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DETERMINANTS OF CONTRACEPTIVE USE AMONG WOMEN OF CHILDBEARING AGE IN KANCHIBIYA DISTRICT-MUCHINGA PROVINCE ZAMBIA)

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Abstract: Introduction: This study investigates the determinants influencing contraceptive use among women of childbearing age in Kanchibiya District, Muchinga Province, Zambia. Understanding these determinants is crucial for improving family planning services and reproductive health outcomes in the region.

Methodology: A descriptive cross-sectional design was employed, with data collected from a sample of 384 women aged 15-49 years using structured questionnaires. The study was conducted in Kanchibiya District, which comprises several rural and semi-urban areas with primary healthcare centers and a district hospital providing reproductive health services. Simple random sampling was used to select participants, ensuring the representativeness of the sample. The data were analyzed using descriptive and inferential statistics to identify significant determinants of contraceptive use.

Results: The study found that injectable was the most commonly used method (35%). Education level significantly influenced contraceptive use, with women having secondary education or higher being more likely to use modern contraceptives ($p < 0.01$). Employment status was also a significant determinant, as employed women were more likely to use contraceptives compared to their unemployed counterparts ($p < 0.05$). Cultural beliefs and partner approval were other critical factors; 40% of respondents reported that cultural values hindered their use of modern contraceptives ($p < 0.05$), and women whose partners approved of contraceptive use were significantly more likely to use them ($p < 0.01$).

Conclusion: The findings revealed that educational attainment, employment, cultural beliefs, and partner support influence contraceptive use among women in Kanchibiya District. Hence, the need for targeted educational and policy interventions to enhance contraceptive use and improve reproductive health outcomes.

Keywords: Contraceptive, Determinants, Family Planning Services

INTRODUCTION

Family planning is a foremost concern for many developing countries where poor perinatal, intra-natal, postnatal, and child health care services are practiced. The number of children the couples want to have vicissitudes over time. Most all the countries where the fertility rate exceeds five children per woman are in Sub-Saharan Africa (SSA). In the late 1990s, the total fertility rate reached below the replacement level (1.7 per woman) in Europe, northern America, and Australia, consequently, Japan reached below the

replacement level in the late 1950s and it has declined further. Increasing women's decision-making is documented as an important solution that can change prevailing fertility and contraceptive use patterns.
Different evidence strongly affirmed that women who are actively involved in household decision-making can control their fertility through the adoption of modern contraception. The Decision-making power of women in family planning is defined as a woman's capability to freely decide independently or discuss with their partner about family planning needs and choices. Contraceptive utilization is commonly compromised by power dynamics between women and her partner as well as those perpetrated by society. Decisions about contraceptive use and childbearing may be confounded by unequal power relations.
Where couples disagree on fertility preferences or desires, men's power in a relationship may contribute to greater unmet need and contraception allows women to reduce unwanted, unplanned pregnancies and unsafe abortions. Women have been playing a great role, not only in the enhancement of family well-being but also in the progress of the financial, political, social, and ecological atmosphere. Despite the influence that partners may have on decisions, women commonly use family planning covertly, indicating that men and women do not always make decisions as a unit; instead, some women make decisions individually. Women's general participation in decision-making is an important factor in increasing the use of contraceptives.
In Sub Saharan Africa secret use of contraceptives among women accounts for between 6 and 20% of all contraceptive use. A short inter pregnancy interval put endangers the new baby, mother, and previous child. According to the 2015 Global Report, the proportion of reproductive age group women who were married or living in union and used modern contraceptive methods were 57.4% globally, 86% in East Asia, 72% in Latin America, and the Caribbean, 28.5% in Africa and not greater than 22% in SSA. Worldwide, in 2019, 50% of all women of the reproductive age were using some form of contraceptive however, in the same year, Sub-Sahara Africa uses some forms of contraceptive were only 29%. Due to the minimal utilization of contraceptives in Africa, particularly in SSA, women are exposed to unintended pregnancy and as WHO recently reported, around 40% of pregnancy was unplanned. High fertility poses health risks for mothers, children, substantially slow economic growth, and exacerbates environmental degradation. As the fertility rate remains high, the youth dependency ratio also increases exponentially.
The use of contraceptives contributes to improvements in maternal and child health as well as national development through direct and indirect means and also assists in national development by reducing population growth; hence, a reduction in the competition for scarce resources. Among the goals set by the global community for sustainable development is Goal 3.7, "By 2030 ensure universal access to sexual and reproductive health care services, including family planning (FP) information and education, and the integration of reproductive health into national strategies and programmes " Meeting all contraceptive and maternal and newborn health care needs would result in substantial health and development gains, yielding dramatic reductions of 76% in unintended pregnancy, 74% in less-than-safe and unsafe abortions, 64% in maternal deaths, and 76% in newborn deaths 2. Investments in Family Planning, therefore, offer benefits beyond fertility, further downstream of the maternal and newborn care continuum.

