

A Study to Assess the Psychosocial Problem and Lived Experience of Woman Attending the Infertility Clinic at Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital Loni

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Abstract: Infertility is one of the most significant life crises. Although infertility is not a disease, it can cause disorders in physical and mental health, quality of life, and marriage quality. It can also lead to separation and divorce, loss of self-confidence, feelings of grief, threatening, depression, guilt, and frustration, emotional distress, and marital problems and rejection, which can in turn cause depression, anxiety, or guilt. Fertility is a process that has an adverse effect on body, occupation, personality, and mentality. A descriptive study with cross sectional approach was used to assess the psychosocial problem and lived experience of woman attending the infertility clinic at Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital Loni. The sample consisted of 20 females from the infertility clinic at Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital Loni. Sampling techniques used for the present study was non-probability purposive sampling technique. A proforma was prepared to collect the data. Descriptive and inferential statistics were used to analyze the data according to objectives. socio-demographic variables of the study participants selected at Infertility clinic of Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital Loni. in the form of frequency and percentage. They are explained further in diagrammatic form using graphic presentation as follows. In the present study, 20 patients from Infertility clinic of Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital Loni were included, majority 55% of the female participants are in age group of 18-23 years, majority 60% of the female are from joint family, majority 20% of participants belongs to group of primary school education, a majority 40% of the participants were farmer by occupation, majority 40% of the participants was having Rs. 2102 to 3503 family income. psychological problems of Infertile women visiting infertility clinic shows Majority of study participants were having stress with mean score 2.55 ± 0.82 . 2.66 ± 0.88 participant having anxiety. Depression also seen in 2.35 ± 1.04 of study participants. Low self esteem faced by 2.3 ± 0.80 of study participant. Social problems of Infertile women visiting infertility clinic suggest that Majority of study participants were having marital discord with mean score 1.9 ± 0.91 . 2.45 ± 1.09 participant facing social isolation. Guilt and shame also seen in 2.25 ± 0.85 of study participants. Negative self-image faced by 2.45 ± 0.94 of study participant. The study findings conclude that, the women who attending the infertility clinic had a mild to moderate level of psychological and social problems and because of their infertility, infertile women experience a range of psychosocial issues and develop coping mechanisms that are emotion-focused.

Keywords: Psychosocial problem, infertility clinic

1. Introduction

The failure to conceive after a year of frequent, unprotected sexual activity between a male and female partner is known as infertility in humans.[1] Infertility can have a variety of causes, some of which can be treated with medication.[2] Worldwide, estimates from 1997 indicate that approximately 5% of heterosexual couples have an unsolved infertility issue. However, a much higher percentage of couples—between 12% and 28%—experience involuntary childlessness for a minimum of a year.[3] Human infertility is mostly caused by aging, and older mothers are more likely to experience spontaneous abortions when pregnant.

Twenty to thirty percent of cases of infertility are caused by males, twenty to thirty percent are caused by females, and twenty to forty percent are caused by issues in both parts combined.[1][4] No cause is discovered in 10–20% of instances.[4] Age is the most common factor contributing to female infertility, which typically shows itself as few or non-existent menstrual cycles.[5] Deficits in the semen are the

most common cause of male infertility, and the quality of the semen is a proxy for male fecundity.[6]

While the epidemiological definition of infertility refers to "trying for" or "time to" a pregnancy, generally in a population of women exposed to a likelihood of conception, demographers typically describe infertility as childlessness in a population of women of reproductive age.[7] Presently, female fertility often peaks in early adulthood, declines after age 35, and seldom occurs after age 50. After ovulation, a female is most fertile for 24 hours. Male fertility typically peaks in early adulthood and then starts to diminish beyond 40.[8] [9]

Both male and female infertility may result from the following factors:

- 1) DNA damage
- 2) General factors like Diabetes mellitus; thyroid disorders, undiagnosed and untreated coeliac disease adrenal disease.

