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Assessment of anxiety levels and marital relationships among women undergoing infertility treatment: A descriptive observational study

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Abstract

This study aimed to assess anxiety levels and marital relationships among women undergoing infertility treatment. A descriptive observational design was conducted involving 300 infertile women over nine months at Zagazig University Hospital. Data were collected using a Structured Interview Questionnaire, the Female Sexual Function Index (FSFI), and the Taylor Anxiety Scale. Reliability analysis showed high internal consistency (Cronbach's alpha: 0.923 for FSFI; 0.845 for Taylor Scale). Results indicated that 32.6% of participants sought services after one year of marriage, 30.5% visited more than five centers, and 47.5% used IVF. Nearly half of the subjects experienced varying degrees of anxiety (moderate to very severe), which significantly impacted sexual arousal, orgasm, and satisfaction. In conclusion, anxiety and psychosexual dysfunction are highly prevalent among women during fertility treatments, underscoring the critical need to integrate psychological counseling and standardized screening protocols within routine reproductive healthcare. *(Afr J Reprod Health 2026; 30 [15]: 32-42).*

Keywords: Anxiety Levels, Infertility, Marital Relationships, Treatment, Women

Résumé

Cette étude visait à évaluer les niveaux d'anxiété et les relations conjugales chez les femmes sous traitement pour l'infertilité. Une étude descriptive et observationnelle a été menée auprès de 300 femmes infertiles sur une période de neuf mois à l'hôpital universitaire de Zagazig. Les données ont été recueillies à l'aide d'un questionnaire d'entretien structuré, de l'index de la fonction sexuelle féminine (FSFI) et de l'échelle d'anxiété de Taylor. L'analyse de la fiabilité a montré une forte cohérence interne (alpha de Cronbach: 0,923 pour le FSFI; 0,845 pour l'échelle de Taylor). Les résultats ont indiqué que 32,6% des participantes ont cherché des services après un an de mariage, 30,5% ont visité plus de cinq centres et 47,5% ont eu recours à la FIV. Près de la moitié des sujettes ont présenté différents niveaux d'anxiété (modérée à très sévère), ce qui a considérablement affecté l'excitation sexuelle, l'orgasme et la satisfaction. En conclusion, l'anxiété et le dysfonctionnement psychosexuel sont très répandus chez les femmes pendant les traitements de fertilité, ce qui souligne la nécessité cruciale d'intégrer un soutien psychologique et des protocoles de dépistage standardisés dans les soins de santé reproductive de routine.*(Afr J Reprod Health 2026; 30 [15]:32-42).*

Mots-clés: Niveaux d'anxiété, Infertilité, Relations conjugales, Fonction psychosexuelle, Femmes

Introduction

Infertility, as defined by the World Health Organization and the American Society for Reproductive Medicine, is the inability of partners to conceive following 12 months of regular, unprotected sexual intercourse. Its prevalence varies, affecting 3.5–17% of couples in developed countries, 6.9–9.3% in developing nations, and 10–15% in the Middle East. As a widespread community health issue, infertility can cause psychological distress, socioeconomic challenges, and sexual difficulties for affected couples. Research indicates that the inability to conceive, coupled with repeated treatment failures, often disrupts couples' ability to adapt to their

circumstances. This may adversely affect their sexual relationships, particularly in terms of sexual function and satisfaction.[1,2]

Infertility profoundly affects the physical, emotional, and social comfort of couples, with females being particularly impacted. Contributing factors like a T-shaped uterus, FIGO type 3 leiomyomas, and fertility preservation therapies for transgender men can intensify anxiety and depression. Women with a history of infertility might likewise encounter an elevated risk of early or premature menopause. The stress of undergoing infertility treatments and the potential reality of a life without children can take a significant toll on mental health. Persistent stress compromises the immune system, making people more vulnerable to infections and various illnesses. Anxiety and depression are notably more common among women experiencing infertility, with rates in infertile couples appraised at 25–60%, much higher than in fertile couples and the overall population.[3,4]

