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Factors Influencing Attitude and Uptake of Family Planning Services among Women of Childbearing Age in Egbedore Local Government Area Osun state

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SUMMARY

Introduction: The adoption of contraceptive techniques improves not only health related outcomes but also educational and economic outcomes, particularly for girls and women.

Materials and methods: This study utilized a cross-sectional design. Its goal was to find out what factors influence females of reproductive age (15-45 years) in Egbedore LGA, Osun State, Nigeria, to use family planning services.

Results: Results and the analyses of data collected from the respondents with a view to assessing the factors influencing the uptake of family planning among women of childbearing age in Egbedore LGA, Osun state.

Discussion: This study aimed to determine the factors associated with the attitude and uptake of family planning services among women of childbearing age in Egbedore Local Government Area, Osun State, Nigeria. Overall, our study showed optimal utilization of family planning in the study area, where the hormonal method is the most widely used.

Conclusion: According to the findings of the study, women of reproductive age used family planning options available in their community, such as condoms, hormonal pills, and hormonal injections, which may be found in community primary health care clinics and patent medicine stores. Family planning services assist men and women of childbearing age in making educated reproduc-tive health decisions.

Keywords: Hormonal pills; Hormonal injections; Hormonal method; Primary health care; Contraceptive

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INTRODUCTION

Background of the study

Family Planning (FP) enables couples and individuals to exercise their fundamental freedom to choose whether and when to have children, as well as how many children they want. The adoption of contraceptive techniques improves not only health related outcomes but also educational and economic outcomes, particularly for girls and women [1].

Contraception can prevent an estimated 2.7 million baby deaths and 60 million healthy lives from being lost each year around the world. Contraceptive use, on the other hand, can prevent at least 25% of all maternal deaths by preventing unwanted pregnancies and unsafe abortions, as well as protecting against sexually transmitted illnesses. According to the third sustainable development goal, the international community is committed to lowering the global maternal mortality rate to fewer than 70 per 100,000 live births by 2030.

Pregnancy related complications, such as abortion, are responsible for numerous deaths among mothers and infants, especially in underdeveloped countries. FP practices, despite their significant benefits, are not practiced in the majority of developing nations (WHO Family Planning/Contraception, 2018). In 2017, 63% of married or in-union women in the world used contraception, while one out of every ten married or in-union women still has an unmet need for FP. In 2015, Asia (61%) and Latin America (69%) saw the fastest increases in contraceptive use.

In Africa, one out of every five women has an unmet demand for contraception, with only 36% of married or in-union women utilizing contraception in 2017. Contraceptive use increased at a far slower rate in Sub-Saharan Africa, with only 25% of women using them in 2015. Unmet need refers to the proportion of sexually active, reproductive-age women who wish to limit (do not want additional children) or space (postpone pregnancy) their children but are not employing FP methods. Eastern Africa, Middle Africa, Western Africa, Melanesia, Micronesia, and Polynesia had the highest unmet need (more than 20%, more than double the global average) in 2017, with contraceptive prevalence ranging from 20% in Western Africa to 43% in Eastern Africa.

The lack of use of FP is due to several factors, including lack of access to contraceptive techniques, limited knowledge of contraceptive methods, fear of side effects, societal and religious approval, and provider bias. Most women of reproductive age are either unaware of or misinformed about FP techniques [2]. Even if they are aware of the names of contraceptives, many have no idea where to obtain them or how to properly utilize them. These women may also have negative attitudes around FP, and some may have received inaccurate or misleading information.

Description of the research

Uptake of Family Planning (FP) is a cost-effective public health strategy that faces many challenges. Women of childbearing age are priority groups because they have a higher unmet need for FP. Unmet need refers to the proportion of sexually active, women of reproductive age who can become pregnant but want to limit (do not want more children) or to space (postpone pregnancy) their children; however, they are not using FP methods.

Unmet need is usually regardless of the reason why they are not using FP. Hence, there is a need for evidence that can support FP programs to enhance FP uptake in these priority groups. The current study was conducted on factors influencing attitude and uptake of family planning services among women of childbearing age in Egbedore Local Government Area of Osun State [3]. The independent variables and covariates are based on the Socio-Ecological Model (SEM) and were grouped as intrapersonal, interpersonal, community, and organizational.

Justification for the study

Despite global efforts to reduce maternal deaths, in 2015 two thirds of women (303,000) between the ages of 15 and 49 still died from causes related to pregnancy and childbirth, and about two thirds of the deaths (201,000) occurred in Sub-Saharan Africa. Nigeria currently has a high rate of maternal mortality and ~40% of these maternal deaths are due to complications of unsafe abortions as a response to unwanted pregnancy. Facilitations of family planning in countries with high birth rates could potentially avert 32% of all maternal deaths and nearly 10% of childhood deaths. In addition, family planning could contribute not only to women's education and empowerment but to long-term improvements in economic development and public health.

Statements of problem

Despite the knowledge that FP is one of the most cost-effective public health strategies that can contribute to the improvement of maternal health, empower women and girls and spur economic growth, there are many challenges associated with developing successful FP programs. Many studies have been undertaken to study the various factors influencing FP uptake in different geographical areas. For instance, a cross-sectional multi-country analysis of DHS data for low and middle-income countries revealed that different factors influenced FP uptake differently. Community level education attainment influenced FP uptake positively, whereas gender and fertility related norms influenced contraception uptake negatively. Exposure to media did not have a positive influence on the FP uptake.

Community level barriers to uptake of FP included myths and misconceptions about FP, side effects experienced by some community members, social stigma, and harmful cultural and religious beliefs. Various individuals, national and international organizations such as the World Health Organization, Population Reference Bureau, and others have warned of the dangers of population growth and have advised couples to reduce their family sizes. The difficulties that affect our society include a deteriorating standard of living and insufficient infrastructure because of increased population demands.

