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Impact of Structured Nursing Counselling on Emotional Well-being and Treatment Adherence among Infertile Couples

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Abstract

Infertility is a significant reproductive health challenge that impacts millions of couples around the globe, bringing with it a host of psychological, emotional, social, and marital issues. Couples facing infertility often deal with emotional turmoil, anxiety, depression, social stigma, and the stress that comes with treatment during their journey to conceive. Nursing professionals are crucial in offering emotional support, psychological counseling, reproductive health education, and guidance throughout the treatment process for these couples. Structured nursing counseling has become a key intervention aimed at enhancing emotional well-being and ensuring adherence to treatment during infertility care.

This study set out to evaluate how structured nursing counseling affects emotional well-being and treatment adherence among couples dealing with infertility at selected clinics. A quantitative descriptive analytical research design was utilized for this investigation. The study involved 200 infertile couples who were chosen through a purposive sampling method. Data collection was carried out using a structured questionnaire that included demographic information, infertility-related characteristics, an emotional well-being assessment scale, a treatment adherence scale, and a nursing support evaluation tool.

The results indicated that couples who received more extensive nursing counseling experienced better emotional well-being, less psychological distress, higher rates of treatment adherence, and greater satisfaction with the infertility care services they received. Statistical analysis revealed a significant positive correlation between nursing counseling and treatment adherence ($p < 0.001$), while those receiving structured nursing support reported notably lower levels of psychological stress.

The study found that structured nursing counseling can really make a difference for infertile couples by enhancing their emotional adjustment, boosting psychological well-being, and improving their adherence to treatment. These results highlight how crucial it is to weave counseling-based nursing interventions into infertility treatment programs, ensuring that reproductive healthcare services are both holistic and centered around the needs of the patient.

Keywords: Emotional Well-being, Treatment Adherence, Psychological Support, Infertile Couples, Reproductive Health, Patient Satisfaction, Stress Management, Holistic Care

Introduction

Infertility stands out as one of the major reproductive health challenges that couples face around the world. It's typically defined as the inability to get pregnant after a year of regular,

unprotected sex. This issue impacts both men and women and can stem from a variety of biological, hormonal, genetic, environmental, and lifestyle factors. In recent years, the rates of infertility have risen significantly, largely due to factors like delayed marriage, stress, obesity, reproductive disorders, environmental pollution, unhealthy lifestyle choices, and shifting reproductive trends.

The struggle to conceive can lead to deep emotional and psychological turmoil for couples. Many who face infertility deal with feelings of anxiety, depression, frustration, guilt, hopelessness, social isolation, and a diminished quality of life. In numerous cultures, becoming a parent is closely tied to social acceptance and family identity, which means that infertility often brings about social stigma and emotional strain, particularly for women.

Treatments for infertility, such as ovulation induction, intrauterine insemination (IUI), and in vitro fertilization (IVF), can be physically taxing, emotionally draining, and financially burdensome, all while offering uncertain outcomes. The experience of repeated treatment failures and prolonged infertility can heighten psychological distress and negatively impact couples' willingness to continue seeking treatment.

Nurses play a vital role in helping couples dealing with infertility. They offer emotional support, educate patients about reproductive health, provide psychological guidance, help manage stress, and focus on patient-centered care. Through structured counseling, nurses assist infertile couples in understanding treatment options, voicing their emotional concerns, developing coping strategies, and sticking to their treatment plans.

Research has shown that counseling and psychosocial support can greatly improve emotional well-being, lower anxiety and depression levels, and boost adherence to treatment among couples facing infertility. Unfortunately, many healthcare settings still don't fully incorporate these essential psychosocial nursing interventions into their infertility treatment programs.

That's why this study was conducted—to evaluate how structured nursing counseling affects emotional health and treatment adherence for couples visiting selected infertility clinics.

Materials and Methods

Research Approach

For this study, we took a quantitative research approach to objectively evaluate how structured nursing counseling affects the emotional well-being and treatment adherence of couples facing infertility.

Research Design

A descriptive analytical research design was used to evaluate the effectiveness of nursing counseling interventions and analyze relationships among study variables.

Study Setting

The study was conducted in selected infertility clinics and reproductive healthcare centers providing infertility treatment and counseling services.

Population

The target population consisted of infertile couples attending infertility clinics for reproductive treatment and counseling services.

Sample Size

A total of 200 infertile couples participated in the study.

Sampling Technique

Purposive sampling technique was used to select participants who fulfilled the inclusion criteria of the study.