Global studies reveal that nearly 96% of infertile women experience stress related to infertility at some point in their lives. In Iran, research reported that 31.7% of infertile females exhibited symptoms of depression, with 15% diagnosed as clinically depressed. Severe and very severe anxiety levels were reported by 30% and 53.3% of women. These findings highlight that infertile women generally experience higher levels of anxiety.[5] Research indicates that sexual dysfunction is more prevalent among infertile couples compared to those without fertility issues. Despite being a crucial aspect of physical and marital well-being, sexual function often does not receive adequate attention. Several factors have been identified as influencing sexual function in women with infertility, including age, psychological well-being, medication side effects, and hormonal status.[6,7]

The infertility diagnosis and treatment can significantly disrupt the marital relationships of couples. The process of managing infertility often involves extensive laboratory tests, repeated ultrasound monitoring, strict guidelines for sexual activity, and the emotional strain of failed treatment attempts. Infertility has been associated with various challenges, including health complications, lowered self-esteem, grief, sexual dissatisfaction, depression, guilt, anxiety, frustration, emotional strain, and marital difficulties. While infertility affects both men and women emotionally, women generally face greater stress, societal expectations, and higher levels of anxiety and depression.[8]

This study was conducted to seek an understanding of the negative influences of infertility on anxiety levels and sexual function amongst women undertaking infertility treatment. Infertility is a deeply personal and challenging experience, impacting millions of couples worldwide. While treatment offers hope, it often comes with heightened anxiety due to uncertain outcomes, financial strain, and invasive procedures. Moreover, the stress associated with infertility can disrupt sexual function, potentially affecting partner relationships. This study emphasizes the importance of understanding the association among infertility treatments, anxiety, and sexual function. It highlights the need for comprehensive care that integrates medical, psychological, and emotional support to help couples navigate the complexities of infertility. The present study aimed to assess anxiety levels and marital relationships among women undergoing infertility treatment.

Research questions

What is the level of anxiety and marital relationships in women undergoing infertility treatment?

What is the effect of anxiety levels on sexual function in women undergoing infertility treatment?

Methods

Study design and setting

This study employed a descriptive observational study. This type of methodology aims to provide a comprehensive account of the features, behaviors, attitudes, opinions, or perceptions of a detailed population. Its main objective is to describe the "what" of a phenomenon, offering a clear and detailed overview without investigating the underlying causes.[9]

The current study was conducted at the Infertility Treatment Unit in the outpatient building of Zagazig University Hospital, which is the major health facility in the area. The infertility unit is part of the gynecologic laparoscopy unit, located on the fifth floor.

Participants

The study included 300 infertile women for nine months. The Infertility Treatment Unit provides infertility diagnosis and treatment services for women, operating three days per week, from 9 am to 2 pm. A pilot study was conducted with 10% of the sample size, involving six infertile women over two weeks. The pilot aimed to evaluate the feasibility of the tools and assist in the planning process. Data collection occurred two days per week, with 2–3 women interviewed every week. Since no modifications were required, the pilot participants were involved in the main study.

The sample size was calculated using G*Power analysis (Version 3.1.9.7) with a 95% confidence level, a margin of error (alpha) of 0.05, an effect size (d) of 0.25, and a statistical power of 0.85. This resulted in a required sample size of 300 participants, ensuring high statistical power and compatibility with our psychometric tools.

Inclusion criteria

Females diagnosed with infertility following a year of consistent, unprotected sexual relations. Females who were sexually active in the past four weeks. Free from any psychological problems, psychiatric, or medical disease. Willing to agree to the study and give consent. Participant Assessment: Each participant was assessed individually, with 15–20 women being interviewed each week.

Data collection instruments

Data collection was conducted over six months. The researchers met with infertile women at the clinic twice a week, from 9:00 AM to 1:00 PM, until the target sample size was achieved. The researchers briefed clinic staff, including nurses, about the study's objectives to ensure its smooth execution. They introduced themselves to the participants to build rapport and obtained informed consent for participation. Participants were designated based on the inclusion criteria, and those with difficulties in reading or writing were assisted in completing the tools.