Purpose of the study

Given the need for focused Family Planning (FP) data for effective program implementation to enhance uptake of contraception, this study sought to examine the factors that contribute to FP uptake among priority groups (women of reproductive age). The s tudy aimed to survey the influence of education, age, culture, religion, income, and health on the attitude of women towards family planning.

The primary dependent variable was the uptake of FP, but other critical measures of FP utilization such as unmet need and discon tinuation were examined. The independent variables included the personal, interpersonal, community, and organizational factors. These factors have been described FP uptake and the associations determined among women of reproductive age. The socio-demographic characteristics included education, wealth status, and residence (rural *vs.* urban), and intrapersonal characteristics included exposure to media, and knowledge of FP. Interpersonal factors included the involvement of partners and making decisions for the woman. Community factors included having heard FP messages from community leaders. Organizational factors included mainly interaction with health workers [4]. Characteristics related to the utilization of maternal and child health services such as facility delivery, seeking Antenatal Care (ANC), and Postnatal Care (PNC) were treated as covariates.

Objectives

General objectives: The main objective of this study was to assess the factors influencing attitude and uptake of family planning services among women of childbearing age in Egbedore Local Government Area, Osun State.

Specific objectives: The specific objectives of this study were to:

- Assess the factors influencing family planning among women of reproductive age in Egbedore LGA, Osun State;
- Evaluate the level of utilization of family planning among women of reproductive age in Egbedore LGA, Osun State and
- Determinem if the provision of adequate family planning services has a role in the uptake or utilization of family planning among women of reproductive age in Egbedore LGA, Osun State.

Research questions

- What are the factors influencing family planning in Egbedore LGA Osun state?
- What is the level of utilization of family planning among women of reproductive age in Egbedore LGA Osun state?
- Does the provision of adequate family planning services have a role in the uptake or utilization of family planning among women of reproductive age in Egbedore LGA Osun state?

Significance of the study

This study will be of benefit to women and society at large. They will gain much from the information contained in this project endeavor. This study project will further contribute to the growth, development, expansion, and awareness of family planning and its value to society. To propose recommendations that will alleviate the identified erroneous beliefs that influence family planning practice.

Scope of the study

The women in this study were only from the Egbedore Local Government Area in Osun State. It did not intend to judge the effectiveness of family planning, but to learn more about the factors that impact women's attitudes about the use of family planning services. It did not include the treatment of adverse effects or procedure failures.

Definition of terms

Family planning: This refers to individuals and couples' ability to

foresee and achieve their desired number of children, as well as the spacing and timing of their births.

Contraception: It refers to the use of various devices, sexual activities, chemicals, medications, or surgical treatments to prevent conception.

Menstruation: This is the monthly shedding of the blood filled uterine lining (womb), which takes four to five days based on individual physiology.

Ovulation: The discharge of egg cells from the ovary into the fallopian tube.

Vasectomy: This is a surgical treatment that is used to sterilize men or to provide permanent contraception.

Tubal ligation: This is a surgical treatment for female sterilization that involves permanently blocking or removing the fallopian tubes.

LITERATURE REVIEW

Various works of literature from notable authors related to this area of study were reviewed under the following sub-heading: Conceptual review, theoretical review, and empirical review to find out their views and contributions to family planning.

Conceptual Review

Family planning is the term used to refer to the preparation, knowledge, and methods that assist people to plan and attain their desired family size and to determine the spacing of pregnancy. It involves making decisions. Therefore, FP services include the provision of counseling to avail the necessary information to make informed choices. Though the term FP often refers to pregnancy prevention, strictly speaking, it does include fertility treatment to enhance conception [5]. In this work, the term FP refers to pregnancy prevention. Some methods of FP are modern, while others are traditional.

Contraceptives: Contraceptives are the methods used to prevent pregnancy for achieving the desired family size and spacing. Thus, contraceptives are used to assist individuals and couples to implement their FP decisions. This relationship may explain why the terms contraception and FP are used interchangeably in many write-ups. Most of the available contraceptive methods are for women, with men having a limited choice of modern methods, mainly limited to male condoms and sterilization (vasectomy). The limited availability of FP methods for men may explain why most of the FP discussion refers to women.

Family planning methods: Unwanted pregnancies are linked with many poor and sometimes terrible health and social outcomes, as well as economic losses. FP is the primary public health strategy to prevent unwanted pregnancies. According to the WHO, various methods can be used for planning pregnancy to achieve desired reproductive goals. Though the term FP is often used to refer to preventing pregnancy, it does include fertility treatment to enhance conception.

According to the WHO, the following FP methods are available for use: combined oral contraceptives, progestogen-only pills or "the minipill," implants, progestogen-only injectables, monthly injectables or combined injectable contraceptives, combined contraceptive patch and combined contraceptive vaginal ring, Intrauterine Device (IUD): Copper-containing or levonorgestrel, male condoms, female condoms, male sterilization (vasectomy), female sterilization (tubal ligation), Lactational Amenorrhea Method (LAM), emergency contraception pills (ulipristal acetate 30 mg or levonorgestrel 1.5 mg), standard days method, basal body temperature method, two-day method, symptom-thermal method, calendar method or rhythm method, and the withdrawal (coitus interruptus) method.

Different FP methods have different levels of effectiveness based on their use. The combined oral contraceptives contain oestrogen and progestogen, and even though with correct use it is >99% effective, the effectiveness drops to 92% with the ordinary use. The progestogen-only pills can be used by breastfeeding women and are up to 99% effective with correct use but with typical use is 90–97% effective. Implants consist of progesterone and are about 99%. The injectables are 99% effective with correct use and 97% effective with ordinary use. The IUDs are up to 99% effective.

