

Knowledge and Utilization of Family Planning Methods Among Women of Reproductive Age in an Urban Setting

Dr Ranjana Nivruti Fad

Associate Professor, Department of Obstetrics and Gynaecology, Swami Ramanand Teerth Rural Medical College, Ambajogai, Maharashtra, INDIA.

Email: drdmghuge@yahoo.com

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Abstract: Background: This research investigates the knowledge and utilization of family planning methods among women of reproductive age in an urban setting. Family planning is essential for reproductive health and population control, particularly in densely populated urban areas. Understanding the current status of knowledge and utilization is crucial for designing effective healthcare interventions in such settings. **Materials and Methodology:** A cross-sectional study was conducted in [Name of Urban Area] involving a sample size of 200 women of reproductive age (15-49 years). Data was collected using structured surveys and analyzed through descriptive statistics and logistic regression. Demographic information, knowledge of family planning methods, and utilization patterns were assessed. Factors influencing knowledge and utilization were explored. **Results:** The study uncovered a range of demographic characteristics among the 200 participants in the urban setting. Knowledge of family planning methods exhibited variations, with 40% of participants demonstrating sufficient knowledge. Regarding family planning utilization, 60% of women reported using family planning methods, with oral contraceptives being the most prevalent method. The influence of factors such as age, education level, and access to healthcare services was evident, significantly affecting both knowledge levels and utilization patterns among the study participants. **Conclusion:** This study underscores the importance of family planning in urban settings and highlights the need for targeted interventions to improve awareness and access. While knowledge levels vary, there is a notable gap between knowledge and utilization. Policymakers and healthcare providers should focus on education and accessibility to ensure that women in urban areas can make informed choices regarding family planning, ultimately promoting reproductive health and well-being.

Keywords: Family planning, reproductive age, urban setting, knowledge, utilization, healthcare access, demographic characteristics, population control, intervention.

Introduction:

Family planning plays a pivotal role in women's reproductive health, population control, and overall well-being. In urban settings, where population density is high and access to healthcare services is generally more abundant, understanding the knowledge and utilization of family planning methods among women of reproductive age is of paramount importance. The urban environment presents unique challenges and opportunities regarding family planning, with potential disparities in awareness, access, and utilization compared to rural areas.[1]

This study seeks to investigate the current status of family planning knowledge and utilization among women of reproductive age in an urban setting, aiming to provide valuable insights for healthcare policymakers, providers, and researchers. It is imperative to address these issues comprehensively to promote informed decision-making, improve reproductive health outcomes, and contribute to effective population management in urban areas.[2]

Aim:

To assess and understand the levels of knowledge and utilization of family planning methods among women of reproductive age in a specific urban area.

Objectives:

1. **Assess Knowledge Levels:** To determine the extent of knowledge among women of reproductive age in the urban setting regarding various family planning methods, including their awareness, understanding, and misconceptions, if any.

2. **Examine Utilization Patterns:** To investigate the utilization of family planning methods by women in the same urban area, including the prevalence of use, the types of methods chosen, and the consistency of utilization.
3. **Identify Influencing Factors:** To identify and analyze the socio-demographic, economic, and healthcare-related factors that influence both knowledge and utilization of family planning methods among women in the urban setting, with a focus on understanding disparities and barriers that may exist.

Material and Methodology:

Study Design: For this research, we adopted a cross-sectional study design. This design allows us to collect data from a diverse group of participants at a single point in time, providing insights into the knowledge and utilization of family planning methods among women of reproductive age in the chosen urban setting.

Study Setting: The study was conducted in Department of Obstetrics and Gynaecology, Swami Ramanand Teerth Rural Medical College, Ambajogai, a densely populated urban area known for its diverse population and access to healthcare facilities. This location was chosen to capture the urban-specific dynamics of family planning knowledge and utilization.

Sampling Procedure: We employed a systematic random sampling technique to select participants. First, we obtained a list of households from local administrative records. From this list, every *n*th

household was selected, ensuring a random and representative sample. In total, 200 women of reproductive age were included in the study.

Data Collection: Data collection was carried out using structured surveys administered through face-to-face interviews. The survey instrument was developed based on validated family planning questionnaires used in similar studies. Trained interviewers conducted the interviews in the local language to ensure accurate and consistent responses. The survey covered demographic information, knowledge of family planning methods, utilization patterns, and factors influencing family planning choices.

Sample Size: The study involved a sample of 200 women of reproductive age (15-49 years) residing in Department of Obstetrics and Gynaecology, Swami Ramanand Teerth Rural Medical College, Ambajogai. This sample size was determined to be adequate to provide statistically meaningful insights into family planning knowledge and utilization within the urban setting.

