



**International Journal of Biology, Pharmacy
and Allied Sciences (IJBPAS)**
'A Bridge Between Laboratory and Reader'

www.ijbpas.com

**A STUDY TO ASSESS THE LEVEL OF DEPRESSION AMONG
PRIMARY INFERTILE WOMEN ATTENDING SELECTED
INFERTILITY CLINICS OF VADODARA**

PATEL V^{1*}, PRAKASAM A², PATEL B³, PATEL A³, PARMAR P³ AND PARMAR R³

1: Associate Professor, Department of Obstetrics and Gynecological Nursing, Sumandeep Nursing College, Sumandeep Vidyapeeth an institution deemed to be University, Vadodara, Gujarat

2: Principal, Sumandeep Nursing College, Sumandeep Vidyapeeth an institution deemed to be University, Vadodara, Gujarat

3: Undergraduate nursing Student, Sumandeep Nursing College, Sumandeep Vidyapeeth an institution deemed to be University, Vadodara, Gujarat

***Corresponding Author: Dr. Vruti Patel; E Mail: vruticpatel@gmail.com**

Received 25th Jan. 2023; Revised 24th Feb. 2023; Accepted 23rd April 2023; Available online 15th June 2023

<https://doi.org/10.31032/IJBPAS/2023/12.6.1081>

ABSTRACT

Background of the Study: Infertility is worldwide and a big or important problem in today's generation. Infertility is a most common stressful event which impact social as well as marital life. It is a severely distressing experience for so many couples. It is considered most common psychological disorders and it is associated with their infertility and may also affect their life.

Aims: The aim of research study was to find out prevalence of depression among the primary infertile women attending infertility clinics.

Material and Method: A cross-sectional design and quantitative survey approach was used to collect data by purposive sampling technique from 59 infertile women who were attending infertility clinics of Vadodara. The tool used for the study was questionnaire and Hamilton depression Scale. Data was analyzed by using SPSS-20 software.

Result: A total of 59 infertile women participated. Among 59, Findings revealed that majority 44 (74.6%) had depression and 15 (25.4%) had reported no depression where 14 (23.7%) had

severe depression, maximum 20 (34%) had moderate depression and 10 (16.9%) had mild depression. **Conclusion:** The present study was concluded depression is common and severe in infertile women and more severe in infertile women related to their problem. Family pressure among the women majority result in psychological disorder or depression.

Keywords: Depression, Infertility, primary infertility, infertile women

INTRODUCTION

All women are blessed by God when they become mothers. Everything is boiled down to the very minimum, which has a really humanizing effect. The ability to give birth naturally is known as fertility. Nutrition, sexual behavior, endocrinology, timing, environment, manner of life, and emotions all affect human fertility. Yet, some women are unable to get pregnant. The inability of a couple to have children is referred to as infertility or sterility. After a year of routine, unprotected sexual activity, a couple is said to be infertile if they are unable to conceive naturally. Primary infertility is the inability to conceive or carry a pregnancy to live delivery following a year of frequent, unprotected sexual activity. Couple who visited an infertility clinic found that half of the women and 15% of men said that it was the most upsetting experience of their lives. Nowadays more and special attention has been given or paid to the psychological health of infertile couples. Infertility also shows low mood of the patient, guilty feelings, loss of interest in regular activities [1, 2].

Infertility is worldwide and a big or important problem in today's generation.

Number of infertilities is more in today's generation just because of unhealthy food patterns, alcoholism, and smoking [3]. Family pressure among the women majority cause or result in psychological disorder or depression. The social outcomes of infertility are different between each country, culture, & religions. In many countries and in many areas, women are blamed for infertility status. In some communities infertile couples are neglected by others or undervalued or sometimes as a domestic violence. As per many researchers found that infertility is the most difficult experience of their lives [4].

Infertility is not only affecting only women's mental health or behavior it also affects men's mental behavior also. And after that leads to problems in their marital life, other family problems and social problems. This socio-economic status also affects their mental behavior and causes depression. Couples who have failed to achieve pregnancy have feelings of being defective and they do not feel comfortable themselves in the community [5].

The inability to conceive children will make the couples to seek medical help and finally

will receive treatment for infertility which does not warrant complete certainty of a successful pregnancy, as causes of infertility are multifactorial [6]. Advances in assisted reproductive technologies, such as invitro fertilization, intrauterine insemination and intracytoplasmic sperm injection, can offer hope to many women or couples where treatment is available, although barriers exist in terms of medical coverage, affordability, success rates and their own moral issues. Treatment for infertility or assisted reproduction is very expensive and the financial burdens on couples can be large, and adding to this is the emotional and physical consequences of experiencing infertility. Mental, psychological, and social pressure adversely affects the married and social life of the infertile couple. This may lead to arguments, abusing, blaming each other as a cause and domestic violence and ends into divorce [7-9].

Infertility not only causes psychological pressure on the couple; but also develops physical and emotional instability [10]. Infertility is often associated with a chronic state of stress which may manifest itself in anxiety-related and depressive symptoms [11].