Male condoms are up to 98% effective with consistent and correct use but on average are 85% effective as commonly used. The female condom is 90% effective with correct use but drops to 79% with common use. Vasectomy is more than 99% effective after 3 months, and tubal ligation is more than 99% effective as well. Emergency contraception pills are 98% effective when used correctly. The standard day's method is a fertility awareness method that utilizes cycle beads or other aids and is up to 95% effective when used correctly and 88% effective as commonly used.

The basal body temperature method is also fertility based utilizes changes in body temperature and is up to 99% effective when used correctly and consistently, but effectiveness reduces to 75% with common use. The two day method is a fertility awareness method based on cervical mucous. It is 96% with correct and consistent use and 86% with common use. The symptom-thermal method is a fertility awareness method that is based on cervical mucous and body temperature. It is 98% effective with correct use. The calendar method or rhythm method is a fertility awareness method that utilizes the pattern of the menstrual cycle. It is up to 91% effective with correct use, and effectiveness reduces up to 75% with common use. The withdrawal method entails the man trying to keep sperm out of the vagina to prevent pregnancy. It is up to 96% effective when used correctly and consistently, and it is 73% effective with typical use [6].

FP methods can also be classified into traditional methods and modern methods. Natural methods are based on abstaining from sex to avoid pregnancy. Most organizations list the methods either as traditional or as modern without stating the criterion. The methods that use hormones or devices to control fertility seem to be universally accepted as modern methods. However, the fertility awareness-based methods have raised controversy, with some being classified as modern methods and others as traditional without clear guidelines.

Some methods use technology to identify the fertile days to support abstinence, thus contributing to the controversy. The WHO recognized symptom-thermal, two day, basal body temperature, and standard days as current fertility awareness approaches, while calendar or rhythm methods and withdrawal (coitus interrupts) were classified as traditional methods. In general, traditional approaches are less efficient than modern ways in avoiding pregnancy. Three sets of criteria must be set to ensure protection: The mother must have amenorrhea, be fully or almost fully breastfeeding, and the infant must be less than 6 months. However, there is concern that many postpartum mothers do not have the right knowledge on how to apply this freely available method and hence miss out on the potential benefits. Fabric and Choi, found that only 26% of LAM users met the criteria for correct and valid LAM.

Method mix in family planning: In considering the uptake of FP, the method mix is significant, as it reflects on the right of women to make an informed choice. Method mix refers to the percent distribution of ncontraceptive users by method in a defined period (e.g.,

in past 12 months). Access to diverse methods enhances the choice a woman has and is an essential component of voluntary contraception, which is a right. Skewed method mix may indicate inadequate access to other methods either due to limitations in supplies and health workers' skills, provider bias, or even community bias.

The longer-acting methods, such as the intrauterine copper device and the implants, are more cost-effective and are associated with less discontinuation compared to the short-acting methods. Besides the user characteristics, the technology, including the logistics associated with the use of the longer-acting methods, contribute to the reduced likelihood of discontinuation. It would, therefore, be more desirable to have women use the longer-acting methods. Organizational factors like social franchising have provided more access to FP services, and more women took up the more cost-effective, longer acting, and permanent methods.

This study will describe the method mix among women of reproductive age and relate this to different factors to determine which ones influence the use of methods. The information on whether the method mix is appropriate among adolescents and postpartum women is critical for the FP program. Such information will be useful to enhance the effectiveness of reaching these groups. It will also inform the policymakers and program managers if changes are needed, for example, in terms of access to the different methods to support a better method mix. A more comprehensive range of method mix increases the use of FP as well as enhances the benefits by having clients use the methods that best suit them as well as the more cost-effective methods [7].

Unmet need for family planning: The total number of pregnancies, the number of children living, the partner's permission of contraception, and the couple's discussion about FP has all been linked to unmet FP needs. The unmet need for FP is an indicator in assessing the performance of FP programs. Reducing the unmet need for FP is one of the cost-effective public health strategies in low and middle income countries with significant benefits for both mothers and infants, reducing demand for abortion as well as vertical transmission of HIV. Investing in access to modern contraception, reducing the unmet need for contraception is more cost-effective than retaining the status quo of limited access. Evidence is needed to support favorable decisions to support FP uptake at all levels to reduce the unmet need. FP use is related to the unmet need. By describing the uptake of FP among women of reproductive age, this study will provide information that could help reduce unmet needs.

Adolescents and family planning: Adolescents are from a significant and growing proportion of the population in Sub-Saharan Africa and Kenya, yet their health needs have not received adequate attention. It is important to curb adolescent pregnancies to contribute to ending preventable maternal deaths. Various factors such as physical immaturity, low socioeconomic status, and sociocultural norms and practices make adolescent pregnancies in the developing world riskier with poor outcomes. Most of these pregnancies are unintended; some result from early and forced marriages with an unmet need for contraception. Different researchers have studied the use of FP among youths and adolescents and have documented different results. Gbagbo and Nkrumah did a study among young unmarried women in a tertiary institution in Ghana and established that the students had knowledge of FP and a positive attitude; however, the knowledge and a positive attitude did not translate into FP use because of availability and accessibility. The emergency contraceptive was the most used since it was widely available without the need to go to a health facility that they would rather avoid due to perceived stigma. These results suggest that there may be need to restructure the information content on FP by FP programs targeting the youths. Additionally, these results point to the need to target more than one level of the SEM in interventions to increase FP uptake.