Inclusion Criteria

- Couples diagnosed with primary or secondary infertility
- Couples undergoing infertility treatment for at least six months
- Participants willing to participate in the study
- Couples able to understand and respond to the questionnaire

Exclusion Criteria

- Couples with severe psychiatric illness
- Participants unwilling to participate in the study
- Couples with serious medical complications unrelated to infertility

Data Collection Tool

Data were collected using a structured questionnaire divided into the following sections:

1. Demographic variables
2. Infertility-related characteristics
3. Emotional well-being assessment scale
4. Treatment adherence scale
5. Nursing counseling evaluation tool

Validity and Reliability

The research tool received validation from experts in various fields, including reproductive health nursing, obstetrics and gynecology, psychology, and biostatistics. To ensure its reliability, the tool was assessed using Cronbach's alpha method, which confirmed that it had acceptable reliability.

Pilot Study

A pilot study involving 20 infertile couples was carried out to evaluate the tool's feasibility, clarity, reliability, and practicality. Based on the findings, necessary adjustments were made before the final data collection began.

Data Collection Procedure

Before collecting data, formal permission was secured from the relevant healthcare authorities. Participants were briefed on the study's purpose, and written informed consent was obtained. Throughout the study, confidentiality and privacy were strictly upheld. Data collection was conducted through direct interviews and self-administered questionnaires.

Ethical Considerations

Ethical approval was granted by the institutional ethics committee. Participants were made aware of their voluntary involvement, the importance of confidentiality and anonymity, and their right to withdraw from the study at any point without facing any penalties.

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Statistical Analysis

The data collected were coded, organized, and analyzed using both descriptive and inferential statistical methods. Various techniques, including frequency, percentage, mean, standard deviation, chi-square test, t-test, and correlation analysis, were employed to interpret the study's findings. A statistical significance level of $p < 0.05$ was established.

Results and Interpretation

Table 1 Demographic Characteristics of Infertile Couples

Demographic Variable	Category	Frequency (n)	Percentage (%)
Age Group	20–25 years	38	19.0
	26–30 years	82	41.0
	31–35 years	56	28.0
	Above 35 years	24	12.0
Gender	Male	96	48.0
	Female	104	52.0
Education	Primary	24	12.0
	Secondary	61	30.5
	Graduate	79	39.5
	Postgraduate	36	18.0
Occupation	Government Employee	32	16.0
	Private Employee	74	37.0
	Self-employed	41	20.5
	Homemaker	53	26.5
Duration of Marriage	1–3 years	47	23.5
	4–6 years	91	45.5
	Above 6 years	62	31.0

The table above reveals that most participants (41.0%) were in the 26–30 age range, while 28.0% fell between 31–35 years old. Interestingly, female participants made up 52.0% of the sample. When it comes to education, 39.5% of those surveyed were graduates, and 30.5% had completed secondary education. A significant portion of participants (37.0%) worked in the private sector. Moreover, 45.5% of couples had been married for 4–6 years, suggesting that a considerable number of participants have been dealing with infertility for an extended period.

Infertility-related Characteristics of Participants

Table 2 Distribution of Participants According to Infertility-related Variables

Variable	Category	Frequency (n)	Percentage (%)
Type of Infertility	Primary Infertility	126	63.0
	Secondary Infertility	74	37.0
Duration of Infertility	Less than 2 years	42	21.0
	2–5 years	101	50.5
	More than 5 years	57	28.5

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Previous Treatment History	Yes	138	69.0
	No	62	31.0
Cause of Infertility	Female Factor	88	44.0
	Male Factor	51	25.5
	Combined Factor	39	19.5
	Unexplained	22	11.0
Type of Treatment Received	Medication	79	39.5
	IUI	54	27.0
	IVF	48	24.0
	Counseling Only	19	9.5

The table shows that primary infertility was more prevalent among the participants, making up 63.0% of the cases, while 37.0% experienced secondary infertility. About half of the participants (50.5%) indicated that their infertility lasted between 2 to 5 years. A significant number of couples (69.0%) had previously sought infertility treatment. The largest share of infertility factors was attributed to female-related issues (44.0%), followed by male-factor infertility at 25.5%. In terms of treatment options, 39.5% of couples received medication therapy, while 27.0% and 24.0% underwent IUI and IVF treatments, respectively. Only 9.5% of participants mentioned that they had received counselling alone.

