

## Infertility and Anxiety among Infertile Women at IVF Treatment Centre, Lalitpur

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### **ABSTRACT**

**Background:** Infertility is being a tangible problem in our society. Infertility is failure to conceive after one year of regular unprotected sexual intercourse in the absence of known reproductive pathology. Infertility and its treatment related process both can create psychological and economic crisis among the women who are receiving its treatment therefore it may result in variant level of anxiety in infertile women. The main objective of this study is to determine the level of anxiety among infertile women.

**Methods and Materials:** All together 100 sample were taken for the study by adopting non-probability purposive sampling technique. Data was collected through direct interview by using demographic and structured questionnaire was used. Beck Anxiety Inventory scale was used as structured questionnaire.

**Result:** Out of 100 respondents, more than half 56 % of the respondents were between ages 26-35 Years age, 28% of respondents were house makers by occupation, majority of respondents 71% were working 12 hours per day. Near to half 47.6 % respondent had the Hypothyroidism. Fifty two percent of respondent's were from 4-6 years of marriage duration followed by duration of infertility were 56 % since 3 years and 45 % are taking infertility treatment from about 1 years. Majority of respondents (59%) has low anxiety level followed by moderate anxiety (35%) and severe anxiety (6%).

**Conclusion:** Anxiety is common in infertile women. Among the respondents, all of the participants had developed the features of anxiety but in very low level. So association could not be assessed between the socio-demographic variables and level of anxiety.

### **KEYWORDS**

Anxiety, Infertile Women, Infertility,

## INTRODUCTION

Infertility is defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse (Zegers-Hochschild, 2009). Infertility maybe considered as one of the most stressful events, infertility is not only a medical or psychological problem, but also a social problem due to the inability to play one of the essential social roles- being a parent. Owing to the cultural and social reasons, as well as religious beliefs, having children in Asian countries is a more crucial factor than Western countries. Infertility associated with stressful experience, health problems, lack of self-confidence, feeling of grievance, threat, depression, sin, disappointment, and marital problems (Noorbala, 2009). According to the World Health Organization, about 33.35% (about 5 million) people in the world are infertile (Vander, M. 2018).). Infertility can play a role in generating stress in the family. The stress due to infertility reduces self-esteem in couples. The collection of these emotions leads to depression and anxiety in them (Biringer, 2018). Females are more vulnerable to having anxiety than males in infertile couples it was prevalence of 13.5% (Zhang, 2022). Assisted reproductive technology (ART) treatment is effective solution to infertility that was widely accepted by infertile couples. However, it is costly and needs a series of complex processes which can increase the psychological burden on infertile couples, especially on the female partner (Karimzadeh, 2017).

## METHODOLOGY

A descriptive cross-sectional design was used for the study to identify level of anxiety among the infertile women who are undergoing infertility treatment. Study was conducted at Creative Infertility Treatment center, Satdobato, Lalitpur. Data was collected from 100 infertile women by using non- probability purposive sampling technique. Ethical approval for the study was taken from the institutional ethical review committee from Creative Infertility Treatment center. Participant were assured for anonymity and confidentiality. No name or personal identification number were reflected on the questionnaire. Informed consent was obtained from each respondent and face to face interview was done to collect data. Research questionnaire consisted of three part: Part A- Socio-demographic variables of respondents, Part B- Infertility related questionnaire and Part C- Beck Anxiety Inventory (BAI). Data from completed questionnaire were cleaned, re-coded and entered in to excel 2010 version and statistical package for social science (SPSS) version 16.0 was used for descriptive and inferential statistics analysis.

## RESULT

Out of 100 respondent's more than half 56 % of the respondents were between ages 26-35 Years age only 6% of respondents were from age group 46-55 years. Forty three percent of respondent were from the ethic group Janjati and 74 % from the Hindu by religion. Ninety five percentage of respondent were literate among then 27% had obtained primary level of education, 28% of respondents were house makers by occupation, majority of respondents 71% were working 12 hours per day. Near to half 47.6 % respondent had the Hypothyroidism.