Data collection

Three tools were utilized for this study.

Tool I: Structured interview questionnaire: This tool, created by the authors after reviewing relevant literature [(10),] was written in Arabic and comprised a mix of open-ended and closed-ended questions. It was divided into three sections:

General characteristics*:* This section gathered demographic information (e.g., age, residence, education, and occupation), as well as health history, including details about the menstrual cycle, infertility treatment history, and any previous medical or surgical conditions

Present marriages and infertility history. This section contains questions about age, length of marriage, the causes and types of infertility, and the use of infertility treatments.

Tool II: Female sexual function index (FSFI): This tool, improved from *Anis et al***.**[11] and written in Arabic, assesses six features of sexual function: desire, arousal, lubrication, orgasm, satisfaction, and pain during intercourse. It consists of 19 closed-ended questions.

Components of the female sexual function index (FSFI) [12]

Desire**:** Evaluated with two items focusing on the frequency and intensity of sexual desire.

Arousal: Assessed through four items that measure the frequency and intensity of arousal during intercourse, confidence in becoming aroused, and satisfaction with sexual desire.

Lubrication: Measured by four items addressing the occurrence and effort of achieving and maintaining vaginal lubrication.

Orgasm: Assessed using three items that evaluate the frequency and difficulty of achieving orgasm and satisfaction with orgasm during intercourse.

Satisfaction: Evaluated with three items exploring emotional intimacy through sex, satisfaction with the sexual relationship, and inclusive sexual satisfaction.

Pain: Measured by three items assessing the frequency and intensity of pain or distress during and after vaginal penetration.

Scoring system: The FSFI includes six subscales:
Desire: Items 1 and 2, Arousal**:** Items 3–6&
Lubrication: Items 7–10&
Orgasm**:** Items 11–13&
Satisfaction**:** Items 14–16, &
Pain**:** Items 17–19

***Scoring details*:** Items 3–14 and 17–19 are scored on a scale of 0 to 5& Items 1, 2, 15, and 16 are recorded on a scale of 1 to 5& The overall FSFI score varies from 2 to 36.

Interpretation: Higher scores reflect better sexual function.

Tool III: Taylor anxiety scale: Created by Taylor *et al* [13]. and adapted by the researcher, this tool was translated into Arabic. It consists of 50 items aimed at evaluating anxiety based on psychosomatic symptoms.

***Components: Physical (Somatic) symptoms*:** These include quick fatigue, nausea episodes, headaches, digestive issues like diarrhea or constipation, and others.

Psychological symptoms: These include nervousness or tension, difficulty concentrating, concerns about finances or work, and other related issues.

***Scoring system*:** Replies are verified using a two-point scale: 1 = Yes, 0 = No

The overall score ranges from 0 to 50, with higher scores representing a greater severity of anxiety.

Score Interpretation: *0–9*: No anxiety or normal. 10–18: Mild to moderate anxiety. 19–29: Moderate anxiety. 30–40: Severe to very severe anxiety. 40–50: Extremely severe anxiety.

Tools validity and reliability: it was evaluated by a panel of three experts in Maternal and Newborn Health Nursing to ensure their clarity and completeness. The reliability of the tools was assessed by Cronbach's alpha reliability test through SPSS software, with the following results:

Tool I: (Female Sexual Function Index - FSFI): 0.923[12]

Tool II: (Taylor Anxiety Scale): 0.845.

Statistical analysis

Data were composed, checked, coded, and entered into the Statistical Package for Social Sciences (SPSS version 23). Quantitative data were represented as means, standard deviations, and ranges. Qualitative data were reported as frequencies and percentages. Spearman correlation coefficients were used to examine the relationship between two quantitative variables within the same group. The confidence interval was set at 95%, with an acceptable margin of error of 5%. The p-value was construed as follows: $P > 0.05$: Non-significant (NS). $P < 0.05$: Significant (S). $P < 0.01$: Highly significant (HS).