In another study on FP, Shahabuddin, et al. explored married adolescents' maternal health care services, including FP-seeking behavior in Nepal. They interviewed community health workers, family members, and government officials. They used the SEM to analyze and report the findings. Intrapersonal factors such as knowledge of the services, dependency on partners, and low autonomy in decision-making influenced their use of FP. The mothers in law, partners, and other family members influenced whether these adolescents used FP at the interpersonal level. At the organizational level, unfriendly, inaccessible services, and inflexible operating hours negatively influenced the uptake of services. In contrast, supportive community environments such as the availability of female community workers and women groups through which information is shared positively influence the uptake of services [8].

Additionally, though knowledge is critical in the use of FP, studies have demonstrated a discrepancy between knowledge of FP and use. Despite immense knowledge of FP or the need to avoid pregnancies, clients' practices on use do not march the knowledge. In a qualitative study in Mozambique by Capurchande, et al., they found very high levels of knowledge of FP, but this did not translate to the use of FP. Thus, knowledge alone is not enough to change behavior.

Other individual factors that negatively influence FP uptake include perceptions of FP and fertility. In a qualitative study done in Uganda by Nanvubya, et al., women's desire for more children negatively influenced contraception. Some women consider it their religious requirement to follow the husband's decision on whether to use FP.

Besides knowledge and perceptions of FP, women's agency, and self-efficacy in deciding whether to use contraception or not is critical and relates to a woman's empowerment. Empowerment, as shown by access to money, freedom of movement to seek services, and making fertility decisions, is a critical personal factor that positively influences FP uptake. Being able to make household decisions is part of women's empowerment. Women who oversee the household are more likely to utilize contemporary contraception.

Factors influencing family planning

Intrapersonal factors include information and knowledge on Family Planning (FP), exposure to media, ability to make decisions, and perceptions on FP. Interpersonal factors include a partner and other family involvement in the decision. Community factors included mean age at marriage, mean age at first birth and mean age of first sexual intercourse, household decision making norms, and the ideal number of children perceptions.

Organizational factors included access and availability to the services (distance and cost) and counseling on FP. Co-variables were also analyzed: age, education level, wealth status, area of residence, obstetric history (parity, seeking ANC and delivery services), and utilization of other maternal and child health services such as PNC and immunizations. FP uptake was evaluated in terms of those who use FP and those who do not use it, about their need for birth spacing or limiting births and sexual activity.

Interpersonal factors: The SEM's interpersonal level focuses on the individual interaction with the primary groups; including family, friends, and peers who are part of society and influence their decision making. These interactions provide social support, identity, and role definition, which in turn influence behavior. On decision making for FP, studies have shown that many women depend

on their partners' approval to use FP. In a study among the fishing communities in Uganda, Nanvubya, et al. found that women depended on their husbands' approval to use FP

Harrington, et al., in a qualitative study in Western Kenya, found that gender roles were involved with many men viewing FP as the responsibility of the women since they carry the pregnancy and take care of the children. However, the ultimate decision-making still rested with the men, despite their little interest in the subject. Even when men want to use contraception, they tend to rely on women. This analysis revealed that men mainly rely on their partners for contraception use. Factors found to influence their contraception use included the area of residence, marital status, religion, wealth, health care provider interaction, fertility preference, number of sexual partners, and access to media. Nevertheless, in most cases, for women to use contraception, they need the partner's approval. In a study in Ethiopia, found male dominance in decision-making, particularly the husband's influence, as barriers to FP use.

Withers, et al. did a qualitative study in the Kenyan Nyanza region. They found that as gender roles and relations change, some men are reluctant to support FP [9]. They fear that FP enhances female sexual agency and promiscuity and further weakens the male's power and role in society. On the one hand, some husbands perceive FP as a woman's business and do not consider it their business. On the other hand, as a study in Nigeria revealed, some husbands fear that women who use FP may become promiscuous, which negatively affects the FP demand.

Approval of contraception by the partner and discussion of FP within the couple increases the likelihood of uptake of FP. Communication with a partner about FP positively influenced FP's uptake. There is a significant and positive association of the utilization of postpartum FP services to the husband's approval of contraception. However, some religious beliefs discourage couples from discussing and deciding the number of children they would want to have. They consider getting children as from God, and hence there should be no interference. Besides the partners, friends influence the use of FP. Women may be more comfortable sharing their contraceptive issues with friends and trusted women rather than health workers. Depending on their knowledge and perceptions of FP, the friends may discourage FP's use, as documented in a qualitative study in Mozambique.

Most of these studies are qualitative, and therefore documented concepts of the interpersonal level factors influencing FP uptake that need testing in quantitative studies. However, few quantitative studies have been reported, such as a Kenyan study that focused on adolescents and postpartum women. It is, therefore, necessary to conduct research that provides evidence-based quantitative data that is nation-specific (representative nationally) for the various priority groups in Nigeria. Data and findings from such studies will be more reliable to support national FP programming than that from either qualitative studies or from studies that covered a limited geographical space

Community factors: Individuals, groups, and organizations are influenced by elements such as social networks, norms, or standards, which exist either formally or informally, according to the SEM community. Community factors such as disapproval of FP use by the community members may discourage women from using contraception. Withers, et al. explored men's perspectives of gender roles and cultural norms about FP use. They found that misconceptions on the side effects hinder men from supporting FP's use by their partners.

Organizational factors: Though personal and community factors are critical in utilizing FP, women may fail to use the service due to various organizational factors such as access and availability of the services. In a qualitative study, Jalu, et al. found that one's residence determines services' utilization. Challenges include physical inaccessibility. The rural setting services tend to be far in many rural areas and inconveniently located with low and costly transport compared to the urban setting. In some cases, the facilities exist, but the commodities and supplies to support service provision are inadequate, and the opening hours are not flexible to suit the needs of different clients. Silumbwe, et al. found that long physical distances to the facilities, stock out of the method of choice, and poor provider attitudes contributed to low utilization [10].