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- 3) Hypothalamic-pituitary factors like Hyperprolactinemia Hypopituitarism
- 4) Environmental factors like tobacco and smoking

Both male and female fertility can be significantly impacted by obesity. Body mass index, or BMI, may have a big role in fertility because infertility can be linked to a male's BMI increase of as little as three units. Numerous investigations have indicated a correlation between an elevated BMI and a reduction in sperm concentration, motility, and DNA damage in sperm. Additionally, there is a connection between obesity and ED. The conversion of androgens to estradiol may result in ED. Serum estradiol levels rise along with the amount of adipose tissue because more aromatase is available to convert androgens. Obesity may also have an impact on leptin and inhibin B, among other hormones. It has been observed that when weight increases, inhibitory B levels drop, leading to a reduction in Sertoli cells and sperm production [10]. [11]

The two main causes of difficulties with fertilization are either structural issues with the uterus or fallopian tube, or issues with egg release. A obstruction of the fallopian tube resulting from scar tissue, infections like chlamydia, or abnormalities can cause infertility. As endometrial tissue grows in the fallopian tubes or around the ovaries, endometriosis can lead to infertility. Typically, women in their mid-twenties and older have higher rates of endometriosis, particularly if they have delayed motherhood. The incapacity to ovulation could be a significant contributing factor to infertility in women. Of the recognized reasons of infertility in women, 25% are due to problems of the ovulation. Infertility arises from oligo-ovulation or anovulation, as there is no monthly release of oocytes. Fertilization cannot occur if there is no oocyte present. [12]

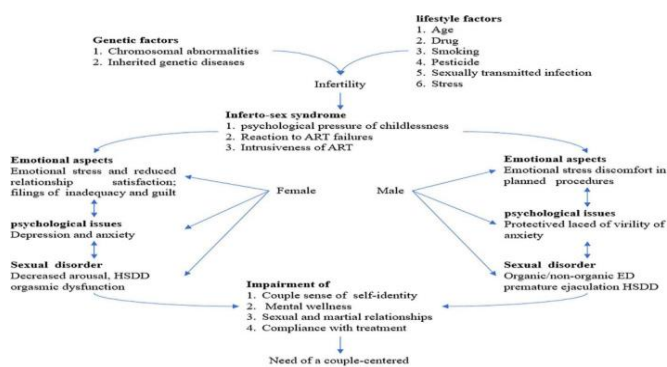
Common causes of infertility of females include:

- Ovulation problems
- Tubal blockage
- Pelvic inflammatory disease caused by infections like tuberculosis
- Age-related factors
- Uterine problems
- Previous tubal ligation
- Endometriosis
- Advanced maternal age
- Immune infertility [13]

Low semen quality is the primary cause of male infertility. Infertility in men with functional reproductive organs can result from decreased sperm count brought on by medications, radiation, endocrine disorders, or infections. Hormone imbalance, blockage of the man's duct system, or abnormalities of the testicles could be present. Some may not have a permanent cure, even though many can be managed with surgery or hormone replacement therapy. [14] Main ciliary dyskinesia may be the cause of infertility linked to viable but immotile sperm. For the zygote to develop into an embryo, the sperm must supply it with DNA, centrioles, and activation factor. Semen analysis will not reveal infertility caused by a flaw in any of these sperm structures. [15] Immune infertility is caused by antisperm antibodies. Men with cystic fibrosis may experience infertility.

Sometimes a man and a woman are infertile or sub fertile together, and the infertility in the pair results from the interaction of these two medical disorders. In other instances, immunological or genetic factors may be at play; it's possible that both partners are fertile on their own but that the pair is unable to conceive naturally. In these situations, anomalies probably exist but are not picked up by the available techniques. The egg may not be released at the best moment for fertilization, it may not enter the fallopian tube, sperm may not be able to reach the egg, fertilization may not take place, zygote transport may be disrupted, or implantation may not succeed. It is becoming more well acknowledged that egg quality is crucial and that older mothers' eggs have a lower ability to fertilize normally and successfully. Additionally, some women who have infertility that cannot be explained may have fertility issues due to polymorphisms in the genes that make up the folate system. [16]

