



A Study of Quality of Life, and Psychiatric Comorbidities in Infertility Women in North West Rajasthan

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Abstract

Background: Infertility challenges the infertile couple's life expectations. It is an unplanned and unexpected stressor and hence couples typically lack the knowledge and skill set to adequately manage stress related to infertility. In this study to determine the quality of life & psychiatric co-morbidities in infertile women.

Material & Methods: The present study conducted in psychiatry clinic in S.P. Medical College, Bikaner, Rajasthan. The sample comprise of 60 consecutive Infertile women attending Gynaecology OPD of S.P. Medical College, Bikaner & those who fulfilling the specific criteria was included in the study. Sixty ages matched healthy fertile women who had similar socio demographic profile (preferably relatives of the infertile women) was recruited as control group. Prior to participation in the study a full informed written consent was taken from the participants. Complete confidentiality was ensured to them.

Results: In our study showed the maximum no. of cases seen in third decade (total 62) followed by forth decade ($n=31$ in both) in both groups. There were no significant differences when the socio-demographic parameters of the group were compared in terms of age, educational level and employment status, religion, living situation and type of family. In present study show the physical health score, psychological score and quality of life score were highly significant ($p<0.0001^{***}$) but social relationship score and environment score are significant ($p=0.0046^{**}$ and $p=0.0049^{**}$ respectively).

Conclusion: The study was conducted in a tertiary hospital and is representative of the flow of patients at this hospital. So the findings from this study cannot be generalized. The sample size of the present study was small and the findings need to be explored further with a larger sample size.

Keywords: Infertility, Comorbidity, Sociodemographic, Quality of Life.

Introduction

Infertility has been reported as an important stressor and life critical point in different cultural settings¹. Infertility in many parts of the world has

damaging concomitant for men's and women's health. Due to the high cultural premium placed on childbearing in many countries, infertility often poses serious social problems for couples². Cross-

culturally, infertility is recognized as a stressor event with the potential to cause destruction in the lives of individuals, couples and families³.

Social stigma of infertility can have lifelong outcomes, “affecting a woman for the remainder of her life, preventing succeeding marriage, and making her economically unprotected.” Childlessness results in social stigmatization for infertile women and places them at risk of serious social and emotional consequences. It is a source of distress for couples as societal norms and distinguish religious platitude may equate infertility with failure on a personal, interpersonal, emotional or social level. Women bear the impact of these societal perceptions in most of the cases. Psychologically, the infertile woman display significantly higher psychopathology in the form of tension, hostility, anxiety, depression, self-blame and suicidal ideation⁴. Infertility is an intergenerational crisis which threatens the family and the extended family’s future.

The inability of family members to understand and discuss reproductive loss is ubiquitous, possibly because family members themselves are experiencing their own losses, such as the parents of the infertile couple never becoming grandparents. In short, not having children may decrease social recognition, and involuntary childlessness may lead to a sense of failure and disappointment, that, in turn, should lower people’s sense of well-being.

Women worldwide appear to bear the major burden of infertility, in terms of blame for the reproductive failing; personal anxiety, frustration, grief, and fear; marital duress, abuse, divorce, polygamous remarriage, or abandonment; and social stigma and community ostracism. Sociologists believe that childlessness is also a common cause of divorce. Most of the studies indicate that marital breakdown is clearly associated with childlessness⁵.

Infertility is often experienced as a biopsychosocial crisis accompanied by adverse cognitive-performance and affective outcomes, such as overgeneralization of the loss of control

over reproduction to other aspects of life, hopelessness, feelings of unfulfillment, inability to plan for the future and compromised ability to find alternate goals and meaning in life, social withdrawal, anxiety and depression.

Fertility is a basic component of reproductive health. Prevention of infertility as well as appropriate treatment of infertility is essential part of reproductive health. In humans, infertility may be described as inability of a woman to either conceive or carry out pregnancy to full term.²⁴ Infertility is defined as 1 year of unprotected intercourse without pregnancy. This condition may be further classified as primary infertility, in which no previous pregnancies have occurred, and secondary infertility, in which a prior pregnancy, although not certainly a live birth, has occurred.⁶ Infertility challenges the infertile couple’s life expectations. It is an unplanned and unexpected stressor and hence couples typically lack the knowledge and skill set to adequately manage stress related to infertility. Coping has been defined in psychological terms as “constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are exceeding the resources of the person”. Couples with infertility engage in a variety of coping strategies in an attempt to regain control over their lives and rebalance the disruptions that they have experienced in their personal, marital and social relationships.³² The present study to determine the quality of life & psychiatric co-morbidities in infertile women.