Besides geographical access, financial costs can be a barrier, particularly for long-term and permanent methods. Where programs have been implemented to provide financial support for FP methods, the uptake of these methods increased significantly compared to areas with no support. The quality of services influences the uptake of FP services, as noted by Woog, et al., in a secondary analysis of national quantitative surveys from 70 developing countries. Health workers' ability to communicate with clients may influence the FP understanding and use by the clients. Health workers should be able to offer culturally relevant counseling. Their ability to serve the different categories of clients (adolescents, postpartum mothers, and other women) appropriately is also critical.

In a qualitative study, realities such as the challenging economic times and the effects of large families on the environment when well-articulated influenced men's fertility desires. Balanced discussions on contraception are therefore critical in encouraging FP use. When health workers emphasize the need for a health service and offer supportive follow-up, they are encouraged to seek services. A program in Embu that entailed close postpartum follow-up led to an increase of FP uptake from 6% to 56%, thus demonstrating the importance of follow-up. Bwazi, et al. in a hospital in Malawi, found a significant and positive association of utilization of postpartum FP services with the provision of clear FP information.

In some studies, in different parts of Africa, clients admitted having limited discussions with the health workers and their spouses. Some clients felt that despite spending much time waiting to see the health workers, they had limited interaction with them, and they were not able to ask many questions. Thus, the quality of counseling may influence the knowledge levels and adequacy for clients to make decisions. Therefore, myths and misconceptions about FP continue despite interactions with health workers.

Theoretical framework

Theory refers to the systematic explanations concerning a particular issue and attempts to answer the why question, particularly as regards a behavior. Thus, theoretical frameworks or models direct research to focus on the relevant areas. Theories are built through the analysis of observations that focus on making sense of occurrences, coming up with various propositions or hypotheses. These prepositions are then used as bases of research questions, and from the research, the theory is further tested [11].

This study used the Socio-ecological model (SEM), which is based on the ecological model that was proposed by Urie Bronfenbrenner. It was introduced in the 1970's as a conceptual model for understanding human development and was further developed into a theory. Bronfenbrenner advocated for a broader approach in studying human beings that would consider their interaction with the changing environment, both the physical and the social context. The model posits that behavior is influenced by the interaction with the environment and implies reciprocal causation. The environment

was described as micro, meso, Exo, and macro, and different variations based on the model have been developed.

The SEM used in this study has been developed to describe intrapersonal (individual), interpersonal (family, friends), community, organizational, and policy level influences on behavior. This model is in line with the current thinking in health promotion that behavior change should not only focus on the individual but also on the environment created by family, friends, and the community as well as the organizational and policy interactions with the individual. This ecological approach considers a broad perspective in dealing with complex public health challenges. It has been adopted by the centers for diseases and prevention for various health promotion initiatives. Individuals in their ecological environments, especially adolescents, have been studied extensively using the SEM. The interaction of the individual with others (family, friends, and community), health systems, and policies all influence the usage of mother and child health services, including FP.

Therefore, Family Planning (FP) uptake is a complex health behavior that must be approached from a broad perspective rather than a simplistic view. Other studies have successfully used the SEM to study the uptake of maternal health services, including FP. For example, Shahabuddin, et al. investigated the maternal healthcare-seeking behavior of married adolescent girls in Nepal. At the individual level, they discovered that attitudes, a lack of information, a lack of decision making autonomy, and a reliance on the husband all influenced requesting assistance. At the interpersonal level, the partners and mothers-in-law made the decisions for many of the girls.

At the community level, certain traditional practices influenced the girl's decision while at the health system level, unfriendly services that were difficult to access discouraged utilization of services. Additionally, Silumbwe, et al. in a qualitative study in Zambia, found that various community-level factors and health system factors influenced the uptake of FP services. In Ethiopia, Jalu, et al. identified barriers to the uptake of maternal health services, including FP at the intrapersonal, interpersonal, organizational, and policy level. Many of these studies are qualitatively done in different parts of Asia and sub-Saharan Africa. They have described different constructs in the SEM that are reported to influence the uptake of maternal health services, including FP. These being qualitative studies, they are not generalizable, and the association of FP uptake by different SEM level factors could not be tested statistically. Hence, these studies' level of evidence is weak, but they generate hypotheses for testing.

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Oluwole, et al. conducted a study in a rural community in Lagos State to evaluate the factors impacting the use of modern family planning methods among women of reproductive age. It was revealed that 183 (83.2%) of the 220 people who took part in the poll were aware of family planning. Health workers were the most prevalent source of contraceptive information, with 68 percent saying they got it from them (30.9 percent). Despite their high degree of understanding of modern family planning technologies, the respondents had a low prevalence of contraception (38.6 percent).

The male condom was the most preferred contraceptive technique among responders (118). (64.5 percent). Overall, 5 (2.7%) of respondents had a strong understanding of family planning, 102 (55.8%) had fair knowledge, and 76 (41.5%) had low knowledge. Fear of negative effects (56.3%), lack of marital permission (48.9%), and a wish for additional children were the primary reasons for non-use (48.9 percent). Marital status, religion, and kind of job were all important socio-demographic factors of contraceptive use.

MATERILAS AND METHODS

Research design

This study utilized a cross-sectional design. Its goal was to find out what factors influence females of reproductive age (15-45 years) in Egbedore LGA, Osun State, Nigeria, to use family planning services.

Study location: The study was conducted in Awo town in Egbedore Local Government Area, Osun State.

Target population: The subjects for the study were women of childbearing age.

Ethical consideration: Ethical clearance was sought and gotten from Adeleke University research ethical committee. Consent was sought from the chief head of the town to carry out the research study. Right to privacy, anonymity, and confidentiality was maintained throughout the research study. The respondents were not exposed to any risk both physically and mentally.