MATERIAL AND METHOD

A cross-sectional design and quantitative survey approach was used to collect data by purposive sampling technique from 59 infertile women who were attending

infertility clinics of Vadodara. The formal permission was obtained for the approval of the study from two different infertility clinics of Vadodara. The data collection was done from 3rd December to 14th December 2021. The investigators selected 59 primary infertile women who are having depression and meeting the inclusion and exclusion criteria for the data collection. The research tool for data collection divided in to two sections: Section 1 consists of questionnaire to collect demographic data and Section 2 consists of Hamilton depression scale to assess the prevalence and level of depression. Data was analyzed by using Descriptive and inferential statistics were applied to analyze the data by using SPSS-20 software.

RESULT

The present study is Cross sectional study comprising 59 infertile women who were attending infertility clinics of Vadodara. The results of demographic data are as under:

According to their age, majority 18(30.5%) were in 23-30 years of age and 41(69.5%) were in 31-40 years of age. Regarding educational level of primary infertility women, maximum 36(61%) had secondary education, 20(33.9%) had primary education and 3(5.1%) had graduation. With regard to habits of primary infertility women, majority 48(81.3%) had no habits, 6 (10.2%) had habit of tobacco and 5(8.5%) had habit of

alcohol. As per life style of primary infertility women, maximum 40(67.8%) had food as lifestyle and 19 (32.2%) had stress full life style. According to family type of primary infertility women, majority 37(62.7%) were living in joint family and 22(37.3%) were living in nuclear family.

The prevalence of depression among primary infertility women revealed that

majority 44 (74.6%) had depression and 15 (25.4%) had reported no depression where 14 (23.7%) had severe depression, maximum 20 (34%) had moderate depression and 10(16.9%) had mild depression with obtained score range between 4-22, median score of 15 and mean depression score was 13.68 with standard deviation was 5.817 (Table 1).

Table 1: Prevalence of depression among primary infertility women (N=59)

Prevalence of Depression	Frequency (f)	Percentage (%)	Score range	Median	Mean	SD
Non depression	15	25.4	4-22 18	15	13.68	5.817
Depression	44	74.6				
Severity of depression						
Mild	10	16.9				
Moderate	20	34				
Severe	14	23.7				

Table 2: Association between level of depression among primary infertility women with their selected socio-demographic variables (N=59)

Demographic Variables	Level of depression			χ ² values	df	p value
	Mild	Moderate	Severe			
Age in years						
23-30 years	0	6	12	2.766	2	0.251 ^{NS}
31-40 years	5	15	21			
Education						
Lliterate	--	--	--	9.535	4	0.049*
Primary	0	4	16			
Secondary	4	16	16			
Graduate	1	1	1			
Habits						
Smoking	--	--	--	4.150	4	0.386 ^{NS}
Tobacco	0	4	2			
	1	2	2			
	4	15	29			
Life style						
Food	4	14	22	0.373	2	0.830 ^{NS}
	1	7	11			
Family type						
Joint	3	12	22	0.515	2	0.773 ^{NS}
Nuclear	2	9	11			

*p value < 0.05 level of significance; NS-Non-Significant

The association between level of depression among primary infertility women with their selected socio-demographic variables which was tested by using chi-square test. Result showed that educational level was found significant association at $p < 0.05$ level but other demographic variables such as age, habits, life style and family type were found non-significant with level of depression among primary infertility women

DISCUSSION

The researcher tried to find out level of depression among infertile women attending primary infertility clinics of Vadodara. Data were collected by using Hamilton depression scale. 59 sample were taken from selected infertility clinics of Vadodara. Research design use for this study was cross-sectional design and survey was quantitative survey approach. Data was analyzed by using Descriptive and inferential statistics were applied to analyzed the data by using SPSS-20 software. The finding of the study has been discussed with reference to objective, hypothesis and findings of other studies.

Findings related to prevalence of depression among primary infertile women

Findings revealed that majority 44 (74.6%) had depression and 15(25.4%) had reported no depression where 14(23.7%) had severe depression, maximum 20(34%) had

moderate depression and 10(16.9%) had mild depression with obtained score range between 4-22, median score of 15 and mean depression score was 13.68 with standard deviation was 5.817. study results were supported by Tuan *et al* (2016) conducted a cross sectional study to assess the prevalence of depression among infertility women showed that 12.2% had depression. Similar study was conducted by [12] to assess the depression among infertile women revealed that 22.3% had mild depression, 8.6% had moderate depression and 10.6% had severe depression among infertility women [13]. Another similar study was carried by [14] to assess the depression among infertile women showed that 35.3% of infertile women had depression [14-17].

Findings related to Association between level of depression among primary infertility women with their selected socio-demographic variables

Association between level of depression among primary infertility women with their selected socio-demographic variables Result showed that educational level was found significant association at $p < 0.05$ level but other demographic variables such as age, habits, life style and family type were found non-significant with prevalence of depression among primary infertility women. [18] conducted a cross sectional study to assess the prevalence of depression

among infertility women showed that 12.2% had depression and alcohol addicted husband was found significant association with depression among infertility women. Another study was supported by [19] to assess the depression among infertility women revealed that occupation was found significant association with depression among infertility women.