**Table 1: Distribution Respondents based on Menstrual Cycle, Duration of Marriage, Infertility and Duration of Infertility Treatment**

Variables	Frequency	Percentage (%)
<b>n=100</b>		
<b>Menstrual Cycle</b>		
Regular	56	56
Irregular	44	44
<b>Irregular menstrual cycle</b>		
40-55 days	11	25
56-70 days	19	43.2
71-85 days	11	25
86-100 days	3	6.8
Above 100 days	-	-
<b>Duration of marriage</b>		
1-3 years	23	23
4-6 years	52	52
7-9 years	17	17
10-12 years	1	1
Above 12 Years	7	7
<b>Duration of infertility</b>		
1-3 years	56	56
4-6 years	35	35
7-9 years	2	2
10-12 years	3	3
Above 12 Years	4	4
<b>Duration of infertility treatment</b>		
About 1 year	45	45
2-3 years	42	42
4-5 years	7	7
> 5 years	6	6

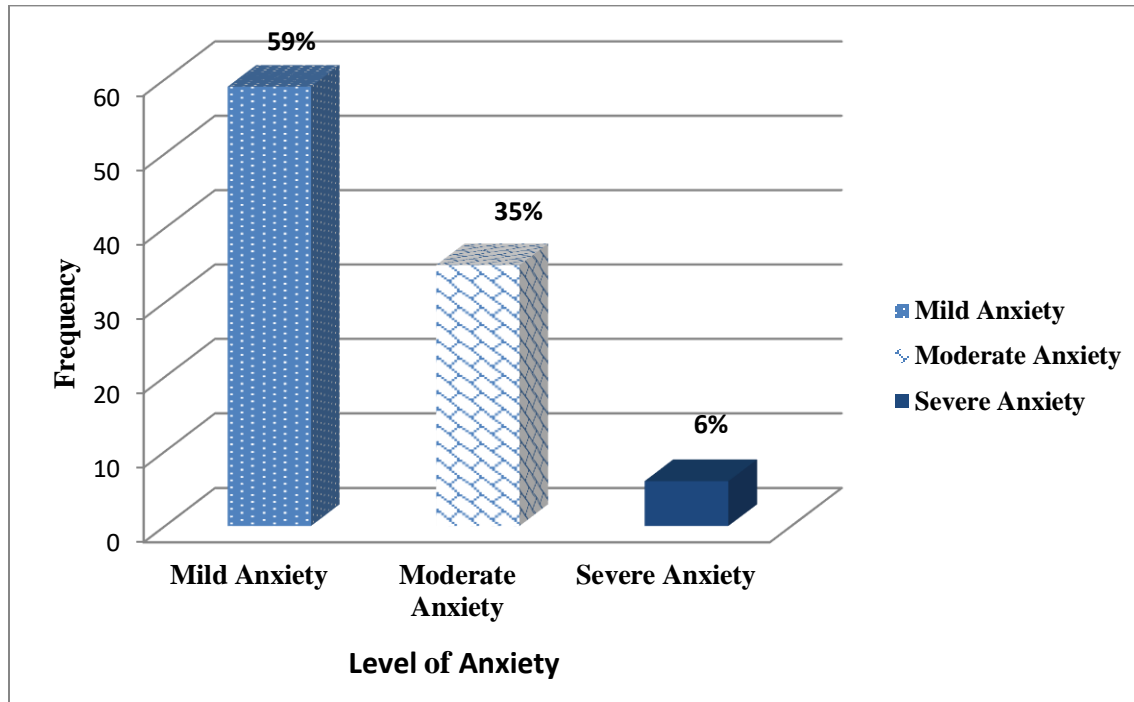
Table 1 shows that out of 100 respondent's majority of respondents had regular menstrual cycle i.e. 56 % followed by 44 % had irregular menstrual cycle where 43.2 % of the respondent had their cycle in between 56-70 days. Among the 100 respondent's 52 % were from the 4-6 Years of duration of marriage followed by duration of infertility were 56 % i.e. 1-3 years and 45 % are taking infertility treatment from about 1 years.

