

Infertility and Lifestyle Management: A Hospital-Based Study in Indore

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ABSTRACT

Background: Infertility, defined as the inability to conceive after 12 months of unprotected intercourse, is a growing public health concern worldwide. Lifestyle factors such as stress, obesity, sedentary behavior, smoking, and poor diet are strongly associated with reproductive dysfunction. This study aimed to assess the relationship between lifestyle factors and infertility among couples attending an infertility clinic and to evaluate the effectiveness of lifestyle modification counselling.

Methods: A hospital-based pre-experimental study was conducted among 100 infertile couples aged 20–40 years in Indore. Data were collected using a structured questionnaire assessing lifestyle practices. A structured counselling session was administered, followed by post-intervention evaluation after 12 weeks.

Results: Before counselling, 72% of participants reported inadequate physical activity, 60% consumed high-fat diets, and 54% had high stress. Post-intervention, significant improvement was seen in lifestyle practices ($p < 0.001$). Eighteen percent reported conception within three months of intervention.

Conclusion: Lifestyle modification and counselling significantly improve fertility outcomes. Nurses play a pivotal role in promoting reproductive health through lifestyle interventions.

KEYWORDS: Infertility, lifestyle modification, counselling, reproductive health, Indore.

INTRODUCTION

Infertility is a global reproductive health issue affecting 10–15% of couples. In India, it poses significant psychological and social challenges, especially for women. Lifestyle behaviors—such as diet, stress, physical activity, and sleep—are modifiable factors that influence fertility. This study explores how nursing-led lifestyle counselling can aid in infertility management.

Objectives

1. To identify lifestyle factors contributing to infertility among couples.
2. To assess knowledge and practices regarding lifestyle management.
3. To implement a lifestyle modification counselling programme.

4. To evaluate post-intervention improvements in lifestyle and conception rates.

Methodology

Design: Pre-experimental one-group pre-test–post-test design.

Setting: Infertility outpatient department, tertiary hospital, Indore.

Sample: 100 infertile couples (20–40 years), purposively selected.

Intervention: Structured counselling on diet, physical activity, stress management, sleep, and substance use. Follow-up was done for 12 weeks.

Analysis: Descriptive and inferential statistics were applied using SPSS 26.

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Results

Table 1: Socio-demographic characteristics of participants (n=100)

Variable	Category	Frequency (%)
Age (years)	26–30	40 (40%)
Education	Graduate	48 (48%)
Occupation	Sedentary job	62 (62%)
BMI	Overweight/Obese (>25 kg/m ²)	55 (55%)

Table 2: Lifestyle factors before and after intervention

Factor	Pre-intervention (%)	Post-intervention (%)	p-value
Unhealthy diet	60	28	<0.01
Lack of physical activity	72	30	<0.001
High stress	54	32	<0.05
Substance use	18	10	NS

Table 3: Knowledge and practice scores before and after intervention

Domain	Mean Pre-test	Mean Post-test	t-value	p-value
Knowledge	14.2 ± 3.8	22.5 ± 4.1	9.12	<0.001
Practice	12.4 ± 4.3	19.7 ± 4.8	8.46	<0.001

Figure 1: Comparison of lifestyle practice scores before and after counselling intervention.

Discussion

The study findings indicate a significant relationship between lifestyle factors and infertility. Improvements after counselling align with prior research showing that physical activity, stress reduction, and healthy diet enhance reproductive health. Nursing-led interventions thus play a vital role in promoting fertility.

Conclusion

Unhealthy lifestyle practices are significantly associated with infertility. Nursing interventions focusing on lifestyle modification can improve reproductive outcomes. Integrating lifestyle counselling into infertility care is essential.

References

- [1] World Health Organization. Infertility definitions and terminology. WHO; 2023.
- [2] Mascarenhas MN, Flaxman SR, Boerma T, Vanderpoel S, Stevens GA. National, regional, and global trends in infertility prevalence. *PLoS Med.* 2012; 9(12):e1001356.
- [3] Sharma R, Biedenharn KR, Fedor JM, Agarwal A. Lifestyle factors and reproductive health: Taking control of your fertility. *Reprod Biol Endocrinol.* 2013; 11:66.
- [4] Anderson K, Norman RJ, Middleton P. Preconception lifestyle advice for people with subfertility. *Cochrane Database Syst Rev.* 2010; (4):CD008189.
- [5] Katole A, Saoji AV. Prevalence of primary infertility and its associated risk factors. *Int J Reprod Contracept Obstet Gynecol.* 2019; 8(10):3891–6.
- [6] Mahajan N, Singh S, et al. Lifestyle modification and fertility outcomes among women with infertility: A randomized controlled trial. *Indian J Obstet Gynecol Res.* 2022; 9(1):48–54.
- [7] Kalra S, Bhasin V. Stress, cortisol and infertility: An integrative review. *Asian J Nurs Educ Res.* 2023; 13(3):210–5.