



ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

ANALYSIS OF CAUSES AND CLINICAL PATTERNS OF INFERTILITY IN COUPLES ATTENDING A TERTIARY CARE CENTER IN HIMACHAL, INDIA

KEY WORDS:

Dr Surabhi Sharma

Medical officer Ms Obstetrics & Gynaecology

Dr Ravikant Bhardwaj

Medical officer Ms Surgery

ABSTRACT

**Objective:** This study aims to analyze infertility patterns among couples seeking medical consultation, identify contributing male and female factors, and establish statistically significant data on various infertility causes. **Materials and Methods:** A hospital-based observational study was conducted at Kamla Nehru Hospital for Mother and Child, IGMCI, Shimla, from May 2023 to August 2023. The study included 100 women of reproductive age diagnosed with primary or secondary infertility through clinical examination and laboratory tests. Couples lacking comprehensive diagnostic evaluations were excluded. **Results:** Among the 100 women studied, 71% had primary infertility, while 29% experienced secondary infertility. Female factors contributed to 54% of infertility cases, male factors accounted for 21%, unexplained infertility was observed in 28%, and combined male and female factors were present in 4% of cases. **Conclusions:** Infertility is influenced by both male and female factors, necessitating comprehensive evaluation and counseling for both partners.

INTRODUCTION

Infertility affects approximately 8-12% of couples worldwide. The WHO defines infertility as the inability to conceive after 12 months of regular unprotected intercourse. In India, primary infertility rates range from 3.9% to 16.8%. This study aims to assess the clinical patterns and causes of infertility among women visiting a tertiary care center in Himachal Pradesh.

3. WorldHealthOrganization(WHO).Infertility.Availablefrom: https://www.who.int/news-room/fact-sheets/detail/infertility.  
 4. Agarwal A, Mulgund A, Hamada A. A global perspective on male infertility. Reprod Biol Endocrinol. 2015;13:3-7.  
 5. Polis CB, Cox CM, Thoma ME. Infertility prevalence in low-income countries. Hum Reprod. 2019;32:1064-74.  
 6. Jejeebhoy SJ. Infertility in India: Patterns and consequences. J Family Welfare. 1998;44(2):15-24.  
 7. Masoumi SZ, Parsa P, Darvish N. Causes of infertility in Iranian couples. Iran J Reprod Med. 2015;13(8):513-6.

MATERIALS AND METHODS

This study included 100 consecutive women attending the outpatient department for infertility consultation. Data was collected on demographic details, menstrual history, and medical history. Clinical examinations were conducted, and hormonal analysis was performed.

RESULTS

The study found the following infertility breakdown:

- Primary infertility: 71%
- Secondary infertility: 29%
- PCOS: 44%
- Tubal factor: 20%
- Male factor infertility: 21%
- Unexplained infertility: 28%

DISCUSSION

The study found that PCOS was the most common cause of female infertility, while 21% of male partners had abnormal semen parameters. Unexplained infertility accounted for 28% of cases.

CONCLUSIONS

Both male and female factors significantly contribute to infertility, highlighting the importance of comprehensive evaluation and counseling for couples.

Table 1: Causes of Infertility

| Cause                          | Primary Infertility (%) | Secondary Infertility (%) |
|--------------------------------|-------------------------|---------------------------|
| Female factors                 | 47%                     | 21%                       |
| Male factors                   | 21%                     | -                         |
| Unexplained                    | 28%                     | 6%                        |
| Combined male & female factors | 4%                      | -                         |

REFERENCES

1. World Health Organization. Infertility fact sheet. WHO; 2023.  
 2. Chethana R, Shilpa S. Treatment-seeking pattern among infertile couples in rural areas. Int J Community Med Public Health. 2016;3:2884-90.