Advances in Bioresearch
Adv. Biores., Vol 13 (3) May 2022: 150-153

Print ISSN 0976-4585; Online ISSN 2277-1573
Journal's URL:http://www.soeagra.com/abr.html
CODEN: ABRDC3
DOI: 10.15515/abr.0976-4585.13.3.150153

Advances in Bioresearch

ORIGINAL ARTICLE

A Comparative Analysis on The Mental Health In Patients Having in Infertile Issues

M. Saraswathi, K. Shwetha, G. Jayalakshmi*
Department of Microbiology, Sri Lakshmi Narayana Institute of Medical Sciences (Affiliated to Bharath Institute of Higher Education and Research), Puducherry - 605502, India.
***Correspondence:** deanuniversityaffairsslims@gmail.com

ABSTRACT
Psychological disturbances were present in 80 women (40%) had anxiety alone, 56 women (23%) had depression alone and 7 women(3.5%) had both. It was seen in our study that 62 women (31%) had mild anxiety, 23 women (11.5%) had moderate anxiety and 2 women (1%) had severe anxiety. It was seen m our study that 43 women (21.5%) had mild depression, 19 women (9.5%) had moderate depression and 1 woman (0.5%) had severe depression. There has been an increase in worry and depression as the duration of infertility lengthened. Anxiety and despair were shown to be equally prevalent regardless of social status. Women from higher socio - economic, on the other hand, were found to be more depressed. Anxiety was more common among women from joint households than depression. Those from nuclear families suffered more depression. Women with positive family history had an increased prevalenceof anxiety.
Keywords: *Infertility, Fertile-women, Psychology; Depression; Suicide.*

Received 12.02.2022 Revised 16.03.2022 Accepted 15.05.2022

How to cite this article:
M. Saraswathi, K. Shwetha, G. Jayalakshmi. A Comparative Analysis On The Mental Health In Patients Having in Infertile Issues. Adv. Biores. Vol 13 [3] May 2022. 150-153

INTRODUCTION

Early research showed that impotence with no obvious purpose was due to psychological factors. More recent research has taken a bio psychosocial approach, looking at how stress from examinations and therapy, as well as psychiatric illness, affect fertility and infertility clinical outcome [1]. About 25 years back, it was thought that psychological issues were responsible for 40- 50% of fertility problems [2]. Infertile people were thought to have personality characteristics that contributed to their inability to recognize. Recent research, however, have revealed that only 5% of instances can be linked to psychological variables [3].

These researches have revolutionized our understanding of how infertility affects families and individuals emotionally [4]. Infertility has been connected to emotional reactions such as despair, anxiety, guilt, social isolation, and low self-esteem among both men and women, according to investigations [5]. When comparing to fertile couples, infertile couples have consistently scored higher on measures of psychological suffering. Shapiro theorized that infertility anger was channeled in an indirect way, causing marital stress to appear in places where the couple had successfully handled it well [6]. Other studies, on the other hand, have found that infertile couples report no variations in marital happiness when compared to fertile ones. It is thought that infertility may act as a bonding experience for some individuals. Infertility may be viewed as a problem that couples in this circumstance can work together to conquer [7].

Counseling, but at the other hand, entails the use of specific interventions that are suited to the specific of the sufferer. There is much of evidence indicating a reduced stress level correlates with improved fertility [8]. Stress levels can be reduced to reduce infertility dropout rates. The goal is not just to get pregnant, but also to provide a good environment for the child. These issues need to be addressed from both a medical and psychosocial standpoint [9]. In addition, the doctor is crucial in selecting when to halt treatment in situations that are untreatable. It's a difficult decision to make.

With the advancement of modem technology, this inevitable conclusion has all but vanished. Because the majority of literature on psychological aspects of infertility comes from developed nations, it was considered that a research from a developed country with better culture could add to what was already known [10]. The goal of this study was to see how important it is to include a mental health evaluation as part of the infertility checkup.

MATERIAL AND METHODS

This study was conducted in 200 women at the "Infertility Clinic" Of Sri Lakshmi Narayana Institute of Medical Sciences during the period of August 2019-August 2020.

Study design: Cross sectional study.

Inclusion Parameters:

1. 20 - 45 years.
2. Primary infertility(minimumof 1 year)

Exclusion Parameters:

1. <20 & >45 age.
2. Secondary infertility.
3. pregnancy loss.