Infertility has many negative effects, some of which are societal and others of which are personal. When treatment is accessible, advances in IVF and other assisted reproductive technologies can give many couples hope, but there are still obstacles related to cost and insurance coverage. Unintentionally, the medicalization of infertility has resulted in a disdain for the couples' emotional reactions, which include distress, a loss of control, stigma, and a detour in their adult development. [17] [18] Psychology may be impacted by infertility. One of the most significant life transformations for both men and women is becoming a parent. Anger, sadness, anxiety, marital issues, and a sense of worthlessness have all been linked to the emotional fallout that results from the stress of having a child wish not granted. [19] Sexual dysfunction may worsen as partners become more anxious to conceive. Divorce is a common occurrence, particularly when one partner feels pressured to make medical decisions. Depression rates among women attempting to conceive are frequently comparable to those of women with cancer or heart disease. [20] Couples in which one partner is infertile tend to experience higher levels of emotional strain and marital challenges. The way a male and female partner react to issues related to infertility varies. [21]



Furthermore, a couple's socioeconomic situation affects their psyche; a lower socioeconomic status is linked to a higher risk of depression. [22] Infertility-affected couples are more likely than other couples to experience sexual dysfunction. The most frequent sexual problem that couples deal with is erectile dysfunction and a decrease in sexual desire. [23]

An infertile person's life may be significantly impacted by depression, a psychological side effect of infertility that may

also have an impact on a couple's quality of life and mutual relationship [24]. Studies conducted elsewhere and in some parts of Africa have shown how infertility affects infertile women psychologically. A variety of life factors, including social, emotional, and physical ones, are impacted by infertility, and it can result in the emergence of stigma, shame, despair, anxiety, guilt, and low self-esteem. It is one of the social and personal problems that impacts the couple's overall well-being and the functioning of their family, which can result in the emergence of psychiatric diseases or psychological stress. It is said to be connected to health difficulties, resentment, stressful situations, sadness, low self-esteem, disappointment, danger, sin, and marital conflicts. Stress within the family might result from infertility. There is conjecture that psychological variables, as opposed to biological ones, could be the main cause of infertility. Psychologists may find great interest in this area.[25][26] There are conflicting findings despite the large number of research examining the relationship between psychological assessment scores and infertility in rural area like Loni as most of female visiting hospital for this and facing so many psychological social burden. Thus the aim is study to assess the psychosocial problem and lived experience of woman attending the infertility clinic at Dr.Vithalrao Vikhe Patil Pravara Rural Hospital Loni.

2. Methodology

Design

The present study was a quantitative qualitative integrated approach. It is survey based study. This study was approved by the Institutional Ethical Committee of Pravara institute of medical sciences, Loni Ahamadnagar. All participants provided signed informed consent form before participation and their rights were protected throughout this study.

Sample Size

Patient diagnosed with infertility and followed up at infertility clinic of at Dr. Vithalrao Vikhe Patil Pravara Rural Hospital Loni.Total 20 participants included in this study.

Inclusion criteria

The woman, who are,

- 1) Woman who are attending the infertility clinic.
- 2) Women who are willing to participate in the study.
- 3) Subject who will be available during data collection period.

Exclusion criteria

The woman, who are,

- 1) Unable to respond tool
- 2) Women who are undergoing psychiatric consultation for any issue.
- 3) Women who are not willing to participate in the study.

Data Collection tool

The tool is to assess the psychosocial problem and lived experience of woman attending the infertility clinic at Dr. Vithalrao Vikhe Patil Pravara Rural Hospital Loni. 3 sections:

Section A: Socio demographic data

Section B: Psychological Problem and Social Problem

Section C: Lived Experience

It consists of following sections like,

Section A: This section consists of 5 items for obtaining information about Socio demographic profile of infertile women like, Age, Occupation, Education, Type of Family, Family income, Presence of Gynecological history

Section B: This section consists of a scale for assessment of Psychological and social problems Total 47 questions for which minimum score is 0 whereas maximum score is 4.