Ethical consideration

The study protocol received formal ethical approval and permission from the Scientific Research Ethics Committee of the Faculty of Nursing at Zagazig University in April 2025, operating under decision number Nur. REC: 305. Participation in this investigation was entirely voluntary, and each woman was provided with comprehensive data regarding the study parameters, including the title and objective of the study, alongside the specific details of the intervention program and her expected role before signing an informed consent form.

Results

Table 1 displays their characteristics. It was found that the participants' ages fluctuated from 30 to 40 years, with a mean ± SD of 30.0 ± 5.02. In terms of educational level, 43.9% and 26.8% of the women had a basic or secondary education and a university education, respectively. As for their living place, 55.3% of the participants lived in urban areas. Regarding monthly income, only 22.8% of the women reported having enough income to meet their needs and save money. On asking women about at present marriage, 72.6% of study subjects varied between 20-30 years, with a Mean ± SD of 23. 4± 5.0. And 35.2% married for 10 years. As regards the type of infertility, 87.6% of the study subjects reported primary infertility, and 52.5% of them reported male causes of infertility (**Table 1**).

Table 2 shows that 32.6% of study subjects started utilization of infertility services after one year of marriage, 65% used general hospitals, and wives started seeking medical services 68.5%. Regarding the number of settings used, 30.5% of study subjects visit more than 5 centers. Also, the table reveals that the most used infertility lab services are Ultrasonography 96.6% &, Hormonal analysis 98%& Hysterosalpingography 74%. The majority of the sample takes medication, 66.3%, followed by ovarian stimulation, 51.6%. Assisted reproductive techniques (ARTs), including IVF, were used by 47.5% of the study subjects and repeated by 86.7% of them. Concerning male utilization of infertility treatment methods,

Table 1: Socio-demographic and clinical characteristics of the study sample *(n=300)*

Demographic characteristics		n	%
Age (years)	< 30	83	27.6
	31-35	51	17.0
	36-40	98	32.7
	>40	68	22.7
	Mean ± SD	30.00 ±5.02	
Education	Illiterate/ read& write	87	29.3
	Basic/ Secondary	131	43.9
	University	82	26.8
Occupation	Housewife	222	74.3
	Working	78	25.7
Living place	Urban	165	55.3
	Rural	135	44.7
Family income	Not enough	125	41.8
	Not enough, just enough	106	35.4
	Enough & can save from it.	69	22.8
Clinical characteristics			
Marriage Age (by years)	20-25	99	33.0
	26-30	119	39.6
	30+	82	27.4
	Mean ±SD	23.42 ±5.0	
Length of present marriage (by years)	<5	79	26.4
	5-	115	38.4
	10 +	106	35.2
	Mean ± SD	5.61 ±5.02	
Infertility Length (by years)	<10	196	65.6
	10 +	104	34.4
	Mean +SD	5.6 ±5.20	
Type of infertility	Primary	262	87.6
	Secondary	38	12.4
Causes of infertility	Male causes	156	52.5
	Female causes-	120	40.0
	Unexplained	26	8.5

medication was used by 81.2% and repeated by 67.8% of them (Table 2).

Table 3 presents the distribution of women according to data about the nature of their marital relationships. It was noticeable that 82.8% of the study subjects reported the presence of their husband regularly every day. Concerning coital/ per week, only 16.6 % of study subjects reported that coital may be omitted for weeks. And 23.1% reported the presence of dyspareunia during sexual relations. Regarding their level of anxiety, nearly half of the study subjects experience anxiety at different levels, from moderate 23.4% to severe 15.2% and very severe 6.6% (Table 3).

Table 4 reveals that the mean sexual function indicator scores of the studied women were sexual dysfunction (FSFI 25+5.121).

Table 5 illustrates the relationship between anxiety level and different aspects of sexual dysfunction in the study groups. A statistically significant difference was detected among Arousal, Orgasm, and Satisfaction, showing strong statistical significance, indicating that different severity levels of anxiety significantly influence these factors. However, Desire, Lubrication, and Pain do not show clear statistical significance, suggesting that these factors are either stable or unaffected by varying severity levels (Table 5).