Material & Methods

The present study conducted in psychiatry clinic in S.P. Medical College, Bikaner, Rajasthan. The sample comprise of 60 consecutive infertile women attending those who fulfilling the specific criteria were included in the study. Sixty ages matched healthy fertile women who had similar socio demographic profile (preferably relatives of the infertile women) was recruited as control group. Prior to participation in the study a full informed written consent was taken from the

participants. Complete confidentiality was ensured to them.

Inclusion Criteria

- 1) Aged between 18 and 45 years.
- 2) Living with husband for at least last one year having unprotected sexual intercourse.
- 3) Patients diagnosed as infertile women by consultant gynecologist.
- 4) Cooperative and ready to give consent.
- 5) Able to understand the questionnaire.

Exclusion Criteria

- 1) Infertile married women age less than 18 years and more than 45 years.
- 2) Not living with husband for at least last one year.
- 3) Uncooperative and unwilling to give consent.
- 4) Having incapacitating medical or surgical illness.
- 5) Women with secondary infertility.
- 6) Unmarried women.
- 7) Husband with infertility.

Subjects were thoroughly evaluated on the especially designed proforma, which includes identification data (name, age, sex etc.) and socio demographic details (education, occupation, marital status etc.). Patients' clinical profile was also recorded. Diagnosis of psychiatric disorder was made by using ICD-10 criteria and diagnosis was confirmed by a consultant Psychiatrist.

Tools of Study

- 1) A Semi structured specially designed proforma that includes socio demographic details and clinical profile of patients.
- 2) WHO Quality of Life – BREF Scale, Hindi (version).
- 3) Goldberg's Health Questionnaire (GHQ-12).

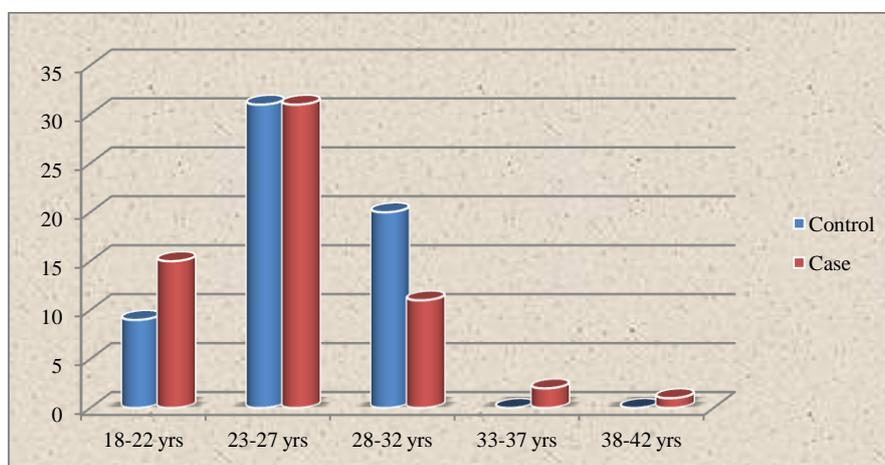
Result

In our study showed the maximum no. of cases seen in third decade (total 62) followed by forth decade (n=31 in both) in both groups (table 1). There were no significant differences when the socio-demographic parameters of the group were compared in terms of age, educational level and employment status, religion, living situation and type of family. (table 2,3 & 4)

In present study the table 5 show the physical health score, psychological score and quality of life score were highly significant ($p < 0.0001^{***}$) but social relationship score and environment score are significant ($p = 0.0046^{**}$ and $p = 0.0049^{**}$ respectively).

Table 1: Age wise distribution of patients in case & control group

Age Group	Control	Case
18-22 yrs	9	15
23-27 yrs	31	31
28-32 yrs	20	11
33-37 yrs	0	2
38-42 yrs	0	1
Total	60	60



Graph 1: Age wise distribution of patients in case & control group

Table 2: Religion & Domicile wise distribution of patients in case & control group

		Control	Case	Chi-Square test	P-value
Religion	Hindu	50 (83.33%)	53 (88.33%)	0.274	0.601
	Muslim	10 (16.66%)	7 (11.66%)		
Domicile	Urban	47 (78.33%)	49(81.66)	0.052	0.819
	Rural	13 (21.66%)	11 (18.33%)		

