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A NURSING PERSPECTIVE ON PSYCHOSOCIAL WELLBEING AND COPING STRATEGIES IN WOMEN WITH PRIMARY INFERTILITY

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Abstract

This exploratory study examined the psychosocial well-being and coping strategies among 50 women aged 20 to 45 years with primary infertility at the Obstetric and Gynecology OPD of SCB Medical College Hospital, Cuttack. Data was collected from February 10 to March 10, 2022, using a questionnaire on psychosocial issues designed with a 4-point Likert scale, along with the Multidimensional Coping Inventory Scale (Folkman and Lazarus, 1983), also rated on a 4-point Likert scale. Descriptive and inferential statistics were used to analyze the data. Results showed that 62% of the participants were between 20-30 years old. Most (44%) were graduates, predominantly Hindu, with a small percentage (2%) identifying as Muslim. A large portion (82%) were homemakers, while 18% held jobs. The majority (58%) belonged to the lower middle-income group, with 42% in the upper middle-income group, and none in the high-income category. The highest proportion of women with primary infertility resided in rural areas, with 42% married for 4-7 years. Social support was available for 80% of these women, while 20% lacked support. About 52% had attended counseling 1-3 times, and 20% had attended over seven times. Thirteen percent had been in treatment for more than five years, while most had been under treatment for 1-2 years. The majority had moderate psychosocial issues, with 4% experiencing poor psychosocial well-being. The mean coping score was 79.24 with a standard deviation of 10.908. Approximately 70% had average coping abilities, while 30% had poor coping abilities. A chi-square analysis indicated a significant association between years of marriage and psychosocial variables ($p \leq 0.0001$). An unpaired t-test further showed a significant difference in coping strategies based on years of marriage, with a calculated value of 5.9.

Keywords: Psychosocial Well-Being, Coping Strategies, Primary Infertility, Women.

1. INTRODUCTION

"Let your hope keep you joyful, be patient in your troubles, and pray at all times" (Romans 12:12). "The most beautiful necklace a mother can wear is not gold or gems, but her child's arms around her neck" (RJI, July 14, 2012). Parenthood is a fundamental milestone for many individuals, often viewed as essential to personal fulfillment. Every human being has the right to the highest attainable standard of physical and mental health, as well as the freedom to decide the number and timing of their children. However, infertility can severely hinder these aspirations, leading to profound emotional distress.

Infertility is defined as the inability to conceive after 12 months of regular, unprotected sexual intercourse. This condition, which affects both men and women, can lead to intense emotional suffering, social stigma, and psychological challenges, especially for women. They often face unique social pressures, sometimes experiencing violence, divorce, social isolation, and a loss of self-esteem. Cultural expectations around fertility

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make infertility a source of hidden suffering, often neglected by society, with little open discussion and limited public support for childless couples.

Studies show that infertility rates in India decrease with an increase in the woman's age at marriage; women who marry after 18 years of age are 81% more likely to experience infertility compared to those who marry younger. Social norms place additional stress on couples, especially women, who are often expected to conceive within the first year of marriage. Failure to meet this expectation can result in significant social pressure, adding to the distress associated with infertility.

Globally, infertility has become a significant reproductive health issue, yet it is rarely addressed openly. In recent years, the World Health Organization (WHO) has recognized infertility as a public health concern.

In India, the prevalence of primary infertility is estimated to range from 3.9% to 16.8% (De et al., 2017). Factors contributing to infertility include preventable causes such as sexually transmitted infections (STIs), lifestyle choices, and health practices. A high body mass index (BMI), smoking, alcohol use, induced abortions, and contraceptive use are known to elevate infertility risks.

To cope with infertility, many individuals seek support from family, friends, or infertility support groups, while others may require professional counseling to develop effective coping strategies and manage relationship challenges. For women facing prolonged treatments and financial strain, stress levels can increase, making self-management difficult.

This study aims to explore the psychosocial well-being and coping strategies of women with primary infertility. It focuses on the effects of infertility on socio-demographic factors, reproductive experiences, and lifestyle variables, considering how these elements interact to influence psychological well-being and coping capacity among infertile women.

