

## CORRELATES OF LIFESTYLE AND REPRODUCTIVE HEALTH OF WOMEN WITH INFERTILITY

<sup>1</sup>Preethi M., <sup>2</sup>C.R. Christi Anandan

<sup>1</sup>Doctoral Scholar, <sup>2</sup>Asst. Professor & Head,

P.G. & Research Department of Social Work., Sacred Heart College (Autonomous),

Tirupattur District, Tamil Nadu., India

Thiruvalluvar University, Serkkadu, Vellore District – 632 115

### ABSTRACT

*Women's lifestyle has recently aroused significant interest and has a major part in reproductive health. The habits and manner of living that can impact women's general health and well-being include fertility. This research focused on the correlation between the lifestyle and reproductive health of women who undergo infertility issues. Quantitative research was carried out. Utilizing a questionnaire, the data was collected from 120 women treated for infertility in Tirupattur District. Using statistical methods such as the 'F-test, Chi-square, Karl Pearson's Correlation, etc., the researcher analyzed the data and presented the results in tables and figures. According to this study, there was a remarkable association between the respondents' age and their spouses' age in reproductive health. There was a relation between the occupation and lifestyle of women with infertility. The study suggested women, change their lives healthily.*

**Key Words:** Lifestyle, Reproductive Health, Women and Infertility

### INTRODUCTION

A vital component of total well-being, reproductive health is greatly impacted by lifestyle decisions. This relationship is demonstrated by recent statistics, which showed that almost 30% of women between the ages of 18 and 49 deal with reproductive health issues. These issues are frequently related to lifestyle choices including smoking, nutrition, and exercise. The World Health Organization estimates that changing one's lifestyle can avoid 25% of illnesses related to reproductive health. Good lifestyle choices, like as good physical activity, nutritious food habits, balanced work life can lower the chance of developing infertility issues.

Furthermore, research indicated that around 70% of individuals didn't know how their lifestyle decisions affect their reproductive health, highlighting the need for greater knowledge and instruction. Understanding these links allowed people to make more educated decisions about their reproductive health and lifestyle. In India, infertility is considered a major public health, it affects 10–15% of couples. Among them, women have particular lifestyle issues that may have an impact on the state of their reproductive health. According to statistics, 20–30% of women who undergo infertility treatment. Those women are obese or overweight, and this condition is associated with lower conception rates and difficulties with the support of reproductive technologies such as intrauterine insemination (IUI), and in vitro fertilization (IVF).

Reproductive health is also greatly impacted by physical activity. According to a study, women who regularly exercise modestly increase their odds of having a successful IVF cycle by 25%. In the meantime, eating habits are important. Studies showed that maintaining a diet heavy on fruits, vegetables, and whole grains can improve fertility. These findings highlight the necessity of addressing lifestyle determinants for women receiving infertility treatment in India, underlining the need for public health campaigns to raise awareness and encourage

healthy lifestyle choices to improve reproductive health outcomes.

## REVIEW OF LITERATURE

**Hamazhegardshehi (2015)** researched “Lifestyle and Outcomes of Assisted Reproductive Techniques: A Narrative Review”. The motive of the study was to examine lifestyle elements that impacted laboratory test findings, as the outcome, the pregnancies caused by assisted reproductive procedures in infertile couples. These factors included lack of physical exercise, being overweight, eating junk food, and smoking habits. The study consisted of a narrative evaluation of related research. In this study, researchers used the general Google Scholar search engine to search public databases. They narrowed their search by utilizing keywords such as lifestyle, reproductive health social health, spiritual health, and psychological health. The researchers then selected relevant articles from these databases from 2004-2015. There were 111 papers in total. Finally, two impartial reviewers evaluated the quality of the full-text studies. After reviewing the summaries of every article they found, the researchers took information from 62 complete papers to create this review report. Nine general categories of ART results' relationships with diet and weight control, physical activity and exercise, psychological well-being, abstaining from drugs and alcohol, preventing diseases, environmental health, spiritual health, social health, and physical health were established after a review of the literature. This study concluded from the review of studies: since lifestyle is one of the significant, modifiable, and influential factors in fertility, assessing infertile couples' lifestyle patterns and creating and implementing programs to promote healthy lifestyles both before and during the implementation.

**Mojgan et.al., (2017)** did a study on “Relationship Between Health-Promoting Lifestyle and Quality of Life in Women with Polycystic Ovarian Syndrome”. The study sought to reveal the association between a healthy lifestyle and quality of life in women who had undergone PCOS. There were 174 women affected with PCOS were involved this the research. A convenience sampling method was used for the study. With the questionnaire, the data were collected from the participants. The association between lifestyle factors and quality of life by using multivariable linear regression. To enhance the lifestyle of women who suffer from PCOS, they should adopt a healthy life that maintains their quality of life.

