



Assessment of Level of Stress and Coping Strategies Adopted by Couples Seeking Treatment for Infertility in Hospitals of Selected Areas

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Abstract

Introduction: The child is an important member in the family, having children is in fact a part of marriage. In most of the societies, children are considered as a natural result of union of man and a woman in the institution of marriage. In all cultures, being pregnant or to produce a child is considered as a major event in the family. If a couple fails to conceive for a year after regular sexual intercourse without contraception, they are called infertile.

Objectives: The study assessed the level of stress and coping strategies adopted by couples seeking treatment for infertility.

Methods: A non-experimental, exploratory, and descriptive method was used to assess stress and coping. The data were collected from 60 couples seeking treatment for infertility using a semi-structured questionnaire and Modified Likert Scale from the selected hospitals of Pune.

Results: Data analysis reveals that 61.7% of the husbands had moderate stress whereas only 30% was found in wife. About 70% of wife had mild stress and 33.3% was found among husband. About 5% of severe stress was observed in husband whereas wife had none. About 78.33% of the husband had average coping whereas 65% was found in wife. About 23.33% wives had good coping and 13.3% was found in husband. Poor coping was found in 11.66% of the wives and 8.3% among husband. Stress among wives was found to have significant association with demographic variable "religion" compared to others.

Conclusion: The present study shows that majority of the couples were able to cope though they had stress regarding infertility.

Keywords: Level of stress, coping strategies, couples, infertility, and treatment

INTRODUCTION

Parenthood is a fundamental human need. The urge to reproduce is virtually universal. Every human being has desire to become a parent and look after his or her children. The

very desire for parenthood is a step in direction of creating a family.^[1] Parenthood is considered as one of the major transitions in adult life for both men and women. The stress of the non-fulfillment of a wish for a child has been associated with emotional sequel such as anger, depression, anxiety, marital-problems, sexual-dysfunction, and social-isolation. Women experience stigma, sense of loss, and diminished self-esteem in the setting of their infertility. In general, infertile-couples women show higher levels of distress than their male partners. However, men's response to infertility closely approximates the intensity of women's responses when infertility is attributed to a male factor. Both men and women experience a sense of loss of identity and have pronounced feelings of defectiveness and incompetence.^[2]

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Infertility means sterile, barren, unproductive, unfruitful, and arid. From a fundamental level, these associations carry stigma and severe psychological and relational consequences for couples who may have a medical condition that prevents them from having an easy conception. The inability to achieve pregnancy is one most emotionally painful challenge a couple can face. It is estimated that one in every six couples face infertility. The psychological and relational impacts of infertility include a multitude of distress-related symptoms.^[3]

Infertility is a world-wide problem affecting people of all communities, though the cause and magnitude may vary with geographical location and socioeconomic status. Approximately 8–10% of couples within the reproductive age group present for medical assessment, generally following 2 years of failed efforts to reproduce.^[4] It is estimated that globally between 60 and 80 million couples suffer from infertility every year, of which probably between 15 and 20 million are in India alone.^[5] In India, there are 40% of infertile couples and the main cause of infertility is because of man and in some cases, there are 10% seen in both man and woman.^[6]

Infertility affects 72.4 million people worldwide and has been named a major medical and social problem by the World Health Organization.^[7] In India, it is reported that 70% of women experiencing infertility are punished with physical violence for their failure.^[8] In China, especially in the countryside, where social health insurance is less than ideal, children, especially sons, are regarded as sources of income and security in old age. Women who are unable to give birth tend to be involved in marital conflict, and a part of them face the threat of divorce.^[9]

Infertility has focused on individual, primarily the women are subject to multiple stressors often getting little recognition or support for their diverse roles. Although stress is a natural part of life, research indicates that prolonged or extreme stress can have a negative effect on a woman's health. It speculates that women's distress levels are higher than men's because women's identities and sense of self-worth are linked to domesticity and child rearing a dominant construction of femininity in our society. Women report significantly greater levels of infertility-related concerns regarding depression, self-esteem issues, relationship distress, identity and role loss issues, anxiety, life satisfaction, sexuality, and self-blame compared to males.^[10]