Sample size determination: Using the Taro Yamane formula below,

$$n = \frac{N}{1 + N(e)2}$$

$$n = Sample\ size$$

$$N = Target\ Population$$

$$E = 0.05$$

$$n = \frac{400}{1 + 400(0.05)2}$$

$$= \frac{400}{1 + 400(0.0025)}$$

$$= \frac{400}{1 + 0.6125}$$

$$n = \frac{400}{1.6125}$$

$$n = 200$$

That is, the calculated sample size is 200.

Sample and sampling technique

A simple random sampling technique was used to select the study participants from a target population of 400 women of childbearing age. From the estimated sample size derived above, 100 women who met the study criteria were selected as the sample size for the study. Eligible participants were females of reproductive age (15-54 years)

who were willing to participate in the study.

Validity of the instrument for data collection

The questionnaire was developed based on the literature review and the study's backdrop. The instrument's validity was determined by confirming that it accurately measured all the variables correctly. The instrument was presented to the project supervisor for scrutiny, correction, and approval.

Method of data collection

The total number of 100 questionnaires was distributed, and all were retrieved.

Data analysis

The data was entered into the computer and analyzed using the Statistical Package for Social Science (SPSS), with the results displayed using descriptive statistical techniques such as percentage Tables. The *Chi-square* test of pearson was used. The level of significance was set at $p<0.05$. The link between factors impacting family planning use and its associated variables was explained using cross-tabulation Tables.

RESULTS

Introduction

This chapter presents the results and the analyses of data collected from the respondents with a view to assessing the factors influencing the uptake of family planning among women of childbearing age in Egbedore LGA, Osun state. All data collected were presented in Tables and Figures.

Distribution of socio-demographic characteristics of respondents (n=100)

Tab. 1 showed descriptive analysis of the study participants' age, religion, and ethnicity. Most of the participants (50%) were between the ages of 25 and 34 years, while just 10% were between the ages of 45 and 54 years. Most of the participants (80 percent) practiced Christianity as their religion. The ethnicity of the participants was diverse, with Yoruba constituting the largest ethnic group (77%).

Tab. 2 showed the academic qualification and occupational levels of respondents. Most of the participants had received tertiary education (48%) and only two had no formal education. Students made up half of the participants (50%) while the rest were either civil servants or artisans. Only small fractions were full-time housewives who were unemployed (12 percent).

Tab. 3 shows that most of the participants (41 percent) earned between 25,000-40,000 Naira, while 7 % earned less than 10,000 Naira.

Tab. 1. Age range of respondents and religion.

Characteristics		Frequency (n)	Percentage (%)
Age range	15-24years	10	10
	25-34years	50	50
	35-44years	30	30
	45-54years	10	10
Religion	Islam	46	46
	Christianity	51	51
	Traditionalist	2	2
	Others (specify)	1	1
Tribe	Igbo	7	7
	Hausa	2	2
	Yoruba	77	77
	Others	14	14

Tab.2. Academic qualification and occupational level of the respondents.

Characteristics		Frequency (n)	Percentage (%)
Academic attainment	Primary education	6	6
	Secondary education	44	44
	Tertiary education	48	48
	No education	2	2
Occupation	Civil servant	25	25
	Artisan	13	13
	Full-house wife	12	12
	Student	50	50

Tab. 3. Financial capacity (monthly income) of respondents.

Characteristics		Frequency (n)	Percentage (%)
The average income per month (Naira)	Below–10,000	7	7
	10,000–24,000	36	36
	25,000–40,000	41	41
	Above–40,000	16	16

Tab. 4. Respondents marital status and number of children.

Characteristics		Frequency (n)	Percentage (%)
Marital status	Single	12	12
	Married	86	86
	Divorced	1	1
	Widow	1	1
If married, for how long	1-5 years	40	40
	6-10 years	33	33
	11-15 years	8	8
	16-20 years	6	6
Number of children	None	12	12
	1-2 children	58	58
	3-4 children	27	27
	5-above	3	3
Minimal interval between children	Months	5	5
	1yr	31	31
	2yrs	34	34
	3yrs	16	16
	4yrs	3	3

Tab. 5. Frequency distribution of respondents' knowledge on family planning.

Characteristics		Frequency (n)	Percentage (%)
Have you heard of family planning methods?	Yes	100	100
	No	0	0
Tick the family planning method you know?	1-2 methods	51	51
	3-4 methods	24	24
	All methods	25	25
Where did you first learn about family planning methods?	Hospital	59	59
	Mass media	6	6
	Friends and family	20	20
	Religion institution	4	4
	Literature	11	11
Do family planning methods decrease sexual urge?	Yes	23	23
	No	77	77
Do some of the methods prevent STIs?	Yes	26	26
	No	74	74
Do you know the type of services rendered in family planning clinics?	Yes	97	97
	No.	3	3
If yes, please list the type of services to known to you?	Pregnancy test and counselling	20	20
	Pregnancy tests and health education	12	12
	Pregnancy test and family planning	17	17
	Counselling and health education	13	13
	Counselling and family planning	19	19
	Family planning and health education	9	9
	Family planning and STI's	2	2
	Health education and STI's	1	1
	Health education and cervical test	1	1
	Cervical test and family planning	1	1
	Cervical test and breast exams	1	1
	Contraceptive use	3	3
	Health education	1	1

Which of the following modern family planning methods are available in the community?	Hormonal pills	24	24
	Hormonal implants	59	59
	Hormonal injections	5	5
	Condom	12	12
Where do you obtain family planning methods in the community?	Primary health center	80	80
	Chemist	2	2
	Hospital	11	11
	Others	7	7

Tab. 6. Distribution of utilization of the family methods.