**Table 2: Medical and Surgical History among Respondents**

(n=100)

Variables	Frequency	Percentage
Medical history		
No	58	58
Yes	42	42
If Yes		
Tuberculosis	8	19
Hypertension	7	16.7
Hypothyroidism	20	47.6
Diabetes	1	2.4
Hyperthyroidism	1	2.4
Others	5	11.9
Taking medicines for above disease		
No	75	75
Yes	25	25
If Yes (Duration of taking medicines)		
About 1 year	8	32
2-4 years	13	52
5-7 years	4	16
>7 Years	-	-
Surgical history		
No	78	78
Yes	22	22
If Yes		
Oophrectomy	4	18.2
Salphingectomy	4	18.2
Laparotomy	2	9.1
Others	12	54.5

Table 2 illustrates out of 100 respondent's 58 % of the respondent had no significant history of medical illness and 42 % had the history of medical illness followed by 47.6 % had the Hypothyroidism. 75 % respondents are not taking medicines for above mention disease where 25 % are taking medicines followed by 52 % are taking medicines from 2-4 years. Only 22 % respondents had been gone through surgical intervention, among them 54.5 % had other types of surgical intervention and 9.1 % had laparotomy.



**Figure 1: Level of Anxiety among Infertile Women Receiving Infertility Treatment**

**n=100**

Figure 1 depicts that majority of respondents (59%) has low anxiety level followed by moderate anxiety (35%) and severe anxiety (6%).

## DISCUSSION

Present study was performed to assess the level of anxiety among infertile women receiving infertility treatment at Creators IVF Nepal Pvt. Ltd, Satdobato. Among 100 infertile women, more than half 56 % of the respondents were between ages 26-35 Years age only 6% of respondents were from age group 46-55 years. Ninety five percentage of respondent were literate among then 27% had obtained primary level of education, 28% of respondents were house makers by occupation, majority of respondents 71% were working 12 hours per day. Near to half 47.6 % respondent had the Hypothyroidism. This findings is similar to a study conducted by Razzaque, 2021, where majority of respondents were from age group 31-40 (55%) and majority of respondents (95%) educated (66.5%) respondent were house makers. Regarding co-morbidity of respondents 42 % has different types of disease such as tuberculosis 19%, Hypertension 20%, hypothyroidism 48%, diabetes mellitus 2%, hyperthyroidism 2.4% and other 12% in present study Hypothyroidism is the most common comorbidity. Present finding is not supported by the study conducted by (Neupane, 2019) where e most common comorbidity was female infertility was ovarian cyst (37%), heavy bleeding (15.7%), Pelvic inflammatory Disease (9.69%), Uterine fibroids (9.09%), Ectopic pregnancy (6.66%) and Thyroid disease (21.81%).

Among the 100 respondent's 52 % were from the 4-6 Years of duration of marriage followed by duration of infertility were 56 % i.e. 1-3 years and 45 % are taking infertility treatment from about 1 years. Present findings is contradictory with a descriptive study conducted by Razzaque, 2019) were common duration of marriage was more than 10 years 61%. Regarding duration of infertility, 58% were from 3.6 years by (Lakatos et al., 2017). In the context of level of anxiety

among infertile women, present study found that majority of respondents (59%) has low anxiety level followed by moderate anxiety (35%) and severe anxiety (6%). Present findings is contradictory with a cross sectional study done by Muhmooda et al 2019 study found that low anxiety was 5%, moderate 18%, severe anxiety 35% and extreme anxiety was 42% in another study conducted by Li w 2022 mild anxiety was 88% and moderate anxiety 12% only there was no evidence of severe anxiety.

## CONCLUSION

Present study concluded that infertile women were married since 3 years, who were undergoing infertility treatment since one year. Hypothyroidism found to be common as comorbidity low level of anxiety was common among infertile women.

## RECOMMENDATION

Comparative study can be done between primary and secondary infertile in both men and women. A large-scale study can be done in the same area of research for more generalization. Tertiary level infertility center from government level can be included.

## LIMITATION

This study was only focus on to assess the level of anxiety among infertile women receiving infertility treatment. Data was obtained from only one infertility treatment center.

## Conflict of interest

None

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## AUTHOR CONTRIBUTION

Reena Khyaju (PI), Bhim Maya Yakha (Co-PI), Durga Kumari Shah (Co-author), Anamika Dangol (Co-author), Sita Kumari Pandey (Co-author), Bhawana Bhandari (Co-author).

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