**Azam Namdar et.al (2017)** conducted a study on “Quality of life and general health of infertile women”. The research aimed to identify women with infertility and their overall health and quality of life, as well as key influencing factors. In a cross-sectional study, 161 infertile women who visited Dr. Rostami's Infertility Center in Shiraz, Southern Iran, in 2013 were included using the convenience sampling approach. Socio-demographic, general health (GHQ28), and QOL Questionnaire for Infertile Couples were used to collect data, which was then evaluated using descriptive and analytical statistics. More than half of the infertile women's overall health showed signs of abnormality. These women were at risk of developing anxiety, social dysfunction, and depression. The key factors that influence QOL are educational status, monthly income, and rural/urban domicile.

**Jill Margaret et.al., (2023)** examined the study “Investigating the relationship between body composition, lifestyle factors, and anti-Mullerian hormone serum levels in women undergoing infertility assessment”. In addition to examining the relationship between serum AMH levels and body fat percentage, body mass index (BMI), and lifestyle factors like smoking, alcohol intake, nutrition, exercise, and stress, the study set out to investigate the lifestyle characteristics of women undergoing infertility investigations. The study only included women who were being investigated for infertility. People who had been diagnosed with PCOS (polycystic ovarian syndrome) were not included. The Tanita Body Composition Monitor was used to determine the percentage of body fat and to compute BMI. The Simple Lifestyle Indicator Questionnaire was used to assess lifestyle aspects (SLIQ). In this study, ninety-six women participated. Based on their BMI, 28.1% (n = 27) of these were overweight and 35.4% (n = 34) of them were obese. In women seeking infertility investigations, there was no correlation between anti-Mullerian hormone serum levels and body fat percentage, BMI, choices of lifestyle, or high levels of stress. The study population had low scores for leading a healthy lifestyle and a high

incidence of obesity. The critical necessity for patient education and pre-pregnancy health optimization was brought to light by this study.

### SIGNIFICANCE OF THE STUDY

In India, infertility rates are on the rise, affecting a sizeable portion of the populace. This study addresses a significant public health concern by looking at lifestyle factors to shed light on modifiable hazards that may improve reproductive health outcomes. Cultural Environment and Local Relevance are critical to comprehending the particular lifestyle aspects that impact reproductive health in the Indian environment. By identifying culturally appropriate therapies that align with local customs and beliefs, this study can facilitate the adoption of lifestyle modifications by impacted women.

The study's identification of lifestyle correlates can give medical professionals information on elements that may raise the success rates of infertility treatments. With this information, treatment programs that are more individualized and include lifestyle changes may be created, which could improve the efficacy of reproductive health. The findings can guide policymakers in designing targeted public health initiatives aimed at educating women about the impact of lifestyle on reproductive health. Such policies can promote awareness and encourage healthy behaviors, ultimately improving population health outcomes. The results can help policymakers create focused public health campaigns that inform women about how lifestyle choices affect their reproductive health. By raising awareness and encouraging healthy behavior, these programs can eventually improve the health of the population.

Giving women knowledge about the links between lifestyle decisions and reproductive health can encourage them to take charge of their health. This empowerment may result in improved knowledge of their reproductive health and more proactive behaviors related to seeking health. With infertility gaining international attention, knowledge from India can help expand our comprehension of how lifestyle choices affect reproductive health across a range of demographics. Global health policies can be improved and cross-cultural comparisons made easier. The study promoted cooperation between medical professionals, dietitians, mental health specialists, and legislators to treat infertility and fully promote reproductive health.

This study is important since it not only tackles the pressing problem of infertility in India but also provides insightful information that can result in better health outcomes, knowledgeable policy, and empowered women. People may create support networks and interventions that are more successful by comprehending the relationship between lifestyle choices and reproductive health.

### Aim

The study aimed to correlate the lifestyle and reproductive health of women with infertility.

### Objectives

- To know about socio-demographic details
- To analyze the Reproductive Health of women with infertility
- To identify Lifestyle Factors of women with infertility
- To analyse the correlation between the lifestyle and reproductive health of women treated for infertility

### METHODOLOGY

The researcher had chosen a descriptive type of research for this study. **Multi-stage sampling** is utilized as a sampling technique. The universe of the study consisted of women who were treated for infertility in the Tirupattur district. The data was gathered at four fertility centres and 30 women from each centre were selected as respondents. As a result, the sample size was 120.

This study utilized the sources based on primary and secondary. The data was gathered by utilizing an **interview method**. It was about **20 to 25 minutes**. The study used a **self-structured questionnaire** for quantitative

research. The secondary data regarding demographic factors were obtained from various published records, books, and journals. While conducting the research, informed consent and ethical standards were followed. The questionnaire was administered in English.