200 women were considered based on above criteria. Participants will be educated about the research questions and the research, and their informed consent will be acquired. The questionnaire will be used to examine individuals by the same investigator. The following was included in the questionnaire:

1. Demographic details
2. The evaluation includes a basic physical examination followed by a psychiatric examination. The accompanying complete history was acquired from these patient populations:,

General: Demographic information such as the individual 's age, residence, degree, profession, and salary were collected; socioeconomic level was assessed using the "Modified Kuppuswamy scale.

Gynaecological history: about infertility, such as the length of fertility problems; any particular concerns; Menarche; spontaneously I forced periods; cycle length and flow; pain relationship; full menstrual record Last menstrual period; H/O endometriosis; H/O Pelvic Inflammatory Disease Detailed specifics of therapy used for fertility problems"

1. Marital and sexual history
2. Personal and family history
3. Psychosocial history

RESULTS

Table 1 shows the educational status of the women. Majority had varied levels of schooling. There are 11% of illiterate populations in the data. 5% of population is in the one to twelfth standard of school. Around 4% of peoples in the data completed diploma course.

Table 1. Educational status

Educational status	Women
Illiterate	22 (11%)
1-12	170(5%)
Diploma	8 (4%)
Total	200 (100%)

Table 2 shows the different types of families belonging to the study population. 15% of the population belongs to the joint family whereas 85% of the population in the study belongs to the nuclear family. From the table, it is found that the majority belonged to the nuclear family.

Table 2. Type of family

Type of family	Women
Joint family	30 (15%)
Nuclear family	170 (85%)
Total	200 (100%)

Table 3 shows the percentage of women who faced the threat of divorce & suicidal attempts. It is found that majority of women's (94%) faced the threat of divorce & suicidal attempts whereas, only 5% of women's in the population faced the threat of divorce & suicidal attempts. Out of 200 patients 80 (40%) had anxiety alone, 56(29%) had depression alone, 7(3.5%) had both anxiety and depression.

This table depicts the relationships between infertile length and anxiety and sadness. Mental morbidity was found to be highest in those aged 10 to more than ten years. The increase in anxiety and despair in the

10 and more age category suggests that they were approaching menopause and that the processes that happen with it were to blame. The association between economic factors and depression or anxiety is depicted in this table. The majority of the patients were from class 4, which is the upper bottom class. Depression was shown to be substantially higher in the upper class. This was most likely due to growing public knowledge and societal pressure. Majority were from nuclear families. Joint family seemed to contribute to much of anxiety probably because they were the husband's family. Nuclear family seemed to contribute much of depression because of lackof moral support. But then this observation did not reach statistical significance.

Table 3. Threat to divorce and suicidal attempts

	Threat to divorce	Suicidal attempts
Present	11(5%)	10(5%)
Absent	189(94%)	190(95%)
Total	200(100%)	200(100%)

Table 4. Relationship between educational status and Anxiety and depression

	Illiterate	School	College
Anxiety and depression absent	8(36.3%)	48(28.2%)	1(12.5%)
Anxiety present	7(31.8%)	70(41.1%)	3(37.5%)
Depression present	5(22.7%)	48(28.2%)	3(37.5%)
Anxiety and depression present	2(9%)	4(4%)	1(12.5%)
Total	22	170	8

This table shows the relationship between educational status and Anxiety and depression. Majority belonged to the age group who had undergone schooling. The difference was too small to achieve statistical significance. The presence of sexual problems was related to anxiety (P value - 0.2848) which could be the cause or effect. There was an increase in anxiety when there was a positive family history. This association was statistically significant (P value - 0.04671). This suggests the importance of taking detailed family history.

Table 5. PCOS in anxiety and depression

PCOS	Anxiety anddepression absent	Anxiety	Total
Present	12(50%)	12(50%)	24
Absent	101(57.3%)	75(42.6%)	176
Total	113(56.5%)	87(43.5%)	200
PCOS	**Anxiety anddepression absent**	**Depression**	**Total**
Present	17(70.8%)	7(29.1%)	10
Absent	120(68.1%)	56(31.8%)	190
Total	137(68.5%)	63(31.5%)	200

Table 5 shows the relationship of PCOS to anxiety and depression. Anxiety was more prone in PCOS women than depression. This again stresses the need to identify and treat these disorders. It is thus important to offer counselling to these patients. The frequency of attempted suicide and anxiety and sadness are shown in this table. This was yet another one-of-a-kind problem. In this situation, fast and timely psychiatric care and counselling are critical in preserving lives. Anxious was more common than despair.