Section C: Section C consist of Question on Lived Experience includes 12 question and scoring is depend on participant answer in which participants are allowed to answer in descriptive form and important words which helpful to determine lived experience are selected.

3. Statistical Analysis and Result

Statistical analysis of study was conducted using IBM SPSS version 20.0. Percentage, mean and standard deviation values calculated for the demographic data. In all statistical analysis p-value <0.05 was considered significant. Descriptive statistics highlighted the main demographic and clinical participant characteristics. Chi-Square Test were used to assess the association. ANOVA Used to compare means among three or more groups. In the present study, 20 patients from Infertility clinic of Dr. Vithalrao Vikhe Patil Pravara Rural Hospital Loni were included, majority 55% of the female participants are in age group of 18-23 years, majority 60% of the female are from joint family, majority 20% of participants belongs to group of primary school education, a majority 40% of the participants were farmer by occupation, majority 40% of the participants was having Rs. 2102 to 3503 family income.

4. Demographic Data

Table 1: Age wise classification of participants.

Age	No. of Responses	Percentage (%)
18 to 23	11	55
24 to 30	5	25
31 to 36	4	20

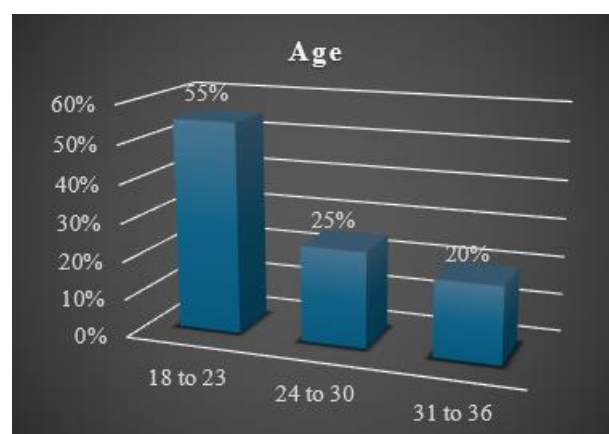


Figure 1: Description of study participants according to age

Table 2: Demographic and Clinical Characteristics of the Study Sample

S. No	Demographic characteristics	Values	P value
1	Age	22.85 (±11.06571)	0.025
2	Education	2.80 (±1.196)	>0.10
3	Occupation	2.55 (±1.57)	>0.10
4	Type of Family	1.6(±0.50)	0.005
5	Family Income	3.5(±0.11)	>0.10
6	Presence of gynecological problems	2.8 (±1.24)	>0.10

Questionnaire and Result

Psychological problems	Score	Mean	SD	P Value
Stress	1-32	2.55	±0.82	<0.0001
Anxiety	1-24	2.66	±0.88	<0.0001
Depression	1-24	2.35	±1.04	<0.0001
Low self esteem	1-24	2.3	±0.80	<0.0001

Table no 3 shows distribution of frequency, percentage, mean and SD. Majority of study participants were having stress with mean score 2.55±0.82. 2.66±0.88 participant having anxiety. Depression also seen in 2.35±1.04 of study participants. Low self esteem faced by 2.3±0.80 of study participant.

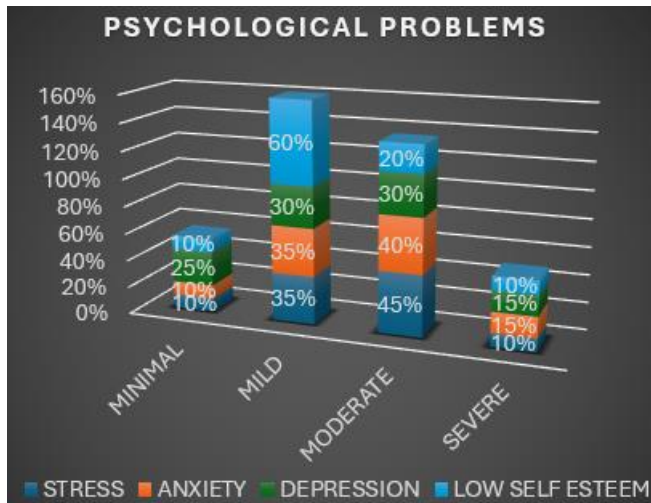


Figure 3: Description of Psychological problems among study participants

Social Problems	Score	Mean	SD	P Value
Marital Discord	1-32	1.9	±0.91	<0.0001
Social Isolation	1-24	2.45	±1.09	<0.0001
Guilt and Shame	1-24	2.25	±0.85	<0.0001
Negative self image	1-24	2.45	±0.94	<0.0001