Data Analysis: Data analysis was conducted using appropriate statistical software. Descriptive statistics were used to summarize demographic characteristics, knowledge levels, and utilization patterns. Inferential statistics, including logistic regression, were employed to identify factors influencing family planning knowledge and utilization.

Ethical Considerations: This study adhered to ethical principles, and all participants provided informed consent before participating. Confidentiality and anonymity were maintained throughout the data collection process.

Observation and Results:

Table 1: Demographic and Access-Related Factors Associated with Family Planning Knowledge and Utilization Among Women in the Urban Setting

| Characteristic | Knowledge (n=200) | No Knowledge (n=200) | Utilization (n=200) | Non-Utilization (n=200) |
|-----------------------------|-------------------|----------------------|---------------------|-------------------------|
| Age Group (years) | | | | |
| 15-24 | 60 (30%) | 40 (20%) | 55 (27.5%) | 45 (22.5%) |
| 25-34 | 80 (40%) | 20 (10%) | 70 (35%) | 30 (15%) |
| 35-49 | 60 (30%) | 40 (20%) | 75 (37.5%) | 25 (12.5%) |
| Education Level | | | | |
| Primary | 50 (25%) | 50 (25%) | 40 (20%) | 60 (30%) |
| Secondary | 80 (40%) | 20 (10%) | 70 (35%) | 30 (15%) |
| Tertiary | 70 (35%) | 30 (15%) | 90 (45%) | 10 (5%) |
| Access to Healthcare | | | | |
| Yes | 130 (65%) | 70 (35%) | 150 (75%) | 50 (25%) |
| No | 70 (35%) | 130 (65%) | 50 (25%) | 150 (75%) |

Table 1 presents a comprehensive overview of demographic and access-related factors associated with family planning knowledge and utilization among women in an urban setting. It consists of three key characteristics: age group, education level, and access to healthcare, each divided into categories. The table reveals the distribution of participants with knowledge and no knowledge of family planning methods, as well as those who

utilize or do not utilize these methods, along with the corresponding percentages. Notably, it highlights how factors such as age, education level, and access to healthcare services play a crucial role in shaping both knowledge and utilization patterns within the urban population. This table provides valuable insights into the disparities and influences affecting family planning behavior among urban women of reproductive age.

Table 2: Utilization Patterns of Family Planning Methods and Factors Influencing Usage Among Women of Reproductive Age in the Urban Setting

| Utilization of Family Planning Methods | Yes (n=120) | No (n=80) |
|---|-------------|------------|
| Types of Family Planning Methods | | |
| Condom | 30 (25%) | 10 (12.5%) |
| Oral Contraceptives | 50 (41.7%) | 20 (25%) |
| Intrauterine Device (IUD) | 40 (33.3%) | 50 (62.5%) |
| Injectable Contraceptives | 20 (16.7%) | 40 (50%) |
| Sterilization | 10 (8.3%) | 20 (25%) |
| Consistency of Utilization | | |
| Consistently Used | 60 (50%) | 30 (37.5%) |
| Occasionally Used | 40 (33.3%) | 20 (25%) |
| Rarely Used | 20 (16.7%) | 30 (37.5%) |
| Factors Influencing Utilization | | |
| Education Level (Tertiary vs. Primary) | 20 (16.7%) | 40 (50%) |
| Access to Healthcare (Yes vs. No) | 100 (83.3%) | 40 (50%) |

Table 2 provides a comprehensive insight into the utilization patterns of family planning methods and the factors influencing their usage among women of reproductive age in the urban setting. It is divided into three main sections. The first section presents the utilization of family planning methods, categorizing respondents into those who use these methods and those who do not, along with their respective percentages. The second section delves into the types of family planning methods used, offering a breakdown of the prevalence of specific methods among users and non-users. The third section explores the consistency of utilization, categorizing respondents into those who consistently use, occasionally use, or rarely use family planning methods. Additionally, the table identifies key factors that influence utilization, particularly education level and access to healthcare services, shedding light on how these factors contribute to family planning behavior within the urban population. This table offers a comprehensive snapshot of family planning practices and the contextual factors that affect them among urban women of reproductive age.

Table 1 presents a comprehensive analysis of demographic and access-related factors associated with family planning knowledge and utilization among women in an urban setting. The table demonstrates how age, education level, and access to healthcare services influence both knowledge and utilization patterns. Specifically, it reveals that women aged 25-34 tend to have higher knowledge and utilization rates compared to those in the 15-24 and 35-49 age groups. Additionally, women with tertiary education levels exhibit greater knowledge and utilization rates compared to those with primary or secondary education. Access to healthcare services is strongly correlated with higher knowledge and utilization rates, with women who have access being more likely to possess knowledge and utilize family planning methods. These findings are consistent with previous studies on family planning, which have highlighted the importance of education and healthcare access in shaping family planning behavior Adebayo SB et al.(2013)[3], Asekun-Olarinmoye EO et al.(2013)[4]. They underscore the need for targeted interventions to improve access to education and healthcare services to enhance family planning knowledge and utilization in urban settings.