Table 3: Socio-demographic profile of patients in case & control group

		Control	Case	Chi-square test	P-value
Education	Illiterate	3 (5%)	4 (6.6%)	7.613	0.268
	Primary	9 (15%)	2 (3.3%)		
	Middle	15 (25%)	19 (31.66%)		
	Secondary	6 (10%)	6 (10%)		
	Sr. Secondary	3 (5%)	8 (13.33%)		
	Graduate	18 (30%)	15 (25%)		
	Post graduate	6 (10%)	6 (10%)		
Occupation	Unemployed	0 (0%)	0 (0%)	19.714	0.0001***
	Self employed	15 (25%)	6 (10%)		
	Housewife	33 (55%)	51 (85%)		
	Farmer	1 (1.6%)	0 (0%)		
	Labour	10 (16.66%)	0 (0%)		
	Any other	1 (1.6%)	3 (5%)		
Self monthly income	No income	34 (56.66%)	55 (91.66%)	25.773	0.0001***
	< 5000 rs	7 (11.66%)	4 (6.66%)		
	5001-15000 rs	15 (25%)	0 (0%)		
	15001-25000 rs	0 (0%)	1 (1.6%)		
	>25000 rs	4 (6.66%)	0 (0%)		

Table 4: Family profile of case and control group

		Control	Case	Chi- square test	P-value
Family type	Joint	6 (10%)	20 (33.33%)	9.639	0.008
	Nuclear	29 (48.33%)	22 (36.66%)		
	Extended Nuclear	25 (41.66%)	18 (30%)		
Family Size	<5	30 (50%)	26 (43.33%)	1.886	0.390
	5-10	27 (45%)	33 (55%)		
	>10	3 (5%)	1 (1.66%)		
Family Income	< 5000 rs	0 (0%)	1 (1.66%)	10.687	0.017
	5001-15000 rs	24 (40%)	40 (66.66%)		
	15001-25000 rs	10 (16.66%)	7 (11.66%)		
	>25000 rs	26 (43.33%)	12 (20.0%)		
Psychiatric H/o in family	Yes	0 (0%)	0 (0%)		
	No	60 (100%)	60 (100%)		
Family H/o in Infertility	Yes	0 (0%)	3 (5%)	1.368	0.242
	No	60 (100%)	57 (95%)		
Type of Marriage	Arrange	58 (96.66%)	57 (95%)	0.000	1.000
	Love	2 (3.33%)	3 (5%)		

Table 5: Shows the various domain in case and control group

Domain	Control	Case	Difference of mean	P-value
Physical Health score	67.83± 12.23	56.10± 14.48	11.73± 2.448	<0.0001***
Psychological Score	62.32± 14.55	44.97± 14.49	17.35± 2.65	<0.0001***
Social Relationship Score	57.53± 14.72	49.57± 15.48	7.967± 2.758	0.0046**
Environmental Score	58.10± 10.87	52.58± 10.21	5.517± 1.926	0.0049**
Total Qol Score	61.38± 11.33	50.80± 11.66	10.57± 2.10	<0.0001***

Discussion

This present study estimated the quality of life in fertile and infertile women. Based on our results, age is one factor affecting the quality of life. Khyata et al., reported that aging caused a reduction of the quality of life in infertile women⁷. In contrast, a study showed that long-term treatments in infertile couples caused better accept of their living conditions and hence increase the quality of life in older infertile couples⁸.

The findings emerged from the study indicate that the major dimension quality of life of infertile women is lower than in fertile women. Infertile women have a worse situation, in the mean scores: physical function, role limitations due to physical problems, general health, vitality, social functioning, role limitations due to emotional problems and mental health. Other studies have shown that infertility is a devastating and painful experience, especially for women. Consistent with our results, a study showed that infertile women experience more feelings of helplessness in comparison to fertile women. Also, infertile women are more at risk of mental and emotional disorders, depression, anxiety, low self esteem and marital dissatisfaction. Apart from infertility factors, even when the male infertility is diagnosed, infertile women can experience anxiety more than fertile women⁹.

Researchers have studied different dimensions of infertility impacts on couples. They concluded that infertility can be considered as life crisis, chronic illness and the combination of these. Due to the complicated treatments and high levels of stress, infertility has become a feature of chronic physical illness¹⁰. Other studies have confirmed the reduced quality of life after infertility^{11,12}.

A study by Ramezanzadeh et al found that depression was more common in “unexplained cause” group comparing to other causes of infertility¹³ Studies by Wright J¹⁴, Sabourin S¹⁵, Tarlatzis I¹⁶, have also found that infertile women showed higher rates of psychiatric symptoms than their partners, especially in female and unexplained factor infertility.

Due to the medicalization of the problem of infertility, the priority of the specialized infertility centres is the treatment of the physical problems. The psychological problems are often neglected and not given their due importance. Ignoring the psychological factors and merely considering infertility as a medical problem will therefore create huge obstacles in understanding & treating such individuals from a holistic point of view. Hence, infertile women should be routinely evaluated for psychological disturbances and psychiatric morbidity to maximize their health.

Conclusion

The study was conducted in a tertiary hospital and is representative of the flow of patients at this hospital. So the findings from this study cannot be generalized. The sample size of the present study was small and the findings need to be explored further with a larger sample size.

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