

Knowledge, Attitude, and Practices Regarding Contraceptive Use in the Rural Population: A Cross-Sectional Study

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Abstract:

Contraceptive use plays a vital role in improving maternal and reproductive health outcomes, particularly in rural communities. This study aims to assess the knowledge, attitudes, and practices regarding contraceptive use among the rural population. A hospital-based cross-sectional descriptive study is planned among married men and women aged 18–45 years residing in rural areas. A minimum sample size of 384 participants will be enrolled using convenience sampling. Data will be collected using a pre-tested semi-structured questionnaire covering demographic characteristics, knowledge, attitudes, and contraceptive practices. Trained interviewers will administer the questionnaire in the local language after obtaining informed consent. Descriptive statistics and appropriate inferential tests, including Chi-square and logistic regression, will be used for data analysis. The study is expected to identify knowledge gaps, misconceptions, and socio-cultural barriers influencing contraceptive acceptance and utilization. The findings will help strengthen family planning services, improve counselling strategies, and promote male participation in reproductive health decisions. The study is expected to contribute to evidence-based interventions aimed at increasing contraceptive awareness and improving reproductive health outcomes in rural populations.

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Introduction

Human fertility is influenced by the customs, values, and social norms and the contraceptive methods of adoption differs across and within communities, factored by various socio-cultural and individual-level determinants such as economic conditions, cultural beliefs, and educational attainment have a notable influence on the decision to use of contraceptives [1].

In some conservative regions of India, the use of contraceptives is often met with hesitation, due to religious beliefs, traditional family structures, and the influential role of elders. Such societal norms contribute to either resistance or general disinterest toward family planning [1].

Further, the educational level of couples, particularly the husband's, plays a critical role in acceptance of contraceptives. Awareness generated through mass media also serves as a key supporter in this context [1,2].

India is aware of the necessity population control. It was the first nation to implement a national family planning program in 1952 with the objective of

lowering the birth rate in accordance with financial requirements [2].

However, despite decades of efforts, the challenge persists. According to global projections, India is expected to remain the world's most populous nation, and the unmet need for contraceptive services continues to be a concern [2].

Empirical data show that women in rural areas are less likely to access contraceptives and more likely to face unexpected pregnancies. Structural gaps, limited choices, and minimal male involvement further complicate the situation [4].

India's family planning efforts have relied heavily on permanent methods like female sterilization, which limits options for couples desiring temporary methods or birth spacing [4].

More recent approaches involve focusing on couple-based decision-making and increasing access to reversible techniques. By including men in counseling sessions, enhancing communication, and promoting the use of contraceptives, interventions like CHARM (Counseling Husbands to Achieve

Reproductive health and Marital equity) have demonstrated promise [4].

However, social barriers, including son preference and limited privacy, still affect effective utilization. Some rural areas continue to have relatively high rates of contraceptive use, especially for permanent methods, despite low awareness and differing attitudes. However, misconceptions about modern methods, fear of side effects, and a preference for traditional practices often persist [5].

Objectives

To assess the knowledge, attitudes, and practices regarding contraceptive use among individuals in rural communities.

To identify sociodemographic factors and barriers influencing contraceptive choices and access to family planning services.

Methodology

Study Design: A standardized questionnaire was used to perform this cross-sectional, descriptive investigation in a hospital.

Study Setting: The study will be conducted at a tertiary care hospital, focusing on patients from surrounding rural areas who attend outpatient departments such as Obstetrics and Gynaecology (OBGYN) and General Medicine.

Study Population: The study will include rural men and women aged 18–45 years who are married or living with a partner and are visiting the hospital for any reason.

Inclusion Criteria: Married individuals aged 18–45 years Rural residents (based on self-reported permanent address) Willing to provide informed written consent

Exclusion Criteria: Unmarried individuals or those not in a union Individuals with known infertility Participants with cognitive impairments or language barriers that prevent effective communication

Sample Size Calculation: Assuming that 50% of the rural population has adequate knowledge or favourable attitudes toward contraception (to allow maximum variability), and using a 95% confidence level with a 5% margin of error:

$$n = (Z^2 \times p \times (1-p)) / d^2$$

$$n = (1.96^2 \times 0.5 \times 0.5) / (0.05)^2 \approx 384$$

Hence, the study will aim to include a minimum of 384 participants using convenience sampling.

Data Collection Tool: Data collection will be done using a semi-structured, pre-tested KAP questionnaire, and trained interviewers will administer it in the local language (Hindi/Marathi). The questionnaire will cover:

Demographic details: age, gender, education level, occupation, religion, income, number of children (parity)

Knowledge: awareness of different contraceptive methods (oral pills, condoms, IUDs, sterilization), and primary sources of information (ASHA workers, media, peers)

Attitude: beliefs regarding safety, effectiveness, societal norms, male involvement, and religious or cultural considerations

Practice: current use of contraceptives, history of past methods, reasons for discontinuation or non-use

The questionnaire will be refined based on feedback from a pilot study to ensure clarity and cultural sensitivity.

Data Analysis: Responses will be summarized using descriptive statistics, which include means, standard deviations, percentages, and frequencies. Associations between KAP scores and socio-demographic variables (such as gender, literacy, and number of children) will be analysed using Chi-square tests and logistic regression. A statistically significant p-value is one that is less than 0.05. Software such as SPSS or STATA will be used for statistical analysis.

Ethical Considerations:

Study protocol review and approval will be conducted by the Institutional Ethics Committee.

Written, informed consent will be requested from each participant.

Participation will be voluntary and confidentiality will be strictly maintained.

No personal identifiers will be collected.

Participants will receive educational leaflets and optional one-on-one counselling about available contraceptive options.

Expected Outcome / Implications: This study is expected to highlight knowledge gaps, prevailing misconceptions, and the socio-cultural barriers that limit contraceptive use in rural areas. The findings will serve as a foundation for strengthening reproductive health services and tailoring educational campaigns to respond to the particular requirements of those living in rural areas. The study will also provide insights into how healthcare workers can better support patients through counselling and outreach. Emphasizing male involvement and culturally sensitive approaches, this research aims to contribute to reducing unintended pregnancies and improving overall reproductive health outcomes in underserved rural communities.

References

1. Hayat H, Khan PS, Imtiyaz B, et al. Knowledge, Attitude and Practice of Contraception in Rural Kashmir. *J Obstet Gynecol India*. 2013;63(6):410–414. doi:10.1007/s13224-013-0447-6.
2. Osborn JA, Rm S, Karthikeyan S, Ravishankar SL. A study on contraceptive prevalence rate and factors influencing it in a rural area of Coimbatore, South India. *J Family Med Prim Care*. 2021;10(6):2246–2251. doi:10.4103/jfmprc.jfmprc_2345_20.
3. Agrawal R, Mishra M, Rehman T, et al. Utilization of modern temporary contraceptive methods and its predictors among reproductive-aged women in India: insights from NFHS-5 (2019–21). *Front Glob Womens Health*. 2023;4:1219003. doi:10.3389/fgwh.2023.1219003.
4. Nair S, Dixit A, Ghule M, et al. Health care providers' perspectives on delivering gender equity focused family planning program for young married couples in a cluster randomized controlled trial in rural Maharashtra, India. *Gates Open Res*. 2019;3:1508. doi:10.12688/gatesopenres.13026.1.
5. Sukumar MBA, John SM. Knowledge, Attitude and Practices of Contraceptives Among Married Women of Rural Vellore. *J Obstet Gynecol India*. 2022;72(S1):S68–S74. doi:10.1007/s13224-021-01552-4