak, Bakalczuk, Janczyk, and Makara-Studzińska[19].

Table 1.Signs and Symptoms for the Initial Approach to Bacterial CAP

n=80

Socio-Demographic Variables	Categories	Frequency(f)	Percentage (%)
Age	20-30 years	34	42.6%
	31-40 years	43	53.7%
	>40 years	3	3.7%
Age At Marriage	20-30 years	61	76.2%
	31-40 years	18	22.6%
	>40 years	1	1.2%
Place of Residence	Urban	29	36.3%
	Rural	51	63.7%
Type of Family	Nuclear	26	32.5%
	Joint	54	67.5%
Educational Status	Primary	31	38.7%
	Secondary	20	25%
	Higher Secondary	14	17.6%
	Graduate and above	15	18.7%
Employment	Unemployed	65	81.2%
	Government	3	3.8%
	Private	3	3.8%
	Self employed	9	11.2%

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Family Income	Rs.10,000- 20000	58	72.6%
	Rs.21000-30000	12	15%
	Rs.31000-40000	3	3.7%
	>Rs.40000	7	8.7%
Duration of Marriage	2 years	21	26.3%
	3 years	22	27.7%
	4 years	10	12.5%
	>=5 years	27	33.7%

Table 2.Frequency and percentage distribution of respondents according to clinical variables

n=80

Clinical Variables	Catrgories	Frequency(f)	Percentage(%)
1. Duration of Childlessness	2 years	32	40%
	3 years	13	16.2%
	4 years	6	7.6%
	>=5 years	29	36.2%
2. Any Co- morbidity	No	36	45%
	Yes	44	55%
If yes, specify	Endometrial cyst	3	7%
	Fibroid	3	7%
	Hypertension	3	7%
	Hypothyroidism	18	41%
	PCOD	9	20%
	Cyst	3	7%
	Sulphangostomy	1	2%
	Tubal block	6	9%
3. Infertility treatment initiation	No	0	0%
	Yes	80	100%
If yes, since how long	1 year	33	41.2%
	2 years	11	13.8%
	3 years	12	15%
	>=4 years	24	30%
4. Type of treatment	Pharmacological treatment	74	92.5%
	ART	6	7.5%

Table 3.Frequency and percentage distribution of level of Quality of Life

n=80

Criteria Measure Of Qol Score		
Level Of Scores	**Frequency**	**Percentage**
Better Qol.(61-100)	11	13.8%
Good Qol.(51-60)	21	26.3%
Low Qol.(0-50)	48	60.0%

Maximum: 100, Minimum: 0

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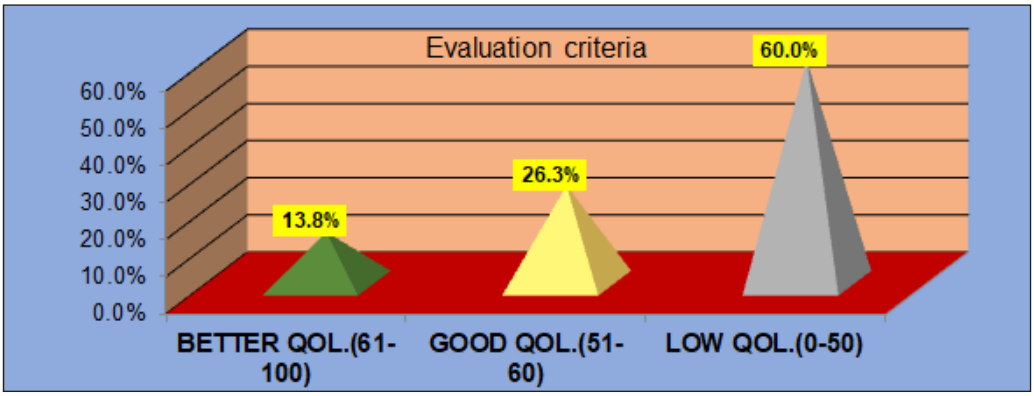

Figure 1.Pyramidal diagram showing the percentage distribution of respondents according to level of Quality of Life

The findings of the present study revealed that higher number of respondents (60%) had low QoL, whereas 26.3% had good QoL and minimum number of respondents 13.8% had better QoL

Table 4.Mean and Standard deviation of domains of Quality of Life

Descriptive Statistics	Emotional	Mind/Body	Relational	Social	Environment	Tolerability
Mean	32.9	35.8	68.2	42.1	62.4	64.1
S.D.	18.1	16.6	10.0	12.6	10.1	16.5