Table No 4 shows distribution of frequency, percentage, mean and SD of social problems. Majority of study participants were having marital discord with mean score 1.9±0.91. 2.45±1.09 participant facing social isolation. Guilt and shame also seen in 2.25±0.85 of study participants. Negative self image faced by 2.45±0.94 of study participant.

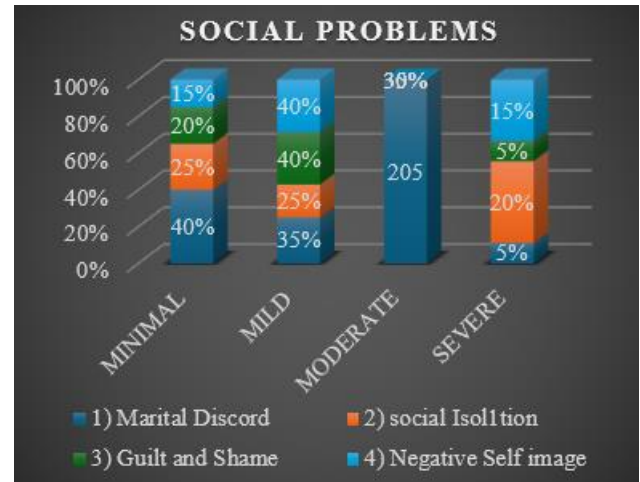


Figure 3: Description of Social problems among study participants

Lived experience were collected in patient language from which some important, related and common words were collected and descriptive analyses was done. In this study, participants described their journey after infertility as emotionally challenging yet transformative, finding new appreciation for life and resilience. Adjusting to changes in body image was tough, but many learned to embrace and love their scars. They shared that coping with this involved pain and growth, and staying positive during recovery was a challenge. Views on societal reactions varied, but self-acceptance and inner strength were emphasized, with many finding comfort in their faith and hope for the future.

5. Discussion

In the present study from 20 females, majority 55% of female with age of 18-23 year of age, 25% female with age of 24-30 year, 20% females with age of 21-36 year of age. The data based on their educational status show that, majority 40% of the female with primary education, 20% female with higher secondary education to degree and above. 10% with no formal education. In this study the majority of participants in this study had a low level of education. Majority of 40% of female farmer by occupation, 20% female in service, 15% labourer by occupation, 10% businessman by occupation, and 15% do other occupation. Type of family of the participants is 60% females were from joint family and 40% female from nuclear family. The data based on their family income 40% family income is Rs. 2102-3503. 25% having income of Rs.3504-7007, 15% having income below Rs.1050. 10% with Rs.1051 to 2101.10% having income of Rs.7008 and above income

A similar study was conducted by Aflakseir A, Association between Coping Strategies and Infertility Stress among a Group of Women with Fertility Problem in Shiraz, Iran. . The mean age of the participants was 29.2 (SD=4.5) years and the ages were ranging from 24 to 52. The education level for the sample was: below high school (38%), high school (27%), undergraduate (32%), and postgraduate (3%). Majority of women were housewives (74%). In addition, the mean duration of infertility was 4.2 years, and the mean length of fertility treatments was 2.8 years.

