



A CROSS-SECTIONAL STUDY TO ASSESS THE RELATIONSHIP BETWEEN DEPRESSION AND MARITAL SATISFACTION AND THEIR PREDICTORS AMONG INFERTILE WOMEN ATTENDING THE INFERTILITY CLINICS AT SELECTED HOSPITALS OF BAGALKOT.

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ABSTRACT

Background of the study: Womanhood is the state of being a woman rather than a girl, or the period of a woman's adult life. Woman who bears a child in her womb and gives birth to a new life. She is a mother, she teaches her children how to eat, walk, talk, run, read, write and succeed in various tests of life. She helps her children to fight against failure and retry and succeed. She cares for her children till her last breath¹. Infertility is “A disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse. Infertility can have major effects on a couple's life, including marital satisfaction, and has a remarkable role in family life and welfare. Infertility is medically defined as “the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse”. Aim of the study is to assess the relationship between Depression and Marital satisfaction and their predictors among infertile women. Interventions should be aimed at management of depression, so that marital satisfaction among infertile women would be enhanced. The most common mental health problem in infertile women is depression. There are several factors including age, education, duration of married life, duration of infertility, social and husband's family pressure that affects the mental status of infertile couples. Infertility not only causes psychological pressure on the couple; but also develops physical and emotional instability².

Keywords: Infertility, Depression, Marital Satisfaction, Infertile Women, Psychological Well-being

INTRODUCTION

Infertility is “a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse. Infertility can have major effects on a couple's life, including marital satisfaction, and has a remarkable role in family life and welfare. Infertility is medically defined as “the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse”. It is a global public health concern affecting 9% of reproductive-aged couples³.

According to World Health Organization (WHO) the couple doesn't have a child after one year of unprotected intercourse may be more affected in terms of their marriage contentment, since in many couples, not being able to have their biologic child is considered as a personal tragedy. This issue deserves consideration from two aspects: first, the fact that 10-15% of the world's population are challenging with infertility and seeking treatment assisted fertility methods in order to realize their dreams so that in the U.S., out of every 100 born infants, one is born through reproduction assisting methods. On the other hand, infertility, through impacting on marital satisfaction or through aggravating marital relationships can directly or indirectly bring about failure in fertility. Accordingly, knowing the factors associated with



marital satisfaction in the infertile couples, it is possible to help them keep on their treatment and increase their success chance through planning for effective interventions⁴.

Thus, and the present study aims to analyze the factors related to marital satisfaction in infertile couples.

MATERIALS & METHODS:

Data were collected using self-report method. Tools used for data collection were; Socio-demographic and Clinical profile, Center for Epidemiological Study Depression scale (CES-D) and ENRICH marital satisfaction scale. Relationships were observed through Spearman's Rho. Multiple linear regression analysis was performed to find the significant predictors of depression and marital satisfaction⁵.

Non-probability purposive Sampling Technique was used to select the sample for the present study.

H₁: There will be a significant negative correlation between depression and marital satisfaction among infertile women.

H₂: There will be a significant relationship between socio demographic and clinical characteristics of infertile women with their depression and marital satisfaction.

CRITERIA FOR SELECTION OF SAMPLE:

The sampling frame structured by the researcher includes the following criteria.

a) Inclusion Criteria: The study includes the infertile women.

- Who failed to achieve clinical pregnancy after 12 months or more regular unprotected sexual intercourse.
- Both primary and secondary infertile women i.e. infertile women who have never had a child and infertile women failed to conceive following a pregnancy.
- Infertile women who can read and write Kannada or English.
- Infertile women who are willing to participate in study.

b) Exclusion criteria: The study excludes the infertile women.

- Who did not meet diagnostic criteria for infertility.
- The women who are breast feeding.
- The women in post-partum amenorrhea.
- Infertile women who don't agree to participate in the study.