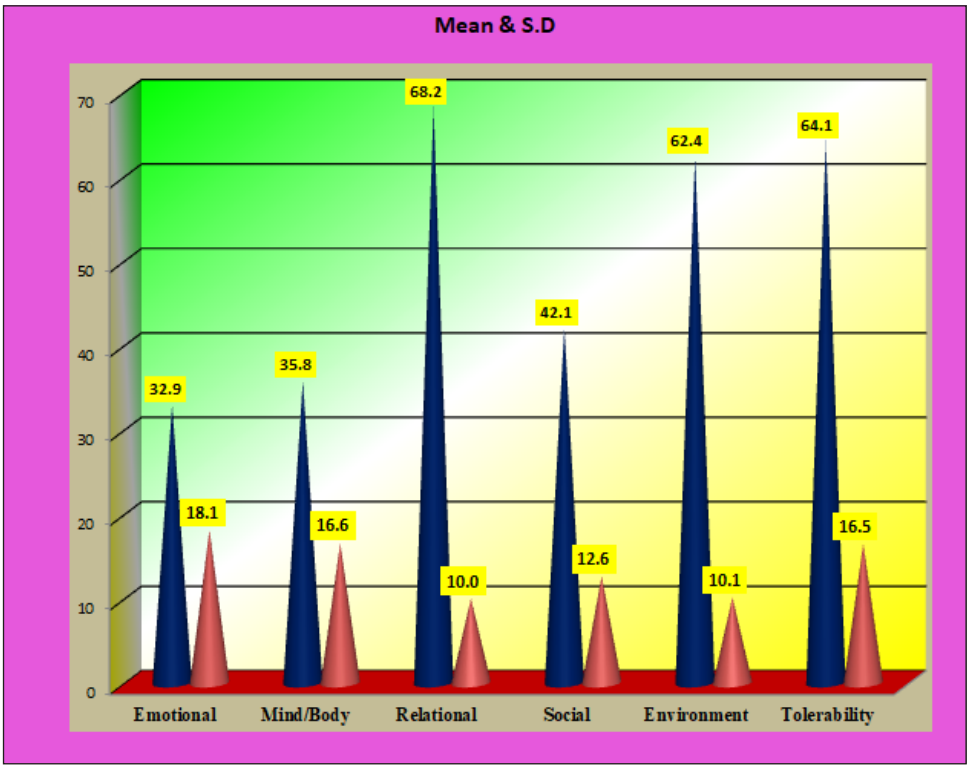

Figure 2.Conical diagram showing the mean and standard deviation of respondents according to domains of Quality of Life

The mean score of fertiQoL domains which was the most affected with lowest score were emotional domain (32.9± 18.1) and mind body domain (35.8 ± 16.6) compared to relational (68.2 ± 10.0), social domain (42.1 ± 12.6) Enviroment (62.4 ± 10.1) and Tolerability (64.1 ± 16.5) respectively

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Table 6. Association of Quality of life scores of respondents with their selected demographic and clinical variables

n=80

Demographic / Clinical Data		Levels Of Qol (N=80)			Association With Qol Score				
Variables	**Options**	**Better Qol**	**Good Qol**	**Low Qol**	**Chi Test**	**p Value**	**df**	**Table Value**	**Result**
Age	20-30 years	6	10	18	9.879	0.043	4	9.488	* Significant
	31-40 years	3	11	29					
	>40 years	2	0	1					
Age At Marriage	20-30 years	6	17	38	4.448	0.349	4	9.488	Non Significant
	31-40 years	5	4	9					
	>40 years	0	0	1					
Place of Residence	Urban	6	13	10	12.511	0.002	2	5.991	* Significant
	Rural	5	8	38					
Type of Family	Nuclear	2	8	16	1.343	0.511	2	5.991	Non Significant
	Joint	9	13	32					
Educational Status	Primary	3	7	21	5.201	0.518	6	12.592	Non Significant
	Secondary	2	7	11					
	Higher Secondary	2	5	7					
	Graduate and above	4	2	9					
Employment	Unemployed	11	16	38	5.462	0.486	6	12.592	Non Significant
	Government	0	0	3					
	Private	0	1	2					
	Self employed	0	4	5					
Family Income	Rs.10,000- 20000	6	16	36	3.883	0.692	6	12.592	Non Significant
	Rs.21000-30000	3	3	6					
	Rs.31000-40000	0	1	2					
	>Rs.40000	2	1	4					
Duration of Marriage	2 years	8	5	8	16.047	0.014	6	12.592	* Significant
	3 years	2	7	13					
	4 years	0	2	8					
	>=5 years	1	7	19					
Duration of Childlessness	2 years	10	8	14	15.698	0.015	6	12.592	* Significant
	3 years	0	5	8					
	4 years	0	1	5					
	>=5 years	1	7	21					
Any Co-morbidity	No	5	9	22	0.053	0.974	2	5.991	Non Significant
	Yes	6	12	26					
Infertility treatment initiation	No	0	0	0		N.A		N.A	-
	Yes	11	21	48					

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If yes, since how long	1 year	11	7	15	21.967	0.001	6	12.592	* Significant
	2 years	0	3	8					
	3 years	0	6	6					
	>=4 years	0	5	19					
Type of treatment	Pharmacological treatment	11	20	43	1.707	0.426	2	5.991	Non Significant
	ART	0	1	5					
How would you rate your health?	Very poor	0	1	2	12.356	0.136	8	15.507	Non Significant
	Poor	1	2	17					
	Nor good nor poor	6	7	18					
	Good	4	10	11					
	Very good	0	1	0					
Are you satisfied with your quality of life?	Very dissatisfied	0	0	3	15.353	0.053	8	15.507	Non Significant
	Dissatisfied	0	2	11					
	Neither satisfied nor dissatisfied	2	6	19					
	Satisfied	8	12	15					
	Very satisfied	1	1	0					

*Significance at 0.05 level

Conclusion

The majority of the respondents reported low quality of life, indicating significant room for improvement in their perceived QOL. A smaller portion experience a good quality of life, and only a few rate their QOL in the best range. These insights suggest that targeted interventions could be beneficial to improving the overall quality of life among the study population.Also, elderly women suffer more than younger women due to their lower quality of life. Similarly, women residing in rural areas had a lower quality of life than women residing in urban areas due to the non-availability of treatment modalities. As the duration of marriage and the number of years from treatment initiation increase, the quality of life deteriorates due to a lack of knowledge about treatment modalities, adherence, and follow-up.

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