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Family Planning Preferences, Awareness, and Utilization among Women of Childbearing Age in Shani Local Government Area, Borno State, Nigeria

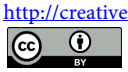
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Abstract

Family planning is a major Pillar of maternal and child health, reducing unintended pregnancies, and supporting household wellbeing. However, utilization remains a challenge in many hard-to-reach underserved communities and socio-economically disadvantaged settings. This study examined family planning awareness, preferences, utilization, and barriers among women of childbearing age in Shani Local Government Area (LGA), Borno State, Nigeria. A descriptive survey design using a mixed-methods approach was employed. Structured questionnaires were administered to 386 women aged 15 - 49 years, with 380 valid responses analyzed. Quantitative findings were complemented by qualitative insights to strengthen interpretation. Most respondents were aged 28 - 37 years, married, had secondary education, and were mainly farmers or housewives. Household income was generally low, and most women had between one and five children. Awareness of family planning was limited, with only about half of the respondents reporting prior knowledge. Information was largely obtained through informal networks such as friends and family, while formal health systems and mass media contributed minimally. Utilization was moderate, with just over half reporting previous use of any method, and fewer than half being current users. Sterilization and injectable contraceptives were the most commonly used methods. Fear of side effects, cultural and religious beliefs, and inadequate knowledge were the major barriers to utilization. Despite these challenges, most women perceived family planning as important and beneficial to women's health. However, concerns about safety and limited access to services persisted. The study concludes that family planning uptake in Shani LGA is constrained by

socio-cultural factors, misconceptions, and service delivery gaps. Community-based education, improved access to services, and engagement of religious leaders and male partners are recommended to enhance utilization.

Subject Areas

Gynecology & Obstetrics

Keywords

Family Planning, Contraceptive Use, Women of Childbearing Age, Barriers, Rural Nigeria, Borno State

1. Introduction

Family planning remains a critical public health intervention for improving maternal and child health outcomes and reducing unintended pregnancies globally. In Nigeria, contraceptive uptake remains uneven, particularly in rural and conflict-affected areas where access to reproductive health services is limited and socio-cultural barriers persist [1] [2].

Despite national and international commitments to improving reproductive health outcomes, awareness and utilization of modern contraceptive methods remain suboptimal in many parts of Northern Nigeria. Socioeconomic inequalities, cultural norms, religious beliefs, and limited male partner support have been identified as important determinants of contraceptive use among women of reproductive age [3] [4].

Studies across sub-Saharan Africa show that fear of side effects, misconceptions about contraceptive safety, and limited access to services continue to contribute to unmet need for family planning [5] [6]. Evidence further suggests that community-level engagement and culturally appropriate interventions can significantly improve uptake where awareness gaps exist [7].

National estimates from the Nigeria Demographic and Health Survey indicate that modern contraceptive prevalence remains particularly low in Northeastern Nigeria compared with other regions of the country. Improving awareness, accessibility, and acceptability of family planning services in underserved communities, therefore remains essential for achieving national reproductive health targets and Sustainable Development Goals.

This study assessed awareness, utilization, preferences, and barriers to family planning among women of childbearing age in Shani Local Government Area of Borno State, a rural and conflict-affected setting in Northeastern Nigeria.

2. Materials and Methods

2.1. Study Design and Setting

A descriptive cross-sectional study design was adopted, employing a mixed-meth-

ods approach. The study was conducted in Shani Local Government Area of Borno State, Northeastern Nigeria. The area is largely rural, with limited health facilities and ongoing socio-economic challenges linked to hard to reach and poverty.

2.2. Study Population

The study population comprised women of childbearing age (15 - 49 years) residing in selected communities within Shani LGA. Women who were permanent residents and consented to participate were included, while visitors and women outside the age range were excluded.

2.3. Sample Size and Sampling Technique

A sample size of 386 was calculated using the Yamane formula at a 5% margin of error. Multistage sampling was employed to select communities and households, followed by random selection of eligible women. A total of 380 questionnaires were completed correctly and included in the analysis, yielding a response rate of 95%, which is considered adequate for descriptive public health research [8].

2.4. Data Collection

Quantitative data were collected using a structured interviewer-administered questionnaire covering socio-demographic characteristics, awareness and knowledge of family planning, utilization and preferences, and perceived barriers. Trained female research assistants administered the questionnaires in the local language.