In the psychological problems stress, anxiety, depression and low self-esteem was assessed by self-made questions. The problems categorized in minimal, mild moderate and severe according to score of participants. The study findings regarding Stress reveals that, mean score was 2.55 ± 0.82 . majority 45% of the study participants having moderate stress, 35% participant with mild stress, 10% with minimal stress and other 10% with severe stress. The level of stress was depended on minimal, mild, moderate and severe scoring. Depression of participant suggest that, 2.35 ± 1.04 is mean of depression in which majority 30% participant having mild to moderate depression, 25% suggestive of minimal depression and other 15% having severe depression. Anxiety also assessed in this study, according to that 40% participant having moderate anxiety about their problem, 35% having mild anxiety, 15% having severe anxiety and 10% having minimal anxiety, Low self-esteem is also one of the psychological problem faced by female during the infertility. 60% participant having mild self esteem, 20% having moderate self-esteem, 10% -10% having minimal and severe self-esteem respectively.

The finding of this suggests that most of female facing the minimal to moderate number of psychological problems like stress, anxiety, depression and low self-esteem.

The study conducted by Nik Hazlina on Worldwide prevalence, risk factors and psychological impact of infertility among women: a systematic review and meta-analysis. Psychological discomfort in females experiencing infertility is significantly impacted. According to the current study, female infertiles are 1.6 times more likely than fertile women to experience psychological discomfort. This is comparable to a Taiwanese study that discovered mental illnesses affect 40.2% of infertile females. According to a study of research done in numerous nations, women bear the majority of the costs associated with infertility and suffer from severe anxiety as a result of being held responsible for their inability to conceive. Depression is also associated with infertility; females experiencing infertility have a 1.4-fold increased likelihood of experiencing depression; however, other studies found that between 67.0% and 35.3% of infertile women also experienced depression. According to recent studies, prevalence might vary from 11% to 27% and 73%. Major depression was shown to be the most prevalent disorder among infertile couples, accounting for 5.1% of male and 10.9% of female respondents in a different Swedish study³⁵. It demonstrates that depression risk is elevated in infertility. As a result, it needs to be taken seriously and given special attention.

In the social problems marital discord, social isolation, guilt and shame, and negative self-image were assessed by self-made questions. The problems categorized in minimal, mild moderate and severe according to score of participants.

The study findings regarding Marital discord reveals that, mean score was 1.90 ± 0.91 . majority 40% of the study participants faced minimal discord, 35% participant with mild marital discord, 20% with moderate discord and other 5% with severe discord. This suggest that very few females with infertility faced marital discord and most of them having normal marital life.

Social Isolation of participant suggest that, 2.45 ± 1.09 is mean of social isolation in which majority 30% participant having moderate isolation. 25% suggestive of minimal to mild isolation and 20% suggestive of severe isolation. Most of female faced social isolation during family function, programs, get to gather as everyone asking about why she is not having child and most of the family members and friends talking about their children's that makes female to feel like she was socially isolated. Women who are infertile might withdraw themselves. Isolation as a coping mechanism can result in loneliness, self-blame, and ruminating on the past, all of which can contribute to depression symptoms.

Guilt and shame also assessed in this study, according to that 40% participant having mild guilt and shame about their problem, 35% having moderate guilt and shame, 5% having severe and 15% having minimal guilt and shame. This is because some females are blaming themselves for their problems, their family members also blaming them for not having child. The most common and unproductive coping mechanisms among infertile women were social distancing and avoidance. Specifically, a large number of them shunned interactions with others who were pregnant or already had kids.

Negative self-image is also one of the social problems faced by female during the infertility. 40% participant having mild negative self-image, 30% having moderate negative self-image, 15% -15% having minimal and severe negative self-image respectively.

Gibson DM, conducted the study on the effect of social coping resources and grow the fostering relationship on infertility stress in women. One significant result for the field's practitioners is that social disengagement was exhibited by all of the women in our study, regardless of their stress levels. This is a disadvantage that women face when attempting to cope with and adapt to infertility. It is imperative for clinic nurses to acknowledge that women who exhibit "social withdrawal" may be experiencing elevated levels of stress. For identical reasons, the ladies in this study did not wish to engage in social contacts. For example, G.H. felt that others could tell if a woman was childless right away, therefore she avoided social situations for fear of being questioned about her childlessness. The bulk of our participants had developed this coping mechanism, which involved isolating themselves and shunning any activities that brought back childhood memories

In this study, we asked questions about what they feel after knowing about their infertility? Most of them replied that they are worried about their future and worried about not having child. They also asked about how they feel in society and friends. Most of them replied that they avoid going out and attending family functions. Most of them feel sad when they so their friends with child. Some experienced social pressure as well as family pressure. Most of them replied that their mother-in-law is very disappointed. When we asked about what traditional method you use as a treatment. So many replied they tried herbal medication some followed diet, sitting on water use of some used so time of herbal combination and they put it inside the vagina. Some replied that they visit temples offered animal sacrifices.