About 15% of couples had more than one cause for their infertility. It is therefore important to make complete investigations from the outset rather than focusing treatment on the first cause identified.^[11] Data from Western communities, where no artificial methods are used to control fertility, show a gradual decline in fertility with age that becomes more after 40 years and approaches 0 by 49 years. Increasing age of male and female partners and reduced vital frequency may also influence this decline.^[12]

Everyone should have a healthy diet, rich in fresh fruits and vegetables, whole grains, and replacing animal fats with

monounsaturated oils and fish oils. A study in 2002 found that infertile men who took zinc (60 mg) and folic acid (5 mg) supplements daily for 6 months increased their sperm counts by 74%. Researchers in India discovered an antioxidant, lycopene, which is found in watermelon, grapes, tomatoes, and some sorts of shellfish, can boost sperm concentrations in infertile men.^[13]

Most couples cope with infertility, but some require professional help. Counseling could take the form of a support group, individual sessions, or couple therapy whichever is most appropriate for the problem. The infertility team can offer support and advice and that might be helpful for the couple to cope with infertility.^[14]

Table 1: Distribution of subjects in relation to demographic data (n=60)

Demographic variables	Husband		Wife	
	f	%	f	%
Age				
20–25 years	3	5.0	11	18.3
26–30 years	14	23.3	26	43.3
31–35 years	30	50.0	18	30.0
36–40 years	11	18.3	5	8.3
Above 40 years	2	3.3	0	0.0
Religion				
Hindu	50	83.3	50	83.3
Muslim	6	10.0	6	10.0
Christian	4	6.7	4	6.7
Education				
Primary	0	0.0	6	10.0
Secondary	3	5.0	12	20.0
Graduate	31	51.7	24	40.0
Postgraduate	26	43.3	18	30.0
Occupation				
Private sector	43	71.7	15	25.0
Housewife	0	0.0	37	61.7
Government	4	6.7	6	10.0
Business	13	21.7	1	1.7
Farming	0	0.0	1	1.7
Monthly income of the family				
5000–10,000/month	2	3.3	2	3.3
10,001–15,000/month	11	18.3	11	18.3
15,001–20,000/month	18	30.0	18	30.0
20,001 and above	29	48.3	29	48.3
Type of family				
Nuclear	40	66.7	40	66.7
Joint	6	10.0	6	10.0
Extended	14	23.3	14	23.3
Duration of marriage				
1–2 year	4	6.7	4	6.7
2–3 years	15	25.0	15	25.0
3–4 years	15	25.0	15	25.0
4–5 years	15	25.0	15	25.0
Above 5 years	11	18.3	11	18.3
Treatment is been provided by				
Private hospitals	54	90.0	54	90.0
Charity hospitals	6	10.0	6	10.0
Any personal habits				
Alcohol	3	5.0	1	1.7
Smoking	2	3.3	2	3.3
No addiction	55	91.7	57	95.0
Any Medical Illness				
Yes	0	0.0	6	10.0
No	60	100.0	54	90.0

METHODS AND MATERIALS

Table 2: Level of stress among couples seeking treatment for infertility ($n=60$)

Stress	Husband		Wife	
	<i>f</i>	%	<i>f</i>	%
Mild (Score 20–40)	20	33.3	42	70.0
Moderate (Score 41–60)	37	61.7	18	30.0
Severe (Score 61–80)	3	5.0	0	0.0

Table 3: Level of coping adopted by couples seeking treatment for infertility ($n=60$)

Coping	Husband		Wife	
	<i>f</i>	%	<i>f</i>	%
Poor (Score 20–40)	5	8.3	7	11.66
Average (Score 41–60)	47	78.33	39	65
Good (Score 61–80)	8	13.33	14	23.33

