

Title:ROLE OF ULTRASONOGRAPHY IN THE EVALUATION OF FEMALE INFERTILITY IN RURAL TERTIARY CARE CENTER

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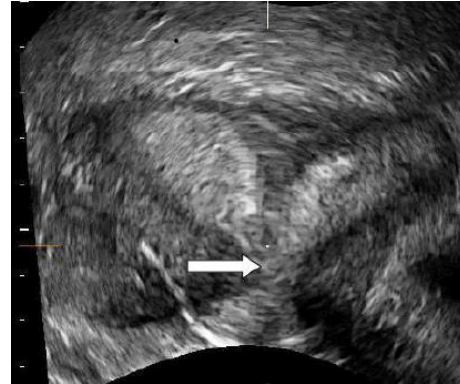


INTRODUCTION -Infertility, defined as the inability to conceive after one year of unprotected intercourse, is a pressing global health concern, affecting approximately 15.5% of women worldwide. In India, the prevalence of infertility ranges from 3.9% to 16.8%, highlighting a significant public health challenge that affects approximately 15% of couples, with female factors contributing to about 50% of these cases. The causes of female infertility are multifactorial and can include ovarian dysfunction, uterine abnormalities, cervical issues, and tubal factors.

AIM: To evaluate the role of ultrasonography in diagnosing various causes of female infertility. To evaluate the frequency of different infertility causes identified using ultrasonography

MATERIALS AND METHODS -STUDY

DESIGN: Cross-sectional observational study: **STUDY POPULATION:** The study was conducted at a rural tertiary care center, where 50 women diagnosed with infertility (primary or secondary) were included.



RESULTS

The **age distribution** of participants revealed that nearly half (47%) were between 26-30 years old, followed by 34% in the 20-25 age group, 12% aged 31-35, and 7% aged 36-40. The **marital duration** of participants was distributed as 30% with less than 5 years, 40% with 5-10 years, and 30% with more than 10 years.**Primary infertility** was more common, affecting 64% of the participants, with the remaining 36% experiencing secondary infertility. In terms of **BMI**, 60% of the participants had a normal BMI, while 22% were classified as overweight and 18% as obese.Factors contributing to the infertility were pcos 16(32%), ovarian cysts(18%), uterine fibroids 10(20%), endometrial factors 6 (12%), tubal factors 4 (8%), uterine malformations 4(8%), normal findings11(22%).

CONCLUSION AND ACKNOWLEDGEMENT –The role of ultrasonography, especially transvaginal sonography (TVS), is pivotal in diagnosing and managing female infertility, offering insights into ovarian reserve, uterine abnormalities, and tubal patency. As a first-line diagnostic tool, ultrasonography is valued for its accessibility, cost-effectiveness, and radiation-free imaging.