But while asking about their relationship with partner most off have positive response as their partner helping them to cope with this situation. They were very supportive and caring during their treatment. Most of them trusted on god's plan. They believed that God/Allah will make it possible to become parents. Their view towards the future life is positive. Some replied that delivery was a god's gift so some are ready tom adopt child.

When we asked about family structured. Some replied that every family member needs to learn and support each other, some replied that family is their main support they supported them through out. They received emotional as well as financial support from their families.

The purpose of the current study was to investigate Iranian women who are infertile. We identified four phases that matched Akizuki's descriptions of shock, reactions, processing, and reorientation (6). Our results are corroborated by research showing that women without children are more likely to experience emotional disturbance, a lower standard of living, marital discord, melancholy, anxiety, and PTSD (9). The women's narratives demonstrated dread, anxiety, self-blame, and a comparable avoidance of sexual activity in response to their infertility (10). In contrast to pregnant women, infertile women exhibited greater rates of alexithymia, according to a different study. If the other person won't listen to them or if even those closest to them are rejecting and passing judgment, they find it difficult to discuss their situation (11). During the processing stage, avoidance was a coping strategy and a form of protection for our participants when they experienced negative emotions. Women receiving fertility treatments associate with their counterparts while receiving treatment in the hospital, as noted by Akizuki and colleagues. When another woman succeeds, one will be deeply upset and will feel like a "loser." Based on our research, we contend that Iranian women must deal with various forms of embarrassment and are subjected to isolation and humiliation by both the community and family. On the other hand, community members provide emotional support to infertile women; yet, the participant narratives revealed women's unfavorable opinion of other people's empathy⁷⁷.

Since infertility affects almost every part of the lives and relationships of those who suffer from it, the experience is difficult to describe. Many times, individuals are quick to ignore the psychological implications of infertility in favor of concentrating just on the medical factors. According to Hasanpoor-Azghdy et al. (2014), infertile women bear ongoing physical, social, and emotional costs. The pain brought on by all of these responsibilities is very intricate. Men and women should be judged roughly equally responsible for infertility in infertile relationships. Sadly, women bear a disproportionate amount of the social burden since they are the only ones who can be held responsible for their inability to conceive and go through the emotional turmoil that comes with anxiety as well as feelings of guilt, shame, grief, and fear (Lindsey & Driskill, 2013; Loke, Yu, & Hayter, 2011). Following the confirmation of their infertility, the majority of infertile women typically experience feelings of disappointment, depression, and isolation, especially when friends and family assemble to welcome them back to their

families. The study's informants had comparable experiences and disclosed that feelings of envy would force them to purposefully keep their distance from kids.

6. Conclusion

The study findings conclude that, compared to fertile women, infertile females are characterized by a significantly worse psychological status in terms of stress, anxiety depression and low self-esteem symptoms also social problems like marital discord, social isolation, guilt and shame and negative self-image. Among infertile women, age, social and sexual concern, maternal relationship stress and financial stress were significantly related to distress. This study points at the necessity of specific psychological interventions, presently absent from our public healthcare routine, for women struggling with infertility, to help them manage potential mental health problems and meet their reproductive goals.

7. Scope

Replication of the study could be done with larger samples to validate and generalize the findings.

The study can be replicated to assess coping strategies of infertile women.

The similar study can be conducted with experimental method in an effort to check the effectiveness of interventions for reducing psychological and social problems improving the quality of life of the participants.

The study with similar objectives can be conducted to assess psychosocial problems and quality of life of different group of study participants.

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