Characteristics		Frequency	Percentage (%)
Percentage of respondents who were sexually active at the time of this research	Sexually active	97	97
	Not sexually active	3	3
Have you used any family planning method before	Yes	98	98
	No	2	2
If yes, are you currently using any family planning methods	Yes	84	84
	No	16	16
If yes, tick the method	Hormonal method	37	37
	Barrier method	11	11
	Fertility awareness	9	9
	Emergency contraceptive	10	10
	Abstinence	6	6
	Withdrawal method	11	11
When last did you visit the family planning clinic?	Within the last 1 month	10	10
	Within the last 3 months	10	10
	Within the last 6 months	18	18
	Others (within the last six months and above)	29	29
Do you have time for your follow up visit to the family planning clinic	Yes	53	53
	No	47	47
Level of respondents' knowledge on family planning methods	High	70	70
	Low	30	30

Tab. 7. Factors that influence the utilization of family planning services.

Characteristics		Frequency (n)	Percentage (%)
The attitude of family planning provider	Yes	60	60
	No	40	40
Availability of facilities/ equipment	Yes	75	75
	No	25	25
Awareness	Yes	64	64
	No	36	36
Language barrier	Yes	49	49
	No	51	51
Schedule of family planning clinic	Yes	61	61
	No	39	39
Effectiveness of family planning method	Yes	78	78
	No	22	22
Accessibility of family planning services	Yes	74	74
	No	26	26
Cultural acceptance	Yes	74	74
	No	26	26
Religious acceptance	Yes	80	80
	No	20	20
Husband's acceptance	Yes	86	86
	No	14	14

Tab.8. Association between respondents' socio-demographic characteristics and family planning utilization.

Variables		The utilization of family planning services Parameter		Pearson *chi-square* X^2 (P-value)	Df	Remark
		Low utility	High utility	(P-value)		
Age range	15-24 years	18	32	5.981 (0.082)	3	No significant association
	25-34 yeras	5	30			
	35-44 years	6	12			
	45-54 years	1	5			
Academic attainment	Primary education	2	6	9.621 (0.014)	2	There is a significant association
	Secondary education	8	23			
	Tertiary education	16	50			
Level of knowledge of family planning methods	Low level	6	25	5.667 (0.047)	1	There is a significant association
	High level	20	51			

Tab. 4 showed that most of the participants (86 %) were married, while 12 % were single, unmarried females. Majority of married respondents (86%) had been married for one to five years (40%). The highest minimal interval (34%) was 2 years, and most of the participants spaced births (**Tab. 5 and 8**).

Frequency distribution of respondent's knowledge on family planning (n=100)

All the participants (100%) had heard of family planning services and were familiar with contraception options. More participants (51%) knew one or two methods of contraception and first learned about family planning methods in hospitals (59%). Most participants (77%) were aware that family planning does not reduce sexual desire. They also agreed (26%) that it prevents Sexually Transmitted Infections (STI). A higher percentage of participants (97%) were aware of the services provided by a typical family planning provider. Hormonal implants (59%) were the most prevalent type of contraception used by the women, and they were generally obtained at the primary health facility (80%).

Distribution of utilization of family planning methods

Tab. 5 and 6 showed the distribution of family planning methods. Many of the participants (97%) were sexually active at the time of the study, and the majority (98%) agreed to have used one form of family planning before. At the time of the study, 84% of the respondents were using a type of family planning method. The hormonal method was the most widely employed (37 percent), while about 47 percent of the participants don't seem to have time for follow-up visits.

Frequency distribution of factors that influence the utilization of family planning services

Tab. 7 showed the factors that influence the participants' use of family planning services. The attitude of family planning providers, availability of facilities/equipment, awareness, schedule of family planning clinic, the effectiveness of the family planning method, accessibility of family planning services, cultural acceptance, religious acceptance, and husband's acceptance are all factors that affect family planning utilization, except language barrier. The acceptance of the husband received the highest percentage of agreement (86%), while the language barrier received 51%.

Tab. 8 demonstrate that there was a significant relationship between academic achievement and level of knowledge about family planning methods among females of reproductive age and utilization of family planning services, with p-values <0.05.

DISCUSSION

This study aimed to determine the factors associated with the attitude and uptake of family planning services among women of childbearing age in Egbedore local government area, Osun State, Nigeria. Overall, our study showed optimal utilization of family planning in the study area, where the hormonal method is the most widely used. In addition, our findings provide information for a better understanding of the factors linked with the uptake of family planning in low-resourced settings.

Level of uptake and utilization of family planning among childbearing women

In our study, we found that 98% of the study participants reported having previously used family planning, while 84% currently utilize it. These findings present a high rate of family planning uptake compared to the 46% utilization rate in an earlier study conducted by Ekpenyong, et al., in Bauchi, a Northern state in Nigeria. and 42% contraceptive usage reported by a previous study in South Sudan carried out by Obwoya, et al. This high prevalence rate may be attributed to the fact that data were obtained from a semi-urban setting, where the knowledge of family planning is relatively high, and most of the study participants have basic education.

The findings of this present study seem to suggest that knowledge of modern family planning methods is very high as all the participants (100%) knew at least one modern contraceptive method. This may be true even for the Nigerian population, as family education and enlightenment campaigns have been rigorously carried out nationwide. This result confirms what was reported in the Ghana demographic and health survey that about 98% of all women aged 15-49 years know at least one modern method of contraception.

The study also suggested that the main source of family planning information was health workers from the primary healthcare centers located within the local government area of residence, as 80% of the participants agreed to have obtained their contraceptives from the Primary Health Centers (PHCs). This may be explained by the fact that health care workers are readily accessible to these communities throughout the day due to the presence of PHCs which provide health services to the local populace. This finding stresses the significance of health care facilities and workers in family planning education compared to other media such as mass media (radio and television), friends, relatives, and religious settings. This agrees with the report of a Ghanian study conducted by Eliason et al., but does not support that of Ekpenyong, et al., which states that the awareness of family planning was mostly from friends and family.