A non-experimental, exploratory, and descriptive method was conducted to assess stress and coping strategies among couples seeking treatment for infertility from the selected hospitals. Sixty couples were selected with the help of non-probability purposive sampling technique. Reliability analysis was done with the help of split half method. Permission was obtained prior from the ethical committee of the institution. Permission from the hospital authority of the selected hospitals were taken. Informed written consent was taken prior to the study from the study subjects. The subjects were informed about their voluntary participation and they had freedom to withdraw from the study. The subjects were assured that confidentiality of the information would be maintained. The tool used for data collection was a semi-structured questionnaire and Modified Likert Scale for the assessment of level of stress and coping strategies was developed for the study. Reliability analysis of the tool was done with the help of split half method.

Table 4: Association of stress among husbands seeking treatment for infertility with demographic variables ($n=60$)

Demographic variables	Mild	Moderate	Severe	<i>P</i> -value	Significance at 0.05 level
Age					
20–25 years	1	2	0	0.949	Not significant
26–30 years	6	7	1		
31–35 years	9	19	2		
36–40 years	3	8	0		
Above 40 years	1	1	0		
Religion					
Hindu	17	30	3	0.139	Not significant
Muslim	0	6	0		
Christian	3	1	0		
Education					
Primary	0	0	0	0.054	Not significant
Secondary	3	0	0		
Graduate	8	20	3		
Postgraduate	9	17	0		
Occupation					
Private sector	16	25	2	0.585	Not significant
Housewife	0	0	0		
Government	0	4	0		
Business	4	8	1		
Farming	0	0	0		
Monthly income of the family					
5000–10,000/month	1	1	0	0.062	Not significant
10,001–15,000/month	4	6	1		
15,001–20,000/month	10	7	1		
20,001 and above	5	23	1		
Type of family					
Nuclear	15	23	2	0.404	Not significant
Joint	3	3	0		
Extended	2	11	1		
Duration of marriage					
1–2 year	1	3	0	0.9288	Not significant
2–3 years	6	9	0		
3–4 years	5	8	2		
4–5 years	4	10	1		
Above 5 years	4	7	0		
Treatment is been provided by					
Private hospitals	17	34	3	0.749	Not significant
Charity hospitals	3	3	0		
Any personal habits					
Alcohol	1	2	0	1.000	Not significant
Smoking	1	1	0		
No addiction	18	34	3		

Table 5: Association of stress among wives seeking treatment for infertility with demographic variables (n=60)

Demographic variables	Mild	Moderate	Severe	P-value	Significance at 0.05 level
Age					
20–25 years	5	6	0	0.272	Not significant
26–30 years	19	7	0		
31–35 years	14	4	0		
36–40 years	4	1	0		
Above 40 years	5	6	0		
Religion					
Hindu	37	13	0	0.011	Significant
Muslim	1	5	0		
Christian	4	0	0		
Education					
Primary	3	3	0	0.305	Not significant
Secondary	7	5	0		
Graduate	17	7	0		
Postgraduate	15	3	0		
Occupation					
Private sector	9	6	0	0.1605	Not significant
Housewife	29	8	0		
Government	3	3	0		
Business	1	0	0		
Farming	0	1	0		
Monthly income of the family					
5000–10,000/month	0	2	0	0.115	Not significant
10,001–15,000/month	8	3	0		
15,001–20,000/month	15	3	0		
20,001 and above	19	10	0		
Type of family					
Nuclear	31	9	0	0.171	Not significant
Joint	3	3	0		
Extended	8	6	0		
Duration of marriage					
1–2 year	4	0	0	0.106	Not significant
2–3 years	11	4	0		
3–4 years	7	8	0		
4–5 years	10	5	0		
Above 5 years	10	1	0		
Treatment is been provided by					
Private hospitals	39	15	0	0.352	Not significant
Charity hospitals	3	3	0		
Any personal habits					
Alcohol	0	1	0	0.212	Not significant
Smoking	1	1	0		
No addiction	41	16	0		
Any medical illness					
Yes	4	2	0	1.000	Not significant
No	38	16	0		

RESULTS

Age

Majority of husbands were from 31 to 35 years age group 50% and 43.3% of them had age 26–30 years were among wife.