Emotional Well-being among Infertile Couples

Table 3 Distribution of Participants According to Emotional Well-being Scores

Emotional Well-being Level	Frequency (n)	Percentage (%)
Good Emotional Well-being	58	29.0
Moderate Emotional Distress	97	48.5
Severe Emotional Distress	45	22.5
Total	200	100

The table above shows that almost half of the participants (48.5%) faced moderate emotional distress while undergoing infertility treatment. Additionally, around 22.5% of infertile couples reported experiencing severe emotional distress, whereas only 29.0% felt they had good emotional well-being. These findings highlight the significant impact that infertility and fertility treatments can have on the psychological and emotional health of couples.

Effectiveness of Structured Nursing Counseling

Table 4 Distribution of Participants According to Nursing Counseling Effectiveness

Counseling Outcome	Frequency (n)	Percentage (%)
Highly Effective	102	51.0
Moderately Effective	73	36.5
Less Effective	25	12.5
Total	200	100

The table shows that structured nursing counseling was really effective for 51.0% of participants, while 36.5% felt it was moderately effective. Only 12.5% of infertile couples thought the counseling interventions were less effective. These findings suggest that nursing

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counseling played a significant role in enhancing emotional support, improving coping skills, increasing understanding of treatment, and boosting overall patient satisfaction during infertility management.

Treatment Adherence among Infertile Couples

Table 5 Distribution of Participants According to Treatment Adherence

Treatment Adherence Level	Frequency (n)	Percentage (%)
High Adherence	114	57.0
Moderate Adherence	63	31.5
Low Adherence	23	11.5
Total	200	100

The table above reveals that a significant number of couples facing infertility—57.0%—showed strong commitment to their treatment plans. Meanwhile, 31.5% of participants displayed moderate adherence, and just 11.5% reported low adherence. These findings indicate that having counseling support and ongoing nursing guidance played a crucial role in encouraging couples to stick to their infertility treatment and follow-up care.

Association between Demographic Variables and Emotional Well-being

Table 6 Association between Age Group and Emotional Well-being

Variable Pair	Chi-square (χ^2)	df	p-value	Interpretation
Age Group vs Emotional Well-being	3.42	4	0.489	Not Significant

The table above shows that there wasn't a statistically significant link between age group and emotional well-being in infertile couples ($p > 0.05$). This means that emotional distress related to infertility was felt by individuals across various age groups, regardless of how old they were.

Comparison of Emotional Well-being by Level of Nursing Counseling

Table 7 Comparison of Emotional Well-being Scores according to Nursing Counseling

Group	Mean Emotional Distress Score	t-value	p-value	Interpretation
Low Counseling Support	7.12	5.84	<0.001	Significant
High Counseling Support	5.08			

The data shows that infertile couples who received extensive nursing counseling support experienced much lower levels of emotional distress compared to those who had minimal counseling. This difference was statistically significant ($p < 0.001$), suggesting that well-structured nursing counseling plays a crucial role in alleviating psychological stress and enhancing emotional well-being for infertile couples.

Correlation between Nursing Counseling and Treatment Adherence

Table 8 Correlation Analysis between Counseling Support and Treatment Adherence

Variables Compared	Correlation (r)	p-value	Interpretation

Counseling Support vs Treatment Adherence	0.694	<0.001	Strong Positive Correlation

The correlation analysis revealed a strong positive link between nursing counseling support and treatment adherence in infertile couples (r = 0.694). This finding suggests that when couples receive more counseling support, they tend to stick to their infertility treatment plans and follow-up care more effectively.

Discussion

This study aimed to explore how structured nursing counseling impacts the emotional well-being and treatment adherence of infertile couples visiting specific infertility clinics. The results showed that infertility takes a significant toll on emotional health and psychological stability for these couples, while supportive nursing counseling is crucial in enhancing emotional adjustment, coping skills, treatment adherence, and overall patient satisfaction.

Demographic data revealed that most participants were in the 26–30 age range, and many had been dealing with infertility for over two years. These results align with research by Jacky Boivin and Lone Schmidt, which found that infertility is often identified in couples during their early reproductive years, and that prolonged infertility can heighten emotional stress and prompt more healthcare-seeking behavior.

Additionally, the study found that primary infertility was more prevalent than secondary infertility among the participants, with female-factor infertility being the most commonly reported cause. This mirrors findings from Tara M Cousineau and Alice D Domar, who noted that women undergoing infertility treatments frequently bear a heavier emotional burden due to societal expectations and pressures surrounding motherhood.

When assessing emotional well-being, it became clear that a significant number of infertile couples faced moderate to severe emotional distress. Common feelings included anxiety, fear, hopelessness, frustration, and stress related to treatment. These observations are backed by research from Barbara D Peterson and Jacky Boivin, which highlighted that infertility adversely affects mental health, marital relationships, and overall quality of life for couples.