The International Conference on Population and Development (ICPD) held in Cairo, Egypt in 1994 was a landmark in that, for the first time, the concept of reproductive health and reproductive rights was clearly defined (WHO, 2019). Linkages between population and sustained development were articulated. Family planning information and services are a critical means for the articulation and attainment of reproductive rights and reproductive health, and a central component of reproductive health programmes (WHO, 2019). According to World Health Organization (2019), decision making for contraceptive methods requires the need to make trade-offs among the different methods, with advantages and disadvantages of specific contraceptive methods. Women's choices, however, are often imposed or limited by direct or indirect social, cultural and economic factors.
WHO recommends that other than medical eligibility, the client's preference should be considered in order to provide contraceptive choices in a way that respects and fulfils their human rights and enables them to make informed choices? Throughout the world, many women are denied contraceptive methods due to health concerns that, in fact, have no scientific basis. These unnecessary medical barriers can limit women's method choice, decrease the chance that women will like their selected method and continue using it correctly and consistently. These unnecessary medical barriers arise for various reasons such as stock outs and distance to the health facilities offering the service. Service delivery guidelines that shape provider practice may be outdated and may not reflect the latest scientific knowledge. In addition, some providers may misinterpret or ignore service delivery guidelines and impose their own barriers to contraceptive use.

The provider may identify inappropriate contraindications and restrict use of contraceptive method on the basis of age or parity. In some cases women have been denied a method if she has not had a physical examination, laboratory tests or is not menstruating (Family Health International, 2018). In the 1970s, family planning received minimal political support in Zambia, "Politicians didn't see family planning as part of development but as part of the white man's efforts to control the growth of the black population" (MOH, 2020). The Population Policy of 2019 also signalled changing attitudes towards family planning, highlighting that overall economic development depended on lowering fertility and that information and access to family planning services was a fundamental human right.

Currently, there are many family planning methods being used, for example, long-acting reversible contraception, such as an implant, or an intra-uterine device, hormonal contraception such as contraceptive pills "the pill", the injection and vaginal rings, barriers methods, such as condoms and diaphragms and fertility awareness. Zambia is among the countries with the highest Maternal Mortality Ratio (MMR) in the world (MOH, 2020).
The 2018 ZDHS showed that the MMR in 2018 stood at 278 per 100,000 live births. In continued pursuant of the Millennium Development Goal of reducing MMR by three quarters i.e. to 100 deaths per 100,000 live births by 2021, focus on reducing MMR is on improved management of malaria in pregnancy and family planning (MOH, 2020). Maternal mortality ratio is the number of women who die from pregnancy-related causes while pregnant or within 42 days of pregnancy termination per 100,000 live births. The data are estimated with a regression model using information on the proportion of maternal deaths among non-AIDS deaths in women ages 15-49, fertility, birth attendants, and GDP. Zambia maternal mortality rate for 2020 was 135.00 a 4.65 increase from 2019.

According to the Population Reference Bureau (2020), more than 500,000 women die every year from causes related to pregnancy, childbirth, and abortions. Ninety-nine percent of these deaths occur in less developed regions, particularly in Africa and Asia. The Population Reference Bureau (PRB) also estimates the literacy level among Zambian women of childbearing age at 71 percent and that about 14 percent of married women were using a modern contraceptive method. The 2022 Kanchibiya District Health Management Information System (HMIS) Report shows that the new family planning acceptance rate was 12 percent in women of childbearing age in the district.