2. OBJECTIVES

1) To assess the psychosocial well-being of women with infertility.
2) To evaluate the coping strategies used by women with infertility.
3) To compare coping patterns between women who have been married for less than 5 years and those married for more than 5 years.
4) To examine the association between psychosocial well-being and selected demographic variables.
5) To examine the association between coping strategies and selected demographic variables.
6) To determine the correlation between psychosocial well-being and coping strategies among women with primary infertility.

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3. MATERIALS AND METHODS

- ***Research Design and Approach:*** An exploratory descriptive research design with a quantitative approach was employed for this study.
- ***Setting of the Study:*** The study was conducted in the Obstetrics and Gynecology Outpatient Department (OPD) at SCB Medical College Hospital (SCBMCH), Cuttack.
- ***Sample and Sampling Technique:*** The sample consisted of 50 women experiencing primary infertility, selected using a non-probability purposive sampling technique.

4. DESCRIPTION OF THE TOOL

The tool used in this study comprises three main sections (Section I, Section II, and Section III) with an additional analysis component (Section IV):

- **Section I: Sociodemographic Variables**

This section gathers information on sociodemographic variables of participants, including age, education, occupation, religion, family type, income level, family size, number of counseling sessions attended, and number of treatments received for primary infertility.

- **Section II: Psychosocial Well-being Assessment**

This section contains 22 items assessing psychosocial issues using the Psychological Evaluation Test Scale (PETS) for psychosocial well-being. Key areas evaluated include the desire to have children, feelings of inferiority, stigma, treatment experiences, stress, socialization, and couple relationships. A four-point Likert scale is used with responses: Never (1), Sometimes (2), Often (3), and Always (4). The score range for this section is 22 to 88.

- **Section III: Coping Strategies Assessment**

This section uses the Multidimensional Coping Inventory Scale (Folkman and Lazarus, 1983) to evaluate coping strategies, comprising 60 items, of which 42 were selected for this study. Responses are rated on a four-point Likert scale: Don’t do this at all (1), Do this a little bit (2), Do this a medium amount (3), and Do this a lot (4). The score range for this section is 42 to 168.

- **Section IV: Chi-Square Test for Associations**

A chi-square test is applied to determine any associations between psychosocial well-being and selected sociodemographic variables.

- **Section V: Chi-Square Test for Coping Strategies**

This section uses the chi-square test to identify any associations between coping strategies among women with primary infertility and selected sociodemographic variables.

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- **Section VI: Unpaired t-Test**

An unpaired t-test is employed to determine any significant differences in coping strategies based on the duration of marriage among the participants.

- **Section VII: Correlation Analysis**

This section assesses the correlation between psychosocial well-being and coping strategies among women with primary infertility.

5. VALIDITY AND RELIABILITY

- To establish validity and reliability of the demographic and fertility questionnaire, the researcher consulted six experts from medical fields and two from nursing, selecting professionals in nursing administration, nursing education, and medical specialties at SCBMCH, Cuttack. All experts reviewed the tool and provided minor suggestions for simplifying certain items, resulting in 100% agreement on its suitability, confirming the tool's validity for the study.
- After securing the necessary permissions, data collection began at the OPD of SCBMCH, Cuttack. The data was analyzed using SPSS software (version 22), with independent t-tests and one-way ANOVA applied. A significant level of $P < 0.05$ was set for all statistical tests.
- A pilot study was conducted at Capital Hospital, Bhubaneswar, using a sample of 10 participants selected through purposive sampling. Reliability was assessed using the split-half technique with Cronbach’s alpha. The psychological and social problem tool achieved a reliability coefficient of $r = 0.9$, and the coping tool also showed a reliability of $r = 0.9$, confirming strong reliability for use in the main study
    - **Ethical Committee Approval:** Approval for the study was obtained from the Institutional Ethical Committee of S.C.B. Medical College, Cuttack.
    - **Data Collection Procedure:** Written consent was obtained from participants after explaining the study's purpose and assuring them of the confidentiality of their information.
    - **Planned Data Analysis:** The collected data was organized, tabulated, and analyzed using both descriptive and inferential statistical methods.