One of the key findings from this study was how effective structured nursing counseling can be in alleviating emotional distress for couples facing infertility. Those who received more extensive counseling support showed notably lower levels of psychological distress compared to their counterparts who had less support. This aligns with the findings of Alice D Domar, who noted that counseling and psychosocial support can significantly ease anxiety and depression during infertility treatments.

Additionally, the study highlighted that nursing counseling had a positive impact on how well couples adhered to their treatment plans. Couples who benefited from ongoing emotional support, education, and counseling were more likely to stick to their infertility treatment protocols and follow-up care. This mirrors the observations made by Sofia Gameiro and Marleen FGM Verberg, who found that patient-centered infertility care enhances treatment continuation and lowers dropout rates.

The correlation analysis conducted in this study showed a strong positive link between the level of counseling support and treatment adherence. This suggests that the emotional reassurance, therapeutic communication, stress management strategies, and patient education provided by nurses play a crucial role in boosting patient cooperation and engagement throughout infertility treatment. These findings reinforce the importance of evidence-based nursing practices in infertility care, highlighting the vital role of psychosocial support in reproductive healthcare settings.

The study also pointed out that managing infertility really needs a well-rounded and team-based approach to healthcare, one that takes into account both the reproductive and emotional needs of couples. Nurses are key players in this process, offering not just compassionate care but also emotional support, reproductive education, help with coping, and counseling throughout the infertility journey. These kinds of interventions can really help couples deal with the stress that comes with treatment and enhance their overall quality of life.

In summary, the findings from this study show that structured nursing counseling can significantly boost emotional well-being and treatment adherence for couples facing infertility. The research underscores the need to weave psychosocial nursing interventions into infertility treatment programs, aiming for a more comprehensive, holistic, and patient-centered approach to reproductive healthcare.

Conclusion

The present study concluded that infertility has a significant negative impact on the emotional and psychological well-being of infertile couples. Feelings of anxiety, depression, hopelessness, stress, and emotional instability were commonly experienced among participants undergoing infertility treatment. The study findings further demonstrated that structured nursing counseling plays an important role in reducing emotional distress and improving treatment adherence among infertile couples.

The results revealed that couples receiving higher levels of nursing counseling support demonstrated better emotional adjustment, improved coping ability, greater treatment adherence, and higher satisfaction with infertility care services. A significant positive relationship was observed between counseling support and treatment adherence, while emotional distress levels were significantly lower among participants receiving structured nursing interventions.

The study therefore confirms that nursing counseling and psychosocial support are essential components of comprehensive infertility management. Holistic nursing care involving emotional counseling, stress management, therapeutic communication, reproductive education, and supportive guidance significantly contributes toward improving reproductive healthcare outcomes and quality of life among infertile couples.

The findings emphasize the need to integrate structured counseling services and evidence-based nursing interventions into infertility treatment programs to ensure patient-centered and multidisciplinary reproductive healthcare.

Recommendations

Based on what we've learned from this study, here are some recommendations to consider:

1. It's important to regularly include structured nursing counseling programs in infertility treatment services.
2. Infertile couples undergoing fertility treatment should have access to psychological support and stress management interventions on a consistent basis.
3. Infertility clinics ought to embrace a holistic and multidisciplinary approach, bringing together nurses, psychologists, counselors, and fertility specialists.
4. We should organize training programs to boost nurses' knowledge and counseling skills specifically related to infertility management.
5. Conducting patient education programs can help raise awareness about infertility, treatment options, coping strategies, and emotional well-being.
6. Establishing support groups and counseling sessions for infertile couples can significantly help reduce emotional distress and feelings of social isolation.
7. More research is needed with larger sample sizes and across multiple centers to solidify the evidence surrounding nursing interventions in infertility care.
8. Healthcare policies should prioritize the integration of psychosocial nursing support into reproductive healthcare services.

Limitations of the Study

1. The study focused on a few specific infertility clinics and healthcare centers, which means that the findings might not apply to a broader population.
2. The research included a sample of just 200 couples dealing with infertility.
3. Since the study depended on self-reported answers, there's a chance that personal biases and emotional states could have affected the results.
4. Due to time constraints, the study couldn't assess the long-term effectiveness of the counseling provided.
5. Factors like emotional health and adherence to treatment might be impacted by other personal, social, and financial issues that weren't thoroughly examined in this research.

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