In many communities in Zambia, sociocultural factors significantly shape people's perceptions, beliefs, and behavioral patterns. Reproductive choices, including family planning methods and the number of children, are heavily influenced by these socio-cultural norms and values (MOH, 2020). Family planning enables individuals to attain their desired number of children and to determine the spacing of pregnancies through contraceptive methods and infertility treatment. Access to contraceptive information and services is fundamental to health and human rights. Preventing unintended pregnancies lowers maternal ill-health and pregnancy-related deaths. It is particularly crucial to delay pregnancies in young girls who face increased health risks from early childbearing and to prevent pregnancies among older women who also face heightened risks. By reducing unintended pregnancies, contraception decreases the need for unsafe abortions and reduces HIV transmission from mothers to newborns. Additionally, contraception benefits girls' education and creates opportunities for women to participate more fully in society, including paid employment.

According to a 2020 WHO report, an estimated 214 million women of reproductive age in developing regions have an unmet need for contraception. This unmet need is due to factors such as limited access to contraception, limited choice of methods, fear or experience of side effects, cultural or religious opposition, poor quality of available services, and gender-based barriers. The 2020 Zambia Demographic and Health Survey (ZDHS) reported that injectable contraceptives, which are easily concealed, are the most prevalent contraceptive method among married women. Despite the long-standing availability and common knowledge of contraceptives in Zambia, access to reliable methods remains limited. In Lusaka, contraceptives are available through public and private clinics and pharmacies, but inconsistent supply and long wait times restrict access. An ideal family planning scenario would provide free access to contraception, ensure the availability of family planning methods at all times, and guarantee that the benefits outweigh the side effects.

In Kanchibiya District, the dominant ethnic groups are the Bisa and Bemba, and almost all Christian denominations are represented, with the Catholic, UCZ, Jehovah's Witnesses, Seventh Day Adventist, New Apostolic, and Pentecostal churches being the most dominant. These socio-cultural groups have diverse values, norms, and beliefs about family planning, which influence clients' knowledge, perceptions, and choice of contraceptive methods. The provision and accessibility of family planning services in Kanchibiya District mirror the national and provincial situation, with continued low rates of new family planning acceptors linked to high maternal deaths and unsafe abortions (HMIS, 2022). The 2022 Kanchibiya District Health Management Information System (HMIS) report showed a new family planning acceptance rate of 12 percent among women of childbearing age, with a maternal mortality rate of 79.9 per 100,000 in 2022. Ideal coverage is 95% of women of child bearing age should be on family planning unfortunately the coverage is still low for Kanchibiya district at 12% in 2022. The highly favoured contraceptive methods were Injectable.

Further, accessibility of family planning services in the district has been greatly affected by the fact that Chalabesa Mission rural health centre which is one of the biggest institution in the area is served by the mission owned by the Roman Catholic Church that does not advocate for any other family planning methods rather than the natural family planning method. This means that all outreach activities done in their catchment area have a population that is denied artificial family planning services. However, the District has taken measures to improve the provision of family planning services in these areas by provision of outreach family planning services by health facilities near Chalabesa. Despite these efforts by Kanchibiya DHO and other stakeholders in health, little impact has been made in the area of reproductive health as evidenced by the continued high maternal mortality rate, total fertility rate, and high number of unsafe abortions. Improving the accessibility and utilization of reproductive health services such as family planning begins with an assessment of the clients' and community's knowledge, perceptions, and socio-economic and cultural factors that influence their behaviors and practices.

Family planning helps everyone (women, children, men, families, nations). It protects women from unwanted pregnancies, thereby saving them from high risk pregnancies or unsafe abortions. If all women could avoid high-risk pregnancies, the number of maternal deaths could fall by one-quarter. Also other benefits accruing from family planning methods include prevention from cancers, sexually transmitted infections and HIV/AIDs. Reproductive and sexual health care including family planning services and information is recognized not only as a key intervention for improving the health of women and children but also as a human right. All individuals have the right to access, choice, and benefits of scientific progress in the selection of family planning methods. Family planning clients should be provided with factual and adequate information to enable them make an informed, voluntary choice of a contraceptive method. The significance of the study lies in the fact that Knowledge, beliefs and other influential factors of contraceptive use among women of child bearing age in Kanchibiya are some of the major structural and cultural factors that influence the accessibility of family planning services in the district. The national set target for family planning coverage is 95%, unfortunately as of 2022, Kanchibiya district covered 12% of women of child bearing age.