### Data Analysis and Interpretation

**Table 1: Differences among the respondents' educational status and overall reproductive health and lifestyle**

Variables	Df	SS	MS	Mean	Statistical Inference
<b>Reproductive Health</b>					
Between Groups	7	<b>33626.670</b>	<b>4803.810</b>	G1=99.47	F = .6.115
Within Groups	112	<b>87978.255</b>	<b>785.520</b>	G2=223.00	Sig. .000
				G3=78.56	P < 0.05
				G4=72.65	<b>Significant</b>
				G5=71.00	
				G6=66.83	
				G7=71.50	
				G8=55.00	
				G9=76.78	
<b>Lifestyle</b>					
Between Groups	7	16400.975	939.761	G1=80.47	F = .6.417
Within Groups	112	22979.300	146.437	G2=64.00	Sig. .000
				G3=61.41	P < 0.05
				G4=67.22	<b>Significant</b>
				G5=61.50	
				G6=60.76	
				G7=56.67	
				G8=36.00	
				G9=63.85	

Note: G1-No formal education, G2-Elementary, G3-High Scholl, G4-Higher Secondary, G5-Diploma/ITI 6. UG 7.PG 8. Others (Student, Pursuing Ph.D.)

From the above table, it is evident that there is a significant difference among educational status versus reproductive health and lifestyle of women with infertility. Higher-educated women are frequently better informed about concerns related to reproductive health. They probably know how important it is to consult a doctor, abide by health regulations, and recognize infertility symptoms. Education is generally associated with improved access to knowledge on family planning, fertility treatments, and healthy lifestyle options all of which have a substantial impact on the outcomes of reproductive health. Higher education frequently encourages better eating habits, consistent exercise, and abstaining from unhealthy habits (e.g., smoking, and excessive alcohol intake). These circumstances may positively impact fertility.

Therefore, it is crucial in influencing health behaviors, access to resources, and overall reproductive outcomes, as seen by the notable differences observed among women experiencing infertility in terms of lifestyle, reproductive health, and educational position. To improve the reproductive health of women with infertility, it may be imperative to address educational inequality.

**Table 2: Differences among the respondents' occupation and overall reproductive health and lifestyle**

Variables	Df	SS	MS	Mean	Statistical Inference
<b>Reproductive Health</b>					F = .843
Between Groups	2	<b>1728.394</b>	<b>864.197</b>	G1=74.43	Sig. .433
Within Groups	117	<b>119876.531</b>	<b>1024.586</b>	G2=80.63	P > 0.05
				G3=52	Not Significant
<b>Lifestyle</b>					F = 9.182
Between Groups	2	3117.335	1558.667	G1=59.59	Sig. .000
Within Groups	117	19861.965	169.760	G2=69.98	P < 0.05
				G3=62.00	<b>Significant</b>

Note: G1-Homemaker, G2-Employed, G3-Self-employed

From the above table, it is evident that there is a significant difference among the occupation and lifestyle of women with infertility. Stress levels might vary greatly throughout different professions. High-stress occupations may harm menstrual periods, hormone levels, and general well-being, which may lead to infertility. Work that exposes women to dangerous substances or physically taxing duties can also have a negative impact on reproductive health, making conception difficult. A woman's capacity to maintain a healthy lifestyle may be impacted by the demands of her particular line of work. For instance, working shifts or long hours might result in poor food choices, insufficient exercise, and restless nights, all of which can negatively impact fertility.

The striking disparity between the lifestyle and occupation of infertile women highlights how work-related variables might affect reproductive outcomes overall, resource accessibility, and health-related behaviors. Improving access to healthcare and addressing occupational stressors for women working in a variety of

industries may be essential to improving reproductive health and assisting infertile individuals.

**Table 3: Relationship between the age of the respondents and the overall reproductive health and Lifestyle**

Variables	Correlation Value	Statistical Inference
Reproductive Health	.532**	P < 0.05 <b>Significant</b>
Lifestyle	.170	P > 0.05 <b>Not Significant</b>

**\*\*.** *Correlation is significant at the 0.01 level (2-tailed).*

The above table stated that there's a significant relationship between the age of the respondents and reproductive health. Women's reproductive health is impacted by aging-related natural biological changes. The late teens and early 20s are usually when fertility peaks and the 30s are when it starts to decline, with a more noticeable decline occurring after age 35. The chance of conception and the possibility of infertility can both be influenced by this biological chronology.

Increased age is linked to an increased risk of reproductive health problems, including endometriosis, uterine fibroids, and polycystic ovarian syndrome (PCOS), which can make pregnancy more difficult. Furthermore, there is a connection between a higher chance of pregnancy difficulties and older mothers.