VARIABLES:

Socio-demographic and clinical Variables: Age, religion, educational status, occupation, family monthly income, age at marriage, number of children, age at menarche, education of spouse, occupation of spouse, type of family, area of

residence, duration of marriage, consanguineous marriage, age at spouse, history of bad habits, irregular menstrual cycle, history of abortion, expecting to conceive⁶.

Setting of the Study:

Present study was conducted at infertility clinics of selected hospitals of Bagalkot; H. S. K. Hospital & Research Center of Bagalkot, Telsang Hospital Bagalkot, Kuntoji Multispecialty Hospital Navanagar Bagalkot, Tanksali Hospital Bagalkot, Shirur Memorial Hospital of old Bagalkot.

Target Population:

Infertile women attending Infertility clinics of various Hospital, Bagalkot.

Accessible Population:

Accessible population for the present study consists of infertile women who failed to achieve clinical pregnancy after 12 months or more of regular unprotected sexual intercourse and attending infertility clinics of selected hospitals of Bagalkot.

RESULTS:

Analysis is a research technique for systematic, objective and quantitative description of content of research procured through various means of research investigations. The analysis and interpretation of data involve the objective material in the possession of researcher and his subjective reaction to the problem.

This part deals with the analysis and interpretation of data collected from the sample of 100 infertile women attending in infertility clinics, Bagalkot. Analysis was done with the help of descriptive and inferential statistics.

Presentation of Data

To begin with, data was entered in a master sheet for tabulation and statistical processing. The findings were presented under the following headings.

Part-I: Description of sample in terms of their socio-demographic and clinical characteristics.

Part – II: Assessment of level of depression among infertile women.

Part –III: Assessment of marital satisfaction among Infertile women.

Part-IV: Correlation between depression and marital satisfaction scores of infertile women.

Part-V: Multiple linear regression analysis to find the determinants (Predictors) of depression and marital satisfaction among Infertile women.

The percentage wise distribution of sample according to their age describes that, most of the Infertile women (75%) were 20-30 years, 23% of were 31-40 years, 2% of others were in less than 20 years.



The percentage wise distribution of sample according to their religion shows that, majority (51%) of Infertile women was belonging to Hindu religion, 32% percent of them were belonging to Muslim community and 13% of them were belonging to Christianity 4%.

The percentage wise distribution of Infertile women according to their education depicts that, more number (41%) of Infertile women were educated Up to 10th standards, 29% of them had PUC, 18% of them had Illiterate, 12% of them were graduates.

The percentage wise distribution of Infertile women according to their Occupation depicts that, (40%) of Infertile women were employed, 39% of them were Housewives, 10% of them were doing Agriculture, 6% of them were doing coolie, 5% of them were self-employed.

Table-1 shows assessment of levels of depression among infertile women and findings reveals that, the majority of infertile women (89%) had significant depression, 11 percent of them had no significant depression.

Table-2 shows that maximum score of depression among infertile women is 38, Minimum score is 13. The mean and SD of Depressions core is 25.88±5.74.

Table-3 shows assessment of levels of marital satisfaction among infertile women reveals that, the majority of infertile women (81%) had

moderate satisfaction, 19 percent of them had high satisfaction and no one had low satisfaction.

Table-4 shows that maximum score of marital satisfaction among infertile women is 67, Minimum score is 34. The mean and SD of marital satisfaction score is 45.65±6.73.

The multiple linear regression carried out to find the determinants (Predictors) of marital satisfaction among Infertile women revealed a significant regression equation [$F_{99,34}=2.87$, $R^2=0.600$, $P<0.001$]. Family monthly income [$t=2.094$, $P<0.05$] has positively predicted Marital satisfaction among Infertile women. Being an Illiterate [$t=-2.501$, $P<0.05$], doing an agriculture work [$t=-2.695$, $P<0.01$], being an employed [$t=-2.202$, $P<0.05$], being a self-employed [$t=-2.278$, $P<0.05$], having an only one child [$t=-2.577$, $P<0.05$] having negatively predicted the marital satisfaction of Infertile women. Depression [$t=-3.228$, $P<0.01$] was the strongest negative predictor of marital satisfaction among Infertile women.