The low utilization of family planning services in Zambia poses a great challenge to the achievement of reproductive health. Many studies on family planning have been conducted globally, regionally and nationally and these studies have come up with different findings and this can be attributed to the culture diversity. In Kanchibiya, however to the best of my knowledge, no study has been conducted in reproductive health to assess the knowledge, attitudes and practices towards the choice of contraceptive use. In this study, the researcher intended to make the findings of the study to be used by the policy makers, family planning managers and providers to improve the delivery of family planning services in Kanchibiya District. The study also aimed at providing a stepping stone for future studies to be conducted in Kanchibiya District and other parts of the country in the area of reproductive health particularly choice of family planning method.

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3.1Population and Sample

The target population for this study included women of childbearing age (15-49 years) who were currently using a contraceptive method.

3.2 Data and Sources of Data

A structured interviewer administered questionnaire was the primary data collection tool, consisting of both closed-ended and open-ended questions to elicit demographic information, knowledge of contraceptive methods, attitudes toward family planning, and factors influencing the choice of contraceptive methods. The questionnaire was developed based on the literature available in this study.

3.3 Theoretical framework

PENDER'S THEORETICAL FRAMEWORK

The Health Promotion Model (HPM) proposed by Nola Pender (1982; revised, 1996) was designed to be a "complementary counterpart to models of health protection". It defines health as "a positive dynamic state not merely the absence of disease". Health promotion is directed at increasing a client's level of well-being. The Health Promotion Model describes the multi-dimensional nature of persons as they interact within their environment to pursue health.

Pender's' Model focuses on following three areas:

1. **Individual characteristics and experiences,**
2. **Behavior-specific cognitions and affect**
3. **Behavioral outcomes**.

The health promotion model notes that each person has unique personal characteristics and experiences that affect subsequent actions.

Individual characteristics and experiences

Personal factors categorized as biological, psychological and socio-cultural. These factors are predictive of a given behavior and shaped by the nature of the target behavior being considered. Personal factors include variables such as attitude, beliefs, marital status, and parity. Socio cultural factors include variables such as age, religion, level of education, poverty.

Behavior-specific cognitions and affect

The HPM is based on theoretical propositions that prior behavior and inherited and acquired characteristics influence beliefs, affect, and enactment of health-promoting behavior. Persons commit to engaging in behaviors from which they anticipate deriving personally valued benefits and that perceived barriers can constrain commitment to action, a mediator of behavior as well as actual behavior. In addition, perceived competence or self-efficacy to execute a given behavior increases the likelihood of commitment to action and actual performance of the behavior as well as fewer perceived barriers to a specific health behavior.

Positive affect toward a behavior results in greater perceived self-efficacy, which can in turn, result in increased positive effect, for example, if women who seeks services of family planning are given adequate information of the choice of contraceptives, there will be less inconsistence.

When positive emotions or affect are associated with a behavior, the probability of commitment and action is increased. Persons are more likely to commit to and engage in health-promoting behaviors when significant others model the behavior, expect the behavior to occur, and provide assistance and support to enable the behavior. The set of variables for behavioral specific knowledge and affect have important motivational significance.

Behavioral Outcome

Health promoting behavior is the desired behavioral outcome and is the end point in the HPM. Health promoting behaviors should result in improved health, enhanced functional ability and better quality of life at all stages of development. The final behavioral demand is also influenced by the immediate competing demand and preferences, which can derail an intended health promoting

actions. In this study Perception of women of child bearing age on the choice of contraceptives is highly influenced by their knowledge, beliefs, families, peers, and health care providers. These can increase or decrease commitment to and engagement in health-promoting behavior such as making an informed decision on the right contraceptive method to use.

RESEARCH METHODOLOGY

The research design for this study was a descriptive cross-sectional design. The study was conducted in Kanchibiya District located in Muchinga Province, which is one of the ten provinces in Zambia. The district consists of several rural and semi-urban areas. In terms of healthcare services, the district has primary healthcare centers and a district hospital that provides reproductive health services, including contraceptive options and counseling. The target population for this study included women of childbearing age (15-49 years) who were currently using a contraceptive method. Simple random sampling method using a table of random numbers was used to select the study sample. Random sampling, a fundamental method in this study, involved the unbiased selection of participants from the population of women of childbearing age in Kanchibiya District, Muchinga Province. By ensuring that each individual had an equal chance of being included in the sample, this method minimizes bias and enhances the representativeness of our findings. The use of random sampling enhances the credibility of the results, allowing for their generalization to the broader population, and making the study's conclusions more reliable and applicable. Women aged between 15 and 49 years residing in the Kanchibiya District who were willing to participate in the study were included. Only physically and mentally unfit and visitors in the area were excluded.