Table 2: Women's utilization of infertility services, Lab investigations, and infertility treatment in the study sample *(n=300)*

Utilization of infertility services		**n**	**%**
Time of starting utilization after marriage(years)	<1	97	32.6
	1 - 3	170	57.1
	> 3	33	10.3
Type of utilized services:	Private clinics.	25	8.5
	General clinics.	195	65.0
	Both.	80	27.5
Who starts seeking infertility services first? #	Wife	204	68.5
	Couple together	30	10.0
	Husband	66	22.5
Number of utilized settings	<3	96	31.9
	3-5	113	37.6
	>5	91	30.5
Period of infertility treatment/year	<5	167	55.5
	5-10	105	35.1
	>10	28	9.4
Utilization of infertility lab services			
Lab investigations used for female infertility #	1-Ultrasonography	291	96.6
	2- Hormonal analysis	267	98.0
	3-Hystrosalpingography	222	74.0
	4-Sonohysterography	211	70.3
	5-Ovulation follow-up	170	56.6
	6-Laparoscopy	140	46.6
	7-Hysteroscopy	126	42.0
	8-Post coital test	58	19.3
	9-Endometrial Biopsy	45	15.0
	10-Antisperm Antibody Tests	30	10.0

Infertility treatment		**Utilization**		**Repeated services**	
		No	**%**	**No**	**%**
Female treatment #	Medication	199	66.3	79	39.7
	Surgeries	101	33.6	29	28.8
	Ovarian stimulation.	155	51.6	96	62.0
Assisted reproduction technique :(n=206)	IUI	66	32.2	45	68.2
	IVF	98	47.5	85	86.7
	ICSI	42	20.3	19	45.2
Male treatment	Medication	134	81.2	91	67.8
	Surgeries	31	18.8	21	67.7

More than one answer (# Women have given more than one reason. Row numbers are given over 'n=300)

Table 3: The nature of marital relationships and their anxiety level *(n=300)*

Nature's sexual relationship		**n**	**%**
Husband's regular presence every day	Yes	276	82.8
	No	25	17.2
Coital/ per week	1	98	32.9
	2 +	151	50.5
	Not applicable	51	16.6
The presence of dyspareunia	Yes	69	23.1
	No	231	76.9
Level of anxiety	Normal (0-7)	67	21.5
	Mild (8-9)	103	33.3
	Moderate (10-14)	70	23.4
	Sever (15-19)	45	15.2
	Very severe < 20	20	6.6

Table 4: Different aspects of sexual dysfunction among the study sample*(n=300)*

Items	**Mean ±SD**
Desire (1,2)	5 ±3.56
Arousal (3,4, 5,6)	4 ±3.121
Lubrication (7,8,9,10)	5 ±3.22
Orgasm (11,12,13)	4 ±3.121
Satisfaction (14, 15, 16)	5 ±4.121
Pain (17, 18, 19)	4 ±3.121
Female Sexual Function Index (FSFI).	25 ±5.121

Table 5: Relation between anxiety levels and different aspects of sexual dysfunction of the study sample *(n=300)*

Items	Normal	Mild	Moderate	Sever	Very sever	-Value
Desire	4 ±0.056	5 ±0.069	4 ±0.056	3 ±0.086	4 ±0.086	**00.70**
Arousal	3 ±0.066	5 ±0.086	5 ±0.086	5 ±0.096	4 ±0.066	**0.05***
Lubrication	3 ±0.56	5 ±0.76	4 ±0.096	5 ±0.096	3 ±0.56	**0.60**
Orgasm	4 ±0.006	3 ±0.066	4 ±0.016	4 ± 0.076	3 ±0.071	**0.005****
Satisfaction	3 ±0.0121	3 ±0.092	4 ±0.0121	4 ± 0.071	3 ±0.069	**0.005****
Pain	**3 ±0.056**	**3 ±0.086**	**5 ±0.096**	**5 ± 0.096**	**3 ±0.056**	**0.40**