The Multiple linear regression carried out to find the determinants (Predictors) of depression among Infertile women revealed a significant regression equation [$F_{99,34}=1.630$, $R^2=0.460$, $P<0.01$]. Marital satisfaction [$t=-3.228$, $P<0.01$] is the strongest negative predictor of depression among Infertile women. Duration of time of expecting to conceive [$t=-2.042$, $P<0.05$] has negatively predicted the depression of Infertile women.

Table 1: Levels of Depression among Infertile women. N=100

Levels of Depression	Range of Score	No of respondents	Percentage (%)
No significant Depression	<16	11	11%
Significant Depression	16 & above	89	89%

Table 2: Mean and SD of Depression scores. N = 100.

Variable	Maximum Score	Minimum Score	Mean	S. D
Depression	38	13	25.88	5.75

Table 3 Levels of Marital satisfaction among infertile women N=100

Variable	Range of Score	No. of respondents	Percentage (%)
Low satisfaction	1-25	00	0%
Moderate satisfaction	26-50	81	81%
High satisfaction	51-75	19	19%

Table 4 Mean and SD of Marital satisfaction scores. N=100.

Variable	Maximum Score	Minimum Score	Mean	S. D
Marital satisfaction	67	34	45.65	6.73

Table-5 Multiple linear regression model depression among Infertile women n=100.

Sl no	Determinants (Predictors)	Standardized Coefficients (β)	t value	P value
1	Age in Years	-0.115	-0.526	0.601
2	Family Monthly Income	0.000	-0.003	0.998
3	Age at Marriage	0.247	1.705	0.093
4	Time of expecting to conceive	-0.263	-2.042	0.045*
5	Age at Menarche	0.145	1.422	0.160
6	Age of Spouse	-0.056	-0.284	0.777



7	Marital Satisfaction	-0.432	-3.228	0.002**
8	Muslim	0.054	0.490	0.626
9	Christian	-0.108	-0.905	0.369
10	Jain	-0.014	-0.110	0.913
11	Illiterate	-0.089	-0.637	0.527
12	PUC/Higher	-0.011	-0.081	0.936
13	Graduation and above	-0.187	-1.257	0.213
14	Housewife	0.068	0.477	0.635
15	Coolie	0.175	1.498	0.139
16	Agriculture	0.025	0.224	0.824
17	Self Employed	-0.048	-0.385	0.701
18	One Child	-0.114	-0.862	0.392
19	Two Children	-0.131	-1.227	0.224
20	Spouse Illiterate	-0.228	-1.909	0.061
21	Upto10th (Spouse)	-0.073	-0.554	0.582
22	Graduation (Spouse)	-0.122	-0.956	0.343
23	Unemployed Spouse	-0.153	-1.344	0.184
24	Coolie Spouse	-0.029	-0.235	0.815
25	Agriculture Spouse	0.108	0.896	0.374
26	Self Employed Spouse	-0.151	-1.364	0.177
27	Nuclear	0.171	1.542	0.128
28	Urban	0.030	0.268	0.790
29	Below 5yrs	-0.038	-0.282	0.779
30	Above10 yrs	0.145	1.139	0.259
31	History of abortion No	0.127	1.125	0.265
32	No CM	-0.022	-0.198	0.844
33	No Bad Habits	-0.020	-0.153	0.879
34	No HIM	0.151	1.346	0.183

Regression Equation: F_{99, 34}=1.630, R²=0.46, P<0.01

***P<0.05, **P<0.05**

DISCUSSION:

The present study was conducted to find out the depression and marital satisfaction and their determinants among infertile women attending infertile clinics of selected hospitals of Bagalkot. In order to achieve the objectives of the study, cross sectional descriptive survey research design was adopted. A sample of 100 infertile women was selected using non-probability purposive sampling technique⁷.