Sample size estimation is based on various factors, including the desired level of confidence, the margin of error, and the variability in the population. One common method for calculating sample size is using the formula for sample size in a simple random survey called Cochran's formula.
Where:
n = required sample size
Z = Z-score corresponding to the desired level of confidence
p = estimated proportion of the population with a particular characteristic
E = margin of error

$$n = \frac{Z^2 * P(1-P)}{E^2}$$

$$n = \frac{(1.96)^2 * 0.5(1-0.5)}{(0.05)^2}$$

$$n = \frac{3.8416 * 0.25}{0.0025}$$

$$n = \frac{0.9604}{0.0025}$$

$$\underline{n = \mathbf{384}}$$

A structured interviewer administered questionnaire was the primary data collection tool, consisting of both closed-ended and open-ended questions to elicit demographic information, knowledge of contraceptive methods, attitudes toward family planning, and factors influencing the choice of contraceptive methods. The questionnaire was developed based on the literature available in this study. Validity refers to the extent to which a study or research instrument measures what it intends to measure. In the context of this study on the determinants of contraceptive use among women of childbearing age in Kanchibiya District, Muchinga Province, several strategies was implemented to establish the validity of the research. This included the careful development and pre-testing of the survey questionnaire to ensure that the questions are relevant and directly related to the determinants of contraceptive use. Additionally, efforts were made to minimize response bias through clear and unbiased wording in the questions. Content validity was assessed by involving subject matter experts and ensuring that the questionnaire adequately covers the relevant factors influencing contraceptive choices. The pilot study was conducted in Mpika District, which shares similarities with the target population, which helped in refining the questionnaire and confirming its validity in a similar context.
Reliability pertains to the consistency and stability of research instruments and methods over time. In this study, reliability was upheld by employing consistent data collection procedures and ensuring that the survey questionnaire is administered consistently to all participants. Pre-testing and piloting the questionnaire helped identify any ambiguities or issues in survey administration, allowing for improvements to be made before the main data collection. Additionally, inter-rater reliability was maintained among data collectors to ensure that responses were coded and recorded consistently. Statistical methods such as test-retest reliability was used in the analysis phase to assess the stability of responses over time. By implementing these measures, the study aimed to enhance the reliability of the data and research findings.
Data Processing and Analysis Collected data was analyzed using appropriate statistical techniques, including descriptive statistics and inferential analysis. Statistical software SPSS was used for data analysis. Basic statistics, such as mean and standard deviations for age, were calculated to understand the central tendency and dispersion within the sample. Additionally, the distribution of marital status and education level among the respondents was categorized, laying the groundwork for a comprehensive understanding of the participants' backgrounds. Bivariate analysis, including the Chi-square test, was employed to explore associations between different variables such as marital status, education level, and contraceptive knowledge. This analysis revealed significant associations, if present. Subsequently, multivariate analysis, such as logistic regression, was conducted to identify the most influential determinants of contraceptive use while accounting for potential confounding factors. By employing these statistical methods, a deeper understanding of the determinants of contraceptive use in the study population was achieved, contributing valuable insights to the field of family planning and reproductive health.
The pilot study sample constitutes 10% of the anticipated sample size. The pilot study was carried out in Mpika District at Chitulika Health Post, which exhibits substantial similarities to Kanchibiya in terms of demographics, socio-economic factors, and cultural

aspects, after getting permission from Mpika DHO/Chitulika HP. 39 respondents were selected using a simple random method after meeting the inclusion criteria. The choice of Mpika District as pilot study location was deliberate and strategic. Mpika serves as a suitable proxy for Kanchibiya due to its comparable characteristics, such as a predominantly rural population, similar ethnic and cultural backgrounds, and parallel socio-economic conditions. The knowledge gained from the pilot study was invaluable in ensuring a smooth and effective data collection process in Kanchibiya District, ultimately contributing to the robustness and reliability of our research findings.

Ethical clearance was sought from the University of Zambia Biomedical Research Ethics Committee (UNZABREC) ref- 5232-2024 and permission from National Health Research Authority (NHRA) ref- 1307/19/06/2024 and Kanchibiya district health office. Informed consent was be obtained from all participants before the interviews conducted. Confidentiality and anonymity was ensured throughout the study, and participants were informed of their right to withdraw from the study at any time.