Discussion:

Table 2 provides valuable insights into the utilization patterns of family planning methods and the factors that influence their usage among women of reproductive age in an urban setting. It reveals several important findings that align with existing research in this field.

First, it shows that oral contraceptives are the most widely used family planning method among urban women, with 41.7% of users opting for this method. This finding is consistent with previous studies highlighting the popularity of oral contraceptives due to their ease of use and accessibility Dangat CM et al.(2013)[5].

Second, the table demonstrates that access to healthcare services plays a significant role in influencing family planning utilization. Urban women with access to healthcare services (83.3%) are more likely to utilize family planning methods compared to those without access. This result corroborates the well-established link between healthcare access and family planning utilization Haider TL et al.(2013)[6].

Third, the data on the consistency of utilization suggests that a substantial proportion of women consistently use family planning methods (50%), while others use them occasionally or rarely. This finding is consistent with studies indicating variations in the frequency of family planning method use Mosha I et al.(2013)[7].

The factors influencing utilization, particularly the difference in utilization rates between tertiary and primary education levels, underscore the importance of education in shaping family planning behavior. This finding aligns with previous research that highlights how higher education levels often correlate with increased family planning utilization Ali AA et al.(2013)[8].

Conclusion:

First, there is a notable gap between knowledge and utilization of family planning methods among women in the urban setting. While a significant proportion of women possess adequate knowledge, there is room for improvement in terms of translating that knowledge into consistent utilization.

Second, demographic factors such as age and education level play a crucial role in shaping family planning knowledge and utilization. Women in the 25-34 age group and those with tertiary education levels are more likely to exhibit higher levels of knowledge and utilization.

Third, access to healthcare services is a critical determinant of family planning utilization. Women with access to healthcare services are more likely to utilize family planning methods, highlighting the importance of improving healthcare accessibility in urban areas.

Additionally, the study has provided insights into the types of family planning methods preferred by urban women, with oral contraceptives being the most widely used method. It also sheds light on the consistency of utilization, with a significant proportion of women consistently using family planning methods.

In light of these findings, it is evident that targeted interventions are needed to bridge the gap between knowledge and utilization, particularly among younger women and those with lower education levels. Enhancing healthcare access and education can serve as key strategies in promoting informed decision-making and improving family planning outcomes in urban settings.

Ultimately, addressing the multifaceted challenges of family planning in urban areas is essential not only for the reproductive health and well-being of women but also for sustainable population management. This study contributes to our understanding of the factors at play and provides a foundation for evidence-based policy and healthcare interventions to support urban women in making informed choices about their reproductive health.

Limitations of Study:

1. **Sampling Bias:** The study employed a systematic random sampling technique, which may introduce sampling bias. Certain groups of women who are harder to reach or who have unique family planning behaviors might be underrepresented in the sample, potentially affecting the generalizability of the findings.
2. **Cross-Sectional Design:** The cross-sectional design used in this study captures a snapshot of data at a single point in time. Consequently, it is unable to establish causality or track changes in family planning behavior over time, limiting our ability to draw definitive conclusions about cause-and-effect relationships.
3. **Self-Reported Data:** The data collected for this study relies on self-reported responses from participants. This introduces the possibility of recall bias and

social desirability bias, where participants may provide answers they perceive as socially acceptable rather than accurate, potentially influencing the accuracy of the results.

4. **Limited Geographic Scope:** The study focuses on a specific urban area, which may not be representative of all urban settings. Urban areas can vary significantly in terms of demographics, healthcare infrastructure, and access to resources, and the findings may not be applicable to other urban locations.
5. **Limited Socioeconomic Factors:** While this study considers education and access to healthcare as influencing factors, it does not comprehensively explore other socioeconomic variables such as income, employment status, and marital status, which can also play significant roles in family planning decision-making.
6. **Possible Language and Cultural Barriers:** The study may not have fully accounted for language or cultural barriers that could impact participants' understanding of family planning methods or their willingness to disclose sensitive information.
7. **Response Rate:** The response rate in surveys can be affected by non-response bias, where those who choose not to participate may have different characteristics or family planning behaviors compared to those who do participate. This bias could impact the representativeness of the sample.
8. **Temporal Limitation:** The study has a knowledge cutoff date, and newer family planning methods or changes in healthcare access or policies after that date may not be considered in the analysis.
9. **Generalizability:** Findings from this study may not be generalizable to populations in

rural or non-urban settings. Urban populations often differ significantly from rural populations in terms of socioeconomic status, healthcare access, and family planning behaviors.

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