Religion

Majority of 83.3% of the couples were Hindu.

Education

About 51.7% of husbands had done graduation and 40% of wives were graduates.

Occupation

About 71.7% of the husbands were from private sector and 61.7% of them were housewives.

Monthly income of the family

About 48.3% of the couples had income above Rs. 20,000.

Type of family

About 66.7% of the couples were from nuclear family.

Duration of marriage

About 25% of them were married for 2–3 years, another 25% of them were married for 3–4 years, and 25% of them were married for 4–5 years.

Treatment is been provided by

About 90% of the couples had treatment from private hospital.

Any personal habits

About 5% of the husband had habit of alcohol and 3.3% of them had habit of smoking. About 1.7% of the wives had habit of alcohol and 3.3% of them had habit of smoking

Any medical illness

About 10% of the wives had medical illness and none were observed among husbands (Table 1).

Table 2 shows that 61.7% of the husbands had moderate stress, 33.3% of them had mild stress, and 5% of them had severe stress. About 70% of the wives had mild stress and 30% of them had moderate stress.

Table 3 shows that 8.3% of the husbands had poor coping and 78.33% of them had average coping and 13.33% of them had good coping. About 11.66% of the wives had poor coping, 65% of them had average coping, and 23.33% of them had good coping.

Table 4 shows that there is no significant association of stress among husbands seeking treatment for infertility with demographic variables.

Table 5 shows that religion has a significant association with stress among wives seeking treatment for infertility with demographic variables.

Table 6 shows that there is no significant association of coping strategies adopted by husbands seeking treatment for infertility with demographic variables.

Table 7 shows that there is no significant association of coping strategies adopted by wives seeking treatment for infertility with demographic variables.

DISCUSSION

Infertility is a stressful experience. Most women do not anticipate that having a baby, which seems easy for many others, will be difficult or impossible for them. Any time we find a major life goal is blocked, it is natural to respond with

Table 6: Association of coping strategies adopted by husbands seeking treatment for infertility with demographic variables (n=60)

Demographic Variables	Poor	Average	Good	P-value	Significance at 0.05 level
Age					
20–25 years	0	3	0	0.902	Not significant
26–30 years	1	12	1		
31–35 years	4	23	3		
36–40 years	3	7	1		
Above 40 years	0	2	0		
Religion					
Hindu	8	37	5	0.139	Not significant
Muslim	0	6	0		
Christian	0	4	0		
Education					
Primary	0	0	0	0.909	Not significant
Secondary	0	3	0		
Graduate	5	24	2		
Postgraduate	3	20	3		
Occupation					
Private sector	6	35	2	0.267	Not significant
Housewife	0	0	0		
Government	0	4	0		
Business	2	8	3		
Farming	0	0	0		
Monthly income of the family					
5000–10,000/month	0	2	0	0.886	Not significant
10,001–15,000/month	1	8	2		
15,001–20,000/month	3	14	1		
20,001 and above	4	23	2		
Type of family					
Nuclear	7	29	4	0.818	Not significant
Joint	0	6	0		
Extended	1	12	1		
Duration of marriage					
1–2 year	1	3	0	0.148	Not significant
2–3 years	0	14	1		
3–4 years	4	11	0		
4–5 years	2	12	1		
Above 5 years	1	7	3		
Treatment is been provided by					
Private hospitals	7	43	4	0.387	Not significant
Charity hospitals	1	4	1		
Any personal habits					
Alcohol	0	3	0	0.562	Not significant
Smoking	1	1	0		
No addiction	7	43	5		

Table 7: Association of coping strategies adopted among wives seeking treatment for infertility with demographic variables (n=60)