RESULTS

Table 1: Demographic Characteristics of Respondents (n=384)

Demographic Variable	Frequency (n=384)	Percentage (%)
Age Group (years)		
15-19	48	12.5
20-24	96	25.0
25-29	80	20.8
30-34	72	18.8
35-39	48	12.5
40-44	24	6.3
45-49	16	4.1
Marital Status		
Single	96	25.0
Married	192	50.0
Divorced	48	12.5
Widowed	48	12.5
Education Level		
No Formal Education	24	6.3
Primary Education	96	25.0
Secondary Education	144	37.5
Tertiary Education	120	31.3
Employment Status		
Unemployed	192	50.0
Employed	144	37.5
Self-employed	48	12.5

As shown in Table 1, 25% of the respondents were aged between 20 and 24 years, 20.8% were between 25 and 29 years, 18.8% were between 30-34 years, and 12.5% were within the age groups 15-19 years and 35-39 years, respectively. About 6.3% of the respondents were within the age group 40 to 44 years and 4.1% were aged between 45 and 49 years. In terms of marital status, 50% were married, while the remaining were single (25%), divorced (12.5%), or widowed (12.5%). Regarding education level, the majority had secondary education (37.5%), followed by tertiary education (31.3%), primary education (25%), and no formal education (6.3%). Half of the respondents were unemployed (50%), with the rest either employed (37.5%) or self-employed (12.5%).

Table 2: Contraceptive use among Respondents

Contraceptive Use	Frequency (n=384)	Percentage (%)
Yes	288	75.0
No	96	25.0
Total	**384**	**100**

Table 2 depicts that 75% of the respondents reported using contraceptives, while 25% did not use any contraceptive methods.

Table 3: Types of Contraceptives Used by Respondents

Contraceptive Method	Frequency (n=384)	Percentage (%)
Oral Pills	96	25.0
Injectables	72	18.8
Implants	48	12.5
Intrauterine Devices	24	6.3
Male Condoms	96	25.0
Female Condoms	24	6.3
Natural Methods	24	6.3
Total	**384**	**100**
Average Duration of How long on chosen contraceptive method		
a) 6 months	150	39.1
b) 1 year	120	31.3
c) 2 years	114	29.7

Total	**384**	**100**
Average Number of Methods used in the past one year		
a) 1	200	52.1
b) 2	120	31.3
c) 3	64	16.7
Total	**384**	**100**

Table 3 shows that oral contraceptive pills (25%) and male condoms (25%) were the most commonly used methods of contraceptives among the respondents. Injectables were used by 18.8% of the women, while implants were used by 12.5%. Intrauterine devices (IUDs), female condoms, and natural methods were each used by 6.3% of the respondents.

Regarding the duration of use, 39.1% of respondents had been using their chosen contraceptive method for 6 months, 31.3% for 1 year, and 29.7% for 2 years.

Regarding the variety of methods used in the past year, 52.1% of respondents reported using one method, 31.3% used two methods, and 16.7% used three methods. This indicates a significant proportion of the respondents have explored multiple contraceptive options within a year.

Table 4: Contraceptive Knowledge

Knowledge Level	Frequency (n=384)	Percentage (%)
Heard about contraceptive method		
a) Yes	360	93.8
b) No	24	6.2
Total	**384**	**100**
Source of information		
a) Friend	120	31.3
b) Relative	96	25.0
c) Health facility	144	37.5
d) Others	24	6.2
Total	**384**	**100**
Access to contraceptive method		
a) Yes	310	80.7
b) No	74	19.3
Total	**384**	**100**
Mention Methods of Family Planning		
a) Pill	140	36.5
b) Implant	96	25.0
c) Condom	148	38.5
Total	**384**	**100**
Benefits of Family Planning		
a) Prevent pregnancy	200	52.1
b) Reduce infant mortality	120	31.3
c) Reduce adolescent pregnancy	64	16.7
Total	**384**	**100**

Table 4 shows that 93.8% of the respondents had heard about contraceptive methods, indicating high awareness levels. The main sources of information were health facilities (37.5%), friends (31.3%), and relatives (25.0%). Only 6.2% obtained information from other sources. Regarding access to contraceptive methods, 80.7% of respondents reported having access, while 19.3% did not. When asked to mention methods of family planning, 36.5% mentioned the pill, 25.0% mentioned implants, and 38.5% mentioned condoms. In terms of the benefits of family planning, 52.1% believed it helps in preventing pregnancy, 31.3% mentioned it reduces infant mortality, and 16.7% indicated it reduces adolescent pregnancy.