CONCLUSION:

The study suggests that depression is more common and severe in infertile women than fertile women. Infertility Clinic and infertility treatment centers should pay attention establish psychological and psychiatric services in infertility women to facilitate the treatment and follow-up procedures in order to reduce the psychological problems of infertile women and their families.

CONFLICT OF INTEREST

The author declares that there is no conflict of interest.

REFERENCES

- [1] Al-Homaidan, Homaidan Turki. "Depression among Women with Primary Infertility attending an Infertility Clinic in Riyadh, Kingdom of Saudi Arabia: Rate, Severity, and Contributing Factors." *International journal of health sciences* vol. 5,2 (2011): 108-15.
- [2] Quaas A, Dokras A. Diagnosis and treatment of unexplained infertility. *Rev Obstet Gynecol.* 2008; 1:69- 76.
- [3] Kazandi M, Gunday O, Mermer TK, Erturk N, Ozkinay E (2011) He status of depression and anxiety in infertile Turkish couples. *Iran J Reprod Med* 9: 99-104.
- [4] Kessler RC, Bromet EJ. The epidemiology of depression across cultures. *Annu Rev Public Health.* 2013; 34:119–38.
- [5] Boivin J, Griffiths E, Venetis AC. Emotional distress in infertile women and failure of assisted reproductive technologies: meta-analysis of prospective psychosocial studies. *BMJ.* 2011 Feb;342: d223 doi:10.1136/bmj.d223.
- [6] Guttmacher AF. Factors affecting normal expectancy of conception. *J Am Med Assoc.* 1956 Jun 30;161(9):855-60.
- [7] Dyer J., Abrahams N., Mokoena N., Lombard C., van der Spuy Z. Psychological distress among women suffering from couple infertility in South Africa: a quantitative assessment. *Hum Reprod* 2005; 20 (7): 1938-1943.
- [8] SA Oladeji & AD OlaOlorun (2018) Depression among infertile women in Ogbomosoland, South African Family

- Practice, 60:2, 41-45, DOI: 10.1080/20786190.2017.1370840
- [9] Roselyn Lasuh, Diana David and TK Aleyamma.2020, Anxiety, Depression and Quality of Life Among Women with Primary Infertility. *Int J Recent Sci Res.* 11(05), pp. 38656-38675. DOI: <http://dx.doi.org/10.24327/ijrsr.2020.1105.5355>
- [10] Basirat Z, Famarzi M, Esmaelzadeh S, Firoozjai AS, Mahouti T, Geraili Z. Stress, depression, sexual function, and alexithymia in infertile females with and without polycystic syndrome, a case control study. *International Journal of Fertility and sterility.* 2019; 13:202-08.
- [11] Dhair, Amal, and Yehia Abed. “The association of types, intensities and frequencies of physical activity with primary infertility among females in Gaza Strip, Palestine: A casecontrol study.” *PloS one* vol. 15,10 e0241043. 23 Oct. 2020, doi: 10.1371/journal.pone.0241043
- [12] Al-Homaidan, Homaidan Turki. “Depression among Women with Primary Infertility attending an Infertility Clinic in Riyadh, Kingdom of Saudi Arabia: Rate, Severity, and Contributing Factors.” *International journal of health sciences* vol. 5,2 (2011): 108-15.
- [13] Middle East Fertility Society Journal Volume 22, Issue 2, June 2017, Pages 145-148
- [14] Fallahzadeh H, Zareei Mahmood Abadi H, Momayyezi M, Malaki Moghadam H, Keyghobadi N. The comparison of depression and anxiety between fertile and infertile couples: a meta-analysis study. *Int. J. Reprod. Biomed. (Yazd).* 17(3), 153–162 (2019)
- [15] SA Oladeji & AD OlaOlorun (2018) Depression among infertile women in Ogbomosoland, South African Family Practice, 60:2, 41-45, DOI: 10.1080/20786190.2017.1370
- [16] Elsous A, El-Kass SA, Salama A, Radwan M, Abo-Eid S, Baloushah S. Depression among Infertile Women in Gaza Strip: Symptom Severity and Predictors. *Depress Res Treat.* 2021 Jan 29;2021:6616489. doi: 10.1155/2021/6616489.
- [17] Yusuf L. Depression, anxiety and stress among female patients of infertility; A case control study. *Pak J Med Sci.* 2016 Nov-Dec;32(6):1340-1343. doi: 10.12669/pjms.326.10828. PMID: 28083022; PMCID: PMC5216278.
- [18] Vo TM, Tran QT, Le CV, Do TT, Le TM. Depression and associated factors among infertile women at Tu Du hospital, Vietnam: a cross-sectional

study. *Int J Womens Health*. 2019 May 28;11:343-351.

- [19] Kiani Z, Simbar M, Hajian S, Zayeri F, RashidiFakari F, Chimeh FJ. Investigating different dimensions of infertile women's quality of life: a descriptive cross-sectional study. *BMC Public Health*. 2022 Dec 27;22(1):2436. doi: 10.1186/s12889-022-14924-w