Discussion

According to Abdallah and the WHO report, infertility rates in the Middle East are estimated to be around 15% among both men and women, which is higher than the global average of approximately 10%, as recent studies show. The report also stated that one in six individuals worldwide, or over 17% of the adult population, suffers from infertility, emphasizing the global significance of this health issue.[14-15]

The link between infertility, anxiety, and sexual function is complex. Couples undergoing infertility often face higher levels of anxiety and are more prone to psychological disorders compared to those without fertility issues, which can deeply affect their lives, particularly their sexual relationships. Conversely, elevated psychological distress has also been linked to an increased risk of infertility. This study aims to assess anxiety levels and marital relationships among women undergoing infertility treatment: a descriptive observational study.[16]

The demographic characteristics of the studied sample revealed that their ages ranged from 25 to 40 years, with an average age of 30.0 ± 5.02 years. In terms of education, nearly three-quarters of the women had a basic or secondary education, and some had completed university studies. Furthermore, only a quarter of the women reported having enough income to meet their needs and save money. These results reflect the characteristics of

infertile couples, as the data collection took place over nearly a year, allowing researchers to gather a sizable sample of 300 women (Table 1).

Consistent with these findings ,Bahadur[17] in their study, reported that the mean age was similar between the cases and controls (30.6 ± 3.9 versus 31.5 ± 3.2 years; P=0.076). They also found that menstrual irregularities were more common in fertile women compared to infertile women (P=0.015). In the current study, most participants had primary infertility (74%), while the remainder were nulliparous women with secondary infertility. Regarding the participants' marriage and infertility history, more than 75% of the women were married between the ages of 20 and 30, with just over a third having been married for 10 years. The majority of participants reported having primary infertility, and half attributed the infertility to male factors (Table 1). This finding agrees with the study by Mohammadzadeh[18], which noted that the average age of participants was 34.02 ± 5.33 years, with a marriage duration of 6.83 ± 4.71 years and an infertility duration of 4.63 ± 4.44 years. Similarly, Ashrafi *et al*.[19] in their study about the prevalence of sexual dysfunction vary between the most common infertility causes. A cross-sectional study found that 67.5% of participants experienced primary infertility, while 32.5% had secondary infertility (Table 1). Regarding the use of infertility treatments, more than half of the participants take medication, followed by ovarian stimulation. Nearly half of the subjects underwent assisted reproductive techniques like IVF, with many repeating the procedures more than once. For male participants, medication was the most utilized treatment for infertility.

In the same line, Katayoun *et al*.[20] reported that primary infertility was identified as the most common cause of the inability to reproduce (91.1%). The most frequent treatment methods were IVF (45.6%) and drug therapy (43.8%). Similarly, El Amiri *et al*.[21] found that emotional stressors related to infertility were associated with lower sexual desire in both men and women. Their research also indicates that couples undergoing assisted reproductive technology (ART) face a higher risk of sexual difficulties (Table 2). Regarding the sexual relationship patterns, most of the study participants reported having regular sexual interactions with their husbands every day. When it comes to the frequency of intercourse, fewer than one-quarter of participants noted that sexual activity could be missed for weeks. Almost one-quarter of the participants also experienced discomfort during sex (dyspareunia). The average sexual function score of the participants was 20 ± 5.1.

This aligns with the findings of Agarwal *et al*.[9] about infertility and female sexual function, which indicated that infertility is a key aspect contributing to sexual dysfunction in women. The duration of infertility, alongside the diagnosis, was shown to worsen sexual issues, with lubrication and orgasm difficulties being major concerns for women. Additionally, sexual dysfunction was more severe in women with secondary infertility, lower education, and higher partner education. Similarly, Afsaneh et al.[22] in their study on sexual dysfunction in infertile couples, found that only 7% of women had a normal SFQ score across all five domains. Female sexual dysfunction was most prevalent in the arousal-sensation domain (80.2%) and least in orgasm (22.8%). Only 2% of the male study sample reported severe erectile dysfunction (ED) (Table 3).