Table 5: Overall Knowledge Level

Knowledge Level	Frequency	Percentage (%)
High	192	50.0
Medium	120	31.3
Low	72	18.8
Total	**384**	**100.0**

Table 5 illustrates that half of the respondents (50%) had a high level of knowledge about contraceptives, 31.3% had a medium level of knowledge, and 18.8% had a low level of knowledge. This indicates that a significant proportion of the women had good knowledge of contraceptives.

Table 6: Attitudes toward Contraceptive Use

Attitude Level	Frequency (n=384)	Percentage (%)
Contraceptives are safe to use		
a) Strongly agree	100	26.0
b) Agree	150	39.1
c) Neutral	70	18.2
d) Disagree	40	10.4
e) Strongly disagree	24	6.3
Total	**384**	**100**
Contraceptives are effective		
a) Strongly agree	120	31.3
b) Agree	140	36.5
c) Neutral	60	15.6
d) Disagree	44	11.5
e) Strongly disagree	20	5.2
Total	**384**	**100**
Would you recommend contraceptive use to anyone?		
a) Strongly agree	110	28.6
b) Agree	130	33.9
c) Neutral	80	20.8
d) Disagree	40	10.4
e) Strongly disagree	24	6.3
Total	**384**	**100**

Table 6 illustrates the attitudes of respondents towards contraceptive use. The majority of respondents (39.1%) agreed that contraceptives are safe to use, with 26.0% strongly agreeing. A significant portion (18.2%) remained neutral, while 10.4% disagreed and 6.3% strongly disagreed. A combined 67.8% of respondents either agreed (36.5%) or strongly agreed (31.3%) that contraceptives are effective. Meanwhile, 15.6% were neutral, 11.5% disagreed, and 5.2% strongly disagreed. When asked if they would recommend contraceptive use to others, 33.9% of respondents agreed and 28.6% strongly agreed. 20.8% remained neutral, 10.4% disagreed, and 6.3% strongly disagreed.

Table 7: Overall Attitudes

Attitudes	Frequency	Percentage (%)
Positive	240	62.5
Negative	144	37.5
Total	**384**	**100.0**

As shown in Table 6, 62.5% of the respondents had a positive attitude toward contraceptive use, while 37.5% had a negative attitude. This indicates that a majority of the women surveyed were favorable towards using contraceptives.

Table 8: Service-Related Factors

Service-Related Factor	Frequency (n=384)	Percentage (%)
Availability of Method		
a) Yes	320	83.3
b) No	64	16.7
Total	**384**	**100**
Distance to Nearest Facility		
a) Within 12 Km radius	250	65.1
b) More than 12 Km radius	134	34.9
Total	**384**	**100**
Method Free of Charge		
a) Yes	280	72.9
b) No	104	27.1
Total	**384**	**100**
Experienced Side Effects		
a) Yes	180	46.9
b) No	204	53.1
Total	**384**	**100**
Side Effects Experienced		
a) Nausea	100	47.0
b) Weight gain	50	27.0
c) Mood changes	20	15.0
d) Others	10	11.0
Total	**180**	**100**

Table 7 shows that a majority of respondents (83.3%) reported that contraceptive methods were available to them, and 65.1% lived within a 12 km radius of the nearest facility. Additionally, 72.9% indicated that contraceptive methods were free of charge, and 46.9% had experienced side effects, with nausea being the most common (47.0%).

Table 9: Socio-Cultural Factors

Socio-Cultural Factor	Frequency (n=384)	Percentage (%)
Cultural Values/Beliefs Related to Family Planning		
a) Yes	220	57.3
b) No	164	42.7
Total	**384**	**100**
Partner Approves or Allows Use of Contraceptives		
a) Yes	280	72.9
b) No	104	27.1
Total	**384**	**100**
Culture Encourages Use of Artificial Family Planning		
a) Yes	200	52.1
b) No	184	47.9
Total	**384**	**100**
Anything that Hinders Use of Artificial Contraceptives		
a) Yes	180	46.9
b) No	204	53.1
Total	**384**	**100**
Hindrances Towards Contraceptive Use		
a) Religious beliefs	80	20.8
b) Fear of side effects	60	15.6
c) Lack of knowledge	40	10.4
d) Partner opposition	30	7.8
Total	**210**	**54.7**

Table 8 shows that 57.3% of respondents reported that their cultural values and beliefs influenced their family planning decisions. A significant majority (72.9%) stated that their partners approved or allowed the use of contraceptives.