DISCUSSION

Women are encouraged to be more stressed than men as a result of the infertility condition, indicating an allocation of responsibilities in the couples such that women suffered more of the emotional load associated with an unmet wish for a child and sought medical diagnosis and treatment faster than men [11]. At the same moment, both spouses had a tendency to have a much more optimistic attitude toward aspects of living outside of the fertility problem than the sample group, which can most likely be understood as an useful response strategy for dealing with the reproductive issue. The study's assessment of the depression rate in infertile women was particularly noteworthy. The stress of infertility is felt by women who are dealing with infertility issues.

Some research found that women's mental discomfort grew over time, with depression peaking between the second and third years and not returning to normal until six years later. With aging process, there was a steady decline in psychological illness. This could be observed that as people got older, their ability to deal with infertility problems improved. The vast majority were from single-parent households. As they were the partner's family, the joint family just seems to contribute

to a lot of tension. Because of a lack of moral support, the nuclear family appeared to have a significant role in depression. However, this finding was not statistically significant (P value - 0.7043 & 0.05782).

CONCLUSION

Mental abnormalities were seen in 80 females (40%) who had anxiety alone, 56 females (23%) who had depression alone, and seven females (3.5%) who had both. There was an increase in worry and depression as the duration of infertility lengthened. In researching how people feel about assisted reproduction technology (ART) and adoption. The majority chose adoption, owing to a desire to fulfil their maternal role. However, the majority of people were unclear about their opinions, choices, and decisions.

FUNDING

No funding sources

ETHICAL APPROVAL

The study was approved by the Institutional Ethics Committee.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ACKNOWLEDGMENTS

The encouragement and support from Bharath Institute of Higher Education and Research, Chennai, Tamil Nadu, India is gratefully acknowledged for providing the laboratory facilities to carry out the research work.

REFERENCES

1. Bharathkumar N, Sunil A, Meera P, Aksah S, Kannan M, Saravanan KM, Anand T (2021) CRISPR/Cas-Based Modifications for Therapeutic Applications: A Review. Mol Biotechnol. https://doi.org/10.1007/s12033-021-00422-8
2. Seibel MM, Shine W, Smith DM, Taymor ML (1982) Biological rhythm of the luteinizing hormone surge in women**Supported in part by a Health, Education and Welfare (HEW) Clinical Research Center Grant. Fertil Steril 37:709–711
3. Sundaram KKM, Bupesh G, Saravanan KM (2022) Instrumentals behind embryo and cancer: a platform for prospective future in cancer research. AIMS Mol Sci 9:25–45
4. Connolly KJ, Edelmann RJ, Cooke ID (1987) Distress and marital problems associated with infertility. J Reprod Infant Psychol 5:49–57
5. Andrews FM, Abbey A, Halman L (1991) Stress from infertility, marriage factors, and subjective well-being of wives and husbands. J Health Soc Behav 32 3:238–253
6. Saravanan KM, Kannan M, Meera P, Bharathkumar N, Anand T (2022) E3 ligases: a potential multi-drug target for different types of cancers and neurological disorders. Future Med Chem. https://doi.org/10.4155/fmc-2021-0157
7. APB B, Bhuvaneswari S, Raj L, Bupesh G, Meenakshisundaram K, KM S (2022). A Review on the Potential Species of the Zingiberaceae Family with Anti-viral Efficacy Towards Enveloped Viruses. J Pure Appl Microbiol 16:796–813
8. Greil A (1997). Infertility and psychological distress: A critical review of the literature. Soc Sci Med 45:1679–1704
9. Vijayaram S, Kannan S, Saravanan KM, Vasantharaj S, Sathiyavimal S, Senthilkumar P (2016). Preliminary phytochemical screening, Antibacterial potential and GCMS analysis of two medicinal plant extracts. Pak. J. Pharm. Sci. 29:
10. Newton CR, Sherrard W, Glavac I (1999). The fertility problem inventory: measuring perceived infertility-related stress. Fertil Steril 72:54–62
11. Gnanavel M, Murugesan A, Mani SK, Kandhavelu M, Yli-Harja O (2021). Identifying the mirna signature association with aging-related senescence in glioblastoma. Int J Mol Sci 22:1–14