Regarding anxiety levels, almost half of the study participants experienced anxiety to varying degrees, with about one-quarter reporting moderate to severe or very severe anxiety. This finding is consistent with the research by Khalesi and Kenarsari[23] in their comparative study between male and female infertility. Their study showed that the mean depression, anxiety, and stress scores for infertile women were 5.53 ± 3.01, 4.36 ± 2.38, and 6.83 ± 3.02, respectively. A statistically significant difference was observed between infertile men and women concerning depression, anxiety, and stress, both in individual subscales and total scores (Table 4).A similar study detected that the stress couples experience due to infertility and its treatment is closely related to their sexual health, suggesting possible targets for intervention for couples seeking assisted reproductive technology (ART).[21] The analysis of sexual dysfunction in the study group showed that arousal, orgasm, and satisfaction were significantly influenced by different levels of anxiety severity. However, desire, lubrication, and pain did not show a clear statistical significance, suggesting that these aspects were either unaffected or remained stable regardless of anxiety severity (Table 5). This aligns with the study results that reported 4.75% of women and 4.26% of males experienced high sexual satisfaction during the lockdown. In comparison, 5.89% of females and

10.33% of males noticed a decrease in sexual satisfaction, with a significant difference between the groups ($p < 0.05$). Furthermore, 4.42% of females and 5.78% of males experienced an increase in sexual desire, whereas 10.31% of women and 9.42% of males experienced a reduction in sexual desire ($p > 0.05$). Additionally, 5.73% of females and 5.78% of males stated an increase in sexual activity occurrence, while 10.64% of females and 13.07% of males described a reduction in sexual activity rate ($p > 0.05$).[16] (Table 5).

Strengths

This study is one of the few descriptive observational studies in the region that utilizes validated, culturally adapted Arabic versions of both the Female Sexual Function Index (FSFI) and the Taylor Anxiety Scale to examine a large sample size of 300 infertile women over a comprehensive 9-month duration. Additionally, it simultaneously investigates both psychological and marital outcomes among women undergoing various lines of infertility treatments, including advanced Assisted Reproductive Techniques like IVF, which provides a holistic understanding of their psychosexual well-being.

Implications of the study

The findings revealed a critical intersection between high anxiety levels and specific domains of female sexual dysfunction, particularly arousal, orgasm, and satisfaction. This demonstrates that treating infertility solely as a physical or biological condition is insufficient. It highlights a vital gap in current reproductive care protocols and underscores the urgent need for fertility clinics and healthcare providers to implement screening tools for anxiety and sexual dysfunction during routine evaluations.

Recommendations of the study

Based on the outcomes of this study, the following recommendations are proposed to improve the comprehensive care of women undergoing infertility treatments: Establish multi-disciplinary fertility care teams that integrate clinical psychologists and sexual health counselors to provide holistic emotional and psychosexual support for women throughout their treatment journey. Develop and implement specialized counseling programs aimed at reducing anxiety, which could directly enhance women's psychosexual function and strengthen marital relationships. Implement standardized screening protocols in fertility centers to identify early signs of anxiety and sexual dysfunction among couples starting reproductive services. Conduct future multi-center and longitudinal studies to evaluate the long-term patterns of psychological distress across different stages of prolonged infertility treatments.

Conclusion

In this study, it was concluded that anxiety and sexual dysfunction are comparatively prevalent among women seeking infertility treatment and had a negative effect on anxiety level and sexual dysfunction; nearly half of the study subjects experienced anxiety at different levels, from moderate to very severe. Furthermore, the mean sexual function indicator scores of the studied women with sexual dysfunction (FSFI), and the results of the current study answered the research question and achieved the aim of the study.

Limitations

The fact that the study was conducted only at Zagazig City in the Sharkia Governorate is among the limitations of the study.

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Author contributions

Concept – E.N.M., Review, Design – M.N., S., H.; Data Collection and/or Processing – H.S., R.; Analysis and/or Interpretation – H.S.E., Literature Review – A.M., R.; Writing.

Conflict of interests

No conflict of interest was declared by the authors.

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