In addition, findings from our study showed that the hormonal methods were the most known and used method of modern contraception amongst the study participants (37%), followed by the barrier and withdrawal methods with an 11% awareness rate respectively. This may be attributed to the fact that most of the participants obtain their contraceptives from health care centers, which need the assistance of trained personnel to administer, as compared to condoms (a form of barrier methods) that are readily available.

Factors influencing the uptake and utilization of family planning among childbearing women

Though the findings from this study showed a high awareness, up-take, and utilization level of family planning methods and services by the study participants, there exists a sharp decline in subsequent visits to the family planning clinic within the last six months and above (47%) and follow-ups of the contraceptives received (53%). According to our findings, the major reasons and factors cited by the participants for not using or the low uptake of family planning services or methods include husband acceptance (86%), religious acceptance (80%), the effectiveness of the family planning method (78%), and availability of facilities/equipment (75%).

The high rate of husbands opposition to their wives using family planning services as seen in this study is in line with the observations made in studies conducted by other researchers such as Allen, et al. in Uganda; Apanga and Adam, in Ghana; Ekpenyong, et al., in Nigeria, amongst others. This is a major constraint as many women in Nigeria specifically and Africa as a whole, hardly take decisions for themselves without the approval of their husbands, who are regarded as the head of the family and home, thus making most women more unlikely to use contraceptives if their husbands refuse.

Other significant factors that influence women of reproductive age's use of family planning services as seen in this study are the attitude of family planning professionals, as this facilitates good communication between the provider and the users; availability of clinics and facilities that ensure that the users receive adequate care at each visit. The lack of awareness and language barriers also hinders the adequate use of services despite being available to the public. Furthermore, the accessibility and effectiveness of family planning methods and possible misconceptions about contraception as displayed by the acceptance from cultural and religious settings affect the use of these services. These findings were consistent with earlier studies reported by Meka, et al. in Nigeria; Apanga and Adam in Ghana, and Gebremariam and Addissie in Ethiopia amongst others. Thus, I strongly opine that additional family planning education from cultural and religious bodies will help to boost confidence in the uptake and utilization of family planning services among our women.

Role of adequate family planning services in the uptake and utilization of family planning among childbearing women

Findings from our study reveal that most participants (97%) were aware of community based family planning services, which are mostly taught in family Planning Clinics (PHCs) for the benefit of sexually active women who want to avoid undesired pregnancies and couples who want to space their children's births. The study respondents are also aware that counseling on the provision of family planning methods, breast examinations, cervical screening, pregnancy tests, health education on Sexually Transmitted Infections (STIs), and other privacy issues that are personal to the users are among the various family planning clinic services available in their community.

The results from our study also showed that nearly anyone living in the community or study area can use family planning services without restriction, as Christians and Muslims who possess basic education made up most of the respondents, with Yoruba being the highest ethnic group. More so, half of the respondents (50%) were students, indicating a significant proportion of single females, with a few as full-time housewives with monthly incomes ranging from 10,000 to 24,000 naira per month. It is, therefore, necessary to equip and upgrade the services rendered in the family planning clinics, especially the lack of needed contraceptive methods, so as not to discourage the use and uptake of family planning services among our child-bearing women.

The role of adequate and proper family planning sensitization and education by primary health care centers and workers towards improving the uptake of these services cannot be overemphasized. As family planning services become readily accessible to users promptly at the appropriate clinic schedules, family planning service providers must imbibe and maintain positive and courteous attitudes to users. Most importantly, there is a need to ensure the accuracy and effectiveness of the desired family planning method alongside its delivery in an efficient, productive, and professional manner.

Findings from our study reveal that family planning uptake and utilization were statistically significant with educational (academic) achievement and awareness of family planning methods (**Tab. 8**). It demonstrates a significant association between participants' up-take and use of family planning services and academic achievement and level of knowledge about family planning methods among women of reproductive age ($p<0.05$ respectively). These results corroborate with the findings from a previous study performed by Oyedoku, which states that well-educated women are readier to engage in innovative behavior than less educated women, and the utilization of family planning methods remains novel in many developing nations. According to Koc, there is a link between the educational level of both women and their spouses and the usage of contraceptive techniques.

Implication of the study to public health

The findings of this study will assist public health workers in providing proper health education to clients and families in the community, allowing them to gain a better understanding of family planning services and ensure adequate child spacing and reproductive health.

Furthermore, public health personnel will be able to provide enough health information to community members about the advantages of child spacing through family planning methods to increase their use and prevent unwanted pregnancies and abortions.

CONCLUSION

According to the findings of the study, women of reproductive age used family planning options available in their community, such as condoms, hormonal pills, and hormonal injections, which may be found in community primary health care clinics and patent medicine stores. Family planning services assist men and women of childbearing age in making educated reproductive health decisions.

The advantages of family planning go well beyond the person seeking information or treatment. People with access to these programs are better able to make proper lifestyle choices and have a positive impact on society. Women who can plan the quantity and timing

of their children's births have better health, and their offspring have a favorable impact on society. Women who use family planning services have fewer unintended pregnancies and births, as well as a lower risk of abortion and associated complications.

RECOMMENDATIONS

The following suggestions were given based on the findings of this study:

- Family planning services should be made available, accessible, and inexpensive to high-risk groups.
- Religious institutions should provide counseling to spread family planning knowledge and urge their members to use the services to improve their reproductive health. Because men play an important role in family decision-making, a healthcare professional should educate men about the benefits of family planning services to increase their acceptance and use among women of reproductive age.
- The public should be informed about family planning services through the media, which is the most widely used medium for disseminating information.

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