6. FINDINGS

Section II: Assessment of Psychosocial Problems

The psychosocial problems of primary infertile women were assessed using variables with a maximum score of 4 and a minimum of 1, giving a total possible score range from 22 to 88.

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The scoring criteria were as follows:

CRITERIA	PERCENTAGE	SCORE
mild	< 40%	< 25.6
moderate	41-60 %	25.6-38.4
severe	> 60%	> 38.4

Section III: Assessment of Coping Strategies

Coping strategies were assessed using a 42-item scale with a score range from 42 to 168. The criteria for coping levels were:

Criteria	Percentage	Score
Poor	<40%	<70.4
Average	41-60%	70.4-105.6
Good	**61-80%**	**107.36-140.8**
Excellent	>80%	>140.8

Coping Pattern of Primary Infertile Women

No. of question	Min – max score	Mean coping pattern (Mean)	Standard Deviation SD
42	42 -168	79.24	10.908

Percentage Scores for Coping Strategies

Coping pattern	Scale	No of women	% Age
Poor	1 - 70	15	30
Average	71 - 140	35	70
Good	141 - 210	0	0

Section IV: Chi-Square Test for Association Between Psychosocial Well-being and Selected Socio-Demographic Variables

Variables	Mean P.W score	Degree of freedom	Chi-square value	p-value	Remarks
Age 20-30years 31-40 years >40 years	 26.77 34.38	2	2.3	 0.3 16	Not significant
Education		2	1.7	0.4 3	Not significant
Socio-economic condition		2	1.3	0.5 2	Not significant
Married since	6.1	1	21.9	0.001	Significant

Section V: Chi-Square Test for Association Between Coping Strategies and Selected Socio-Demographic Variables

Variables	Mean Coping score	Degree of freedom	Chi-square value	p-value	Remarks
Age	77.52	2	5,5	0.06	Significant
Education		2	.98	0.612	Not significant
Socioeconomic condition		2	0.19	0.662	Not significant
Year of marriage		1	5.02	0.03	significant

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Section VI: Unpaired t-Test for Significance of Difference in Coping Strategies by Duration of Marriage

Area of observation	Marriage ≤ 5 years		Marriage≥ 5 years					
Coping	**Mean**	**SD**	**Mean**	**SD**	**t's test value**	**Df**	**P value**	**inference**
	86.87	10.2	72.74	6.39	5.9	48	0.0001	significant

Section VII: Correlation Between Psychosocial Well-being and Coping Strategies Among Primary Infertile Women

Variables	Mean	SD	Correlation co-efficient
Psychosocial	31.56	8.557	
coping	79.24	10.908	r=0.80

In this study, the researcher observed that most women displayed satisfactory psychosocial well-being, with an average score indicating that 70% were effectively coping. Psychosocial well-being showed a significant association with years of marriage, and a moderate correlation was found between psychosocial well-being and coping strategies among women facing primary infertility. This suggests that stronger psychosocial well-being is likely to enhance coping abilities. The research objectives were successfully achieved, but further studies are recommended to support women facing the challenges of primary infertility.

7. IMPLICATIONS

- **Nursing Practice**: The study emphasizes the importance of counseling, continuous education, and family therapy in supporting infertile women. Increased focus should be placed on psychosocial concerns related to infertility, and nursing students should be educated on how to assist these clients effectively in clinical practice.
- **Nursing Administration**: Administrative backing is essential for implementing in-service training programs aimed at equipping nurses with strategies to support and advise women coping with primary infertility.
- **Nursing Research**: The findings serve as a catalyst for further extensive research across diverse populations and settings. Few studies in India have focused on the psychosocial impact of infertility. Dissemination of such research findings can help highlight the broader impacts of infertility, including the challenges and barriers women face in adopting recommended therapies, thus encouraging nurse researchers to explore these areas further.

8. RECOMMENDATIONS

- A large-scale study is recommended to generalize these findings across a broader population.
- A comparative study could be conducted to examine the psychosocial well-being and coping strategies of infertile women across different demographic and clinical settings.

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