The findings of the present study are consistent and supported with the study conducted by Nyarko, Samuel H, and Hubert Amu.at Ghana (2015). There was only for the purpose of reproduction and not for mutual sexual satisfaction (68.8 %). Sexual intercourse was reported to be unfulfilling as well as unenjoyable (64.3 %). The psychological well-being of participants (87.5 %) and stability within marital unions were also negatively affected by infertility, resulting in quarrels (72.3 %) the study was concluded that Infertility has numerous negative implications for marital relationship⁸.

The multiple linear regression carried out to find the determinants (Predictors) of marital satisfaction among Infertile women revealed a significant regression equation [F_{99,34}=2.87, R²=0.600, P< 0.001]. Family Monthly Income [t=

2.094, P< 0.05] has positively predicted Marital satisfaction among Infertile women. Being a Illiterate [t= -2.501, P< 0.05], doing a agriculture work [t= -2.695, P< 0.01], being an employed [t= -2.202, P< 0.05], being a self-employed [t= -2.278, P< 0.05], having an only one child [t= -2.577, P< 0.05] having negatively predicted the Marital satisfaction of Infertile women. Depression [t= -3.228, P< 0.01] was the strongest negative predictor of Marital satisfaction among Infertile women⁹.

The findings of the present study are consistent and supported with the study conducted by Maroufizadeh S, Hosseini M, Rahimi Froushani A. *et al.* (2018) to assess the Depression and Marital satisfaction among Infertile cupels in Iran. Within-dyad correlations revealed that wives' and husbands' scale scores were significantly correlated for depression ($r = 0.256, P = 0.002$) and marital satisfaction ($r = 0.423, P < 0.001$). Based on Pearson correlations, husbands' marital satisfaction was correlated with both their own depression ($r = -0.424, P < 0.001$) and their wives' depression ($r = -0.281, P < 0.001$). Wives' marital satisfaction was also correlated with both their own depression ($r = -0.335, P < 0.001$) and their husbands' depression ($r = -0.203, P = 0.016$).

CONCLUSION



This part deals with the conclusions drawn based on the findings of the study, implications, and limitations of the study, suggestions and recommendations.

On the basis of the findings of the study, the following conclusions are drawn: Finding related to assessment of levels of depression among infertile women reveals that, the majority of infertile women (89%) had no significant. 11% percent had significant Depression. Findings show that, the maximum score of depression among infertile women is 38, Minimum score is 13. The mean and SD of depression score is 25.88 ± 5.75^{10} .

Finding related to assessment of levels of marital satisfaction among infertile women reveals that, the majority of (81%) had Moderate satisfaction, 19% had High satisfaction and No one had to Low satisfaction. Findings show the maximum score of marital satisfaction among infertile women is 67, minimum score is 34. The mean and SD of Marital satisfaction score was 45.65 ± 6.73 . Findings reveal that, there exists a significant negative correlation was found between depression and marital satisfactionscores [$r = -$

0.258^{**} , $P < 0.01$]. Findings of regression analysis reveals that, Family monthly income [$t = 2.094$, $P < 0.05$] has positively predicted Marital satisfaction among Infertile women. Being an Illiterate [$t = -2.501$, $P < 0.05$], doing an agriculture work [$t = -2.695$, $P < 0.01$], being an employed [$t = -2.202$, $P < 0.05$], being a self-employed [$t = -2.278$, $P < 0.05$], having an only one child [$t = -2.577$, $P < 0.05$] having negatively predicted the Marital satisfaction of Infertile women. Depression [$t = -3.228$, $P < 0.01$] was the strongest negative predictor of Marital satisfaction among Infertile women¹¹.

Limitations

The present study is a preliminary study to correlate the depression and marital satisfaction among infertile women. The limitations of this study include.

- Sample size was limited 100.
- Other variables like anxiety and husband's marital satisfaction could have been included.
- More clinical predictors could have been included.

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