Based on the study age is a crucial factor determining reproductive health outcomes. By taking into account this association, policymakers and healthcare professionals can better understand how to improve the reproductive health outcomes for women at various phases of life by creating age-appropriate support networks and resources.

**Table 4: Relationship between the spouses' age and the overall reproductive health and Lifestyle**

Variables	Correlation Value	Statistical Inference
Reproductive Health	.554**	P < 0.05 <b>Significant</b>
Lifestyle	.135	P > 0.05 <b>Not Significant</b>

**\*\*.** *Correlation is significant at the 0.01 level (2-tailed).*

The above table inferred that there's a significant relationship between the spouses' age and reproductive health. The ages of both partners are important fertility factors. Male fertility can also be impacted by characteristics including sperm quality and quantity, which may decrease as men age and impair overall reproductive health, while female fertility generally diminishes with age. Pregnancy difficulties and genetic diseases are among the reproductive health issues that older couples may be more susceptible to. This is especially true for older mothers, although older fathers may also be at higher risk for certain illnesses.

Postponing parenthood might cause difficulties as both spouses age. This is especially true for couples who marry later. The reliance on assisted reproductive technologies may increase due to this delay, which may make them less successful as both partners age. It can also complicate conception. The significant correlation between spouses' ages and reproductive health highlighted the complex effects of age on hazards to health, and fertility.

**Table 5: Relationship between reproductive health and lifestyle**

Variables	Statistics	Reproductive Health	Life Style
Reproductive Health	Pearson Correlation	1	.326**
	Sig. (2-tailed)		.000
	N	120	120
Life Style	Pearson Correlation	.326**	1
	Sig. (2-tailed)	.000	
	N	120	120

**\*\*.** *Correlation is significant at the 0.01 level (2-tailed).*

From the presented table it is inferred that there's a significant relationship between reproductive health and lifestyle. It highlighted a strong connection between reproductive health and lifestyle choices. It revealed that the way individuals live encompassing diet, exercise, stress management, and healthcare access can significantly impact their reproductive health. For example, healthy eating and regular physical activity may enhance fertility, while poor lifestyle habits like smoking or excessive alcohol consumption can lead to negative outcomes. This relationship underscored the importance of making conscious lifestyle decisions to promote better reproductive health and overall well-being.

### **Suggestions**

- Provide Educational Programs that focus educational initiatives on reproductive health, stressing the value of healthy eating, making wise lifestyle decisions, and comprehending infertility. Ensure women, particularly those with less education, may obtain fertility treatments and counseling as well as other reproductive health resources. Implement community outreach programs that educate women about reproductive health through workshops and informational sessions. Develop educational programs to improve awareness among women in diverse occupations about how their work environment may affect reproductive health.
- Provide Workplace Support by encouraging employers to set up wellness initiatives that support employees' healthy lifestyle choices, stress reduction, and work-life balance, especially for those who are infertile. Offer customized therapy Services like individualized infertility management strategies and therapy that take into account lifestyle and work-related pressures. Arrange workshops and seminars on Nutrition and Exercise that are tailored to women working in a variety of professions. The topics covered will include how to keep a healthy lifestyle in the face of obstacles connected to the workplace.
- Conduct educational programs about the effects of aging on reproductive health and fertility to encourage responsible family planning. Establish support groups where people may exchange stories and tips for leading a healthy lifestyle and handling problems related to reproductive health.
- Urge people to create individualized health plans that take their goals for reproductive health and lifestyle into account.
- A comprehensive healthy lifestyle counseling program should be offered in infertility treatment centers, and community health programs should offer healthy lifestyle training for various academic years. This is because infertility has a significant negative impact on families, society, and the medical community. Making these lifestyle adjustments can improve reproductive health and raise the likelihood of a healthy pregnancy. Before making big lifestyle changes, it's usually advisable for women to speak with healthcare specialists, especially when coping with infertility.

### **CONCLUSION**

Ultimately, improving lifestyle factors is crucial for both individual health and the larger objective of improving reproductive health. While infertility remains a major concern, incorporating lifestyle changes into treatment regimens can offer a comprehensive strategy for enhancing reproductive health outcomes and promoting well-being in women dealing with infertility issues. This study's investigation highlighted the lifestyle factors

influencing infertile women's reproductive health. The notable variations in occupation and educational attainment demonstrated the influence of socioeconomic factors on lifestyle decisions and health consequences. Furthermore, the correlations between age and reproductive health that is, the age of the respondents and their spouses highlighted the significance of taking demographic factors into account when attempting to understand infertility. All things considered, these results point to the necessity of all-encompassing strategies that tackle the complex factors influencing reproductive health to provide focused treatments and assistance to women who are struggling with infertility.

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