Qualitative data were obtained through focus group discussions with women of childbearing age to explore attitudes, beliefs, and experiences related to family planning. These discussions provided contextual depth and helped explain patterns observed in the quantitative data.

2.5. Data Analysis

Quantitative data were analyzed using SPSS version 29. Descriptive statistics, including frequencies and percentages, were used to summarize findings. Qualitative data were transcribed, translated, and analyzed thematically. Findings from both components were integrated through complementary data triangulation.

2.6. Ethical Considerations

Ethical approval was obtained from relevant institutional and state research ethics committees. Informed consent was obtained from all participants, and confidentiality and anonymity were strictly maintained.

3. Result

3.1. Socio-Demographic Characteristics

Most respondents were aged 28 - 37 years (43%) and married (65.8%). About 44% had attained secondary education, while others had primary or no formal education. Occupations were mainly farming (31.6%) and homemaking (35.5%). House-

hold income was generally low, with 42.4% reporting monthly earnings below ₦10,000. The majority of respondents had between one and five children.

3.2. Awareness and Knowledge of Family Planning

Only 50.3% of respondents reported awareness of family planning methods. Friends and family members were the most common sources of information (40.5%), followed by community health workers (30.8%). Health facilities and mass media were less frequently cited. Awareness of specific methods varied, with traditional methods, condoms, injectable contraceptives, and sterilization being the most recognized.

3.3. Utilization and Preferences

More than half of respondents (52.6%) reported having ever used a family planning method. However, only 45.3% were current users. Sterilization (42.9%) and injectable contraceptives (22.4%) were the most commonly used methods, indicating a preference for long-acting or permanent solutions.

3.4. Barriers to Utilization

Fear of side effects was the most commonly reported barrier (31.8%), followed by cultural and religious beliefs (25.5%) and lack of adequate knowledge (25.5%). Additional concerns included perceived health risks and limited availability of services. Many respondents reported difficulties accessing family planning services due to distance, cost, and inadequate supplies [6].

3.5. Perceptions of Family Planning

Despite low utilization, most respondents perceived family planning as important (73.9%) and beneficial to women's health (73.5%). Nevertheless, concerns about side effects (54.2%) and long-term health risks (32.9%) remained prevalent, influencing decision-making.

4. Discussions

The findings of this study reveal persistent gaps in awareness and utilization of family planning services among women in Shani LGA. Awareness levels were lower than national averages, reflecting limited outreach of formal health education in rural and hard-to-reach underserved communities.

The dominance of informal information sources highlights the need to strengthen health system communication and community-based education, particularly the community engagement strategies.

The preference for sterilization and injectable contraceptives suggests a desire for methods that require minimal follow-up, possibly due to access constraints and economic considerations.

Fear of side effects and socio-cultural beliefs remain major deterrents, consistent with studies from other parts of Northern Nigeria and similar settings.

Encouragingly, positive perceptions of family planning indicate potential for increased uptake if barriers are addressed. Engaging religious leaders, male partners, and trusted community figures may help dispel misconceptions and improve acceptance.

5. Recommendations

1) Intensify community-based family planning education using locally appropriate approaches (community engagement strategies).

2) Improve accessibility and availability of family planning services in rural communities and hard to reach underserve communities and including during outreach integrated services.

3) Engage religious leaders, male partners, and community influencers to address misconceptions, including follow up meetings to mitigate challenges.

4) Strengthen counseling by healthcare providers to address fears related to side effects during sessions at health facilities and integrated outreaches.

5) Promote continuous monitoring and research to inform adaptive family planning programs.

6. Conclusion

Family planning uptake in Shani Local Government Area remains suboptimal despite generally positive perceptions. Limited awareness, fear of side effects, sociocultural influences, and poor access to services continue to constrain utilization. Addressing these challenges requires culturally sensitive, community-driven interventions and improved service delivery.

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Author Contributions

Kabiru Mustapha Yakasai formulated ideas, goals and aims. Sabo Abdullahi critically reviewing, commenting/revising. Dauda Idris Mohammed coordinated data collection during field visit and data analysis. Ahmad Muhammad provided oversight and guidance. Ibrahim Musa Ngoshe is the author contributed to all part of the sections.

Conflicts of Interest

The authors declare no conflicts of interest.

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