Demographic Variables	Poor	Average	Good	P-value	Significance at 0.05 level
Age					
20–25 years	0	3	8	0.104	Not significant
26–30 years	5	9	12		
31–35 years	1	12	5		
36–40 years	2	2	1		
Above 40 years	0	0	0		
Religion					
Hindu	8	21	21	0.605	Significant
Muslim	0	4	2		
Christian	0	1	3		
Education					
Primary	0	1	5	0.507	Not significant
Secondary	2	4	6		
Graduate	3	13	8		
Postgraduate	3	8	7		
Occupation					
Private sector	1	7	7	0.821	Not significant
Housewife	7	14	16		
Government	0	3	3		
Business	0	1	0		
Farming	0	1	0		
Monthly income of the family					
5000–10,000/month	0	0	2	0.309	Not significant
10,001–15,000/month	2	5	4		
15,001–20,000/month	1	6	11		
20,001 and above	5	15	9		
Type of family					
Nuclear	5	14	21	0.097	Not significant
Joint	0	3	3		
Extended	3	9	2		
Duration of marriage					
1–2 year	1	2	1	0.105	Not significant
2–3 years	3	5	7		
3–4 years	1	4	10		
4–5 years	2	6	7		
Above 5 years	1	9	1		
Treatment is been provided by					
Private hospitals	8	23	23	1.000	Not significant
Charity hospitals	0	3	3		
Any personal habits					
Alcohol	0	0	1	0.354	Not significant
Smoking	1	1	0		
No addiction	7	25	25		
Any medical illness					
Yes	0	2	4	0.595	Not significant
No	8	24	22		

anger, frustration, and sadness. These are common reactions seen in both men and women dealing with infertility. The longer infertile couples have been trying to conceive, the more stressed they become as they experience month after month of disappointment.^[15]

In the present study, 61.7% of the husbands had moderate stress whereas 30% was found in wife. About 70% of wife had mild stress and 33.3% was found among husband. About 5% of severe stress was observed in husband whereas wife had none. About 78.33% of the husband had average coping whereas 65% was found in wife. About 23.33% of wife had good coping and 13.3% was found in husband. Poor coping was found in 11.66% of the wives and 8.3% among husband. Stress among wives was found to have a significant association

with demographic variable “religion” using Fisher’s exact test. The remaining demographic variables had no significant association with stress and coping among couples seeking treatment for infertility.

A cross-sectional study was conducted, among 400 infertile couples in Persian were enrolled at the Royan institute, Tehran, Iran, to determine whether infertility is associated with coping processes and is there a difference between infertile women and men in the use of coping strategies. It was found that husbands had more problem focused coping style and wives had more emotion focused coping style.^[16]

A study was conducted among a Hungarian infertile population to investigate the infertility-related stress in and examine the

effects of gender roles, child wish motives, subjective well-being, and marital relationship on the experience of infertility. The result shows that infertility-related stress, social concerns, and general health problems had more intensive effect on women than on men. Women from the infertile group scored higher their femininity and lower their general health than the reference population. Infertile men believe deeper in meaning of life compared to women or reference population. Femininity, traditional gender role concepts, general health, and marital relationship play the strongest role to predict stress caused by infertility.^[17]

A descriptive research design was conducted to assess the stress and coping mechanism of infertile women attending infertility clinic in Kathmandu Nepal. About 40% of women were at very high level of stress and 35% with high level of stress and was found among the age group of 21–30 years. In relation to level of stress and coping strategies, 54.17% of women with high stress and 50% with very high stress used religious coping strategies followed by 40% of emotional coping and 37.5% of problem focused coping and seeking social support strategies to overcome the stress.^[18]

CONCLUSION

The result of the study helped me to identify the level of stress faced by couples suffering from infertility and various coping strategies adopted by them. It also helped to provide adequate information about infertility among the couples to prevent the further complication.

CONFLICT OF INTEREST AND FUNDING

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