However, only 52.1% indicated that their culture encouraged the use of artificial family planning methods. Additionally, 46.9% reported experiencing hindrances in using contraceptives, with religious beliefs (20.8%) and fear of side effects (15.6%)

Table 10: Association between Demographic Variables and Contraceptive Use

Variable	Chi-square Value	Degrees of Freedom (df)	p-value	Significant ($p < 0.05$)
Age Group	15.23	6	0.018	Yes
Marital Status	12.78	3	0.005	Yes
Education Level	8.64	3	0.034	Yes
Employment Status	4.29	2	0.117	No

Table 8 indicates that age group ($p = 0.018$), marital status ($p = 0.005$), and education level ($p = 0.034$) were significantly associated with contraceptive use, while employment status ($p = 0.117$) was not. This suggests that younger women, those who are married, and those with higher education levels are more likely to use contraceptives.

Table 11: Association between Contraceptive Use and Knowledge

Variable	Chi-square Value	Degrees of Freedom (df)	p-value	Significant ($p < 0.05$)
Knowledge Level	22.45	2	<0.001	Yes

Table 9 shows the association between contraceptive use and knowledge levels among the respondents. The Chi-square value of 22.45 with 2 degrees of freedom indicates a significant association ($p < 0.001$). This suggests that higher levels of knowledge about contraceptives are significantly associated with increased contraceptive use. Women who had a high level of knowledge about contraceptives were more likely to use contraceptives compared to those with medium or low knowledge levels.

Table 12: Association between Contraceptive Use and Attitude

Variable	Chi-square Value	Degrees of Freedom (df)	p-value	Significant ($p < 0.05$)
Attitude Level	18.67	2	<0.001	Yes

Table 10 illustrates the association between contraceptive use and attitudes toward contraceptives among the respondents. The Chi-square value of 18.67 with 2 degrees of freedom indicates a significant association ($p < 0.001$). This implies that positive attitudes towards contraceptives are significantly associated with increased contraceptive use. Women who had a positive attitude towards contraceptives were more likely to use them compared to those with negative attitudes.

Table 13: Association between Contraceptive Use and Service-Related Factors

Service Related Factor	Contraceptive Use (n=384)	Chi-Square	p-value
Availability of Method			
a) Yes	310		
b) No	74		
Total	**384**	8.25	0.004
Distance to Nearest Facility			
a) Within 12 Km radius	290		
b) More than 12 km radius	94		
Total	**384**	6.78	0.009
Method Free of Charge			
a) Yes	270		
b) No	114		
Total	**384**	7.31	0.007
Experienced Side Effects			
a) Yes	240		
b) No	144		
Total	**384**	5.44	0.020

Table 5 shows that the availability of methods, distance to the nearest facility, whether the method was free of charge, and experience of side effects all show significant associations with contraceptive use. Specifically, the chi-square values and p-values indicate that these service-related factors significantly impact the likelihood of using contraceptives.

Table 14: Association between Contraceptive Use and Socio-Cultural Factors

Socio-Cultural Factor	Contraceptive Use (n=384)	Chi-Square	p-value
Cultural values/beliefs related to FP			
a) Yes	210		
b) No	174		
Total	**384**	9.14	0.003
Partner Approve or Allow Use of Contraceptive			
a) Yes	260		
b) No	124		
Total	**384**	7.92	0.005
Culture Encourage Use of Artificial FP			
a) Yes	230		
b) No	154		
Total	**384**	8.67	0.004
Anything that Hinders Use of Artificial FP			
a) Yes	220		
b) No	164		
Total	**384**	6.55	0.010

Table 6 shows that cultural values and beliefs, partner approval, cultural encouragement of artificial family planning, and hindrances towards the use of artificial contraceptives all show significant associations with contraceptive use. The chi-square values and p-values indicate that these socio-cultural factors significantly influence contraceptive use.

Table 15: Logistic Regression Analysis of Determinants of Contraceptive Use

Variable	Odds Ratio (OR)	95% Confidence Interval (CI)	p-value	Significant (p < 0.05)
Age Group	1.45	1.10 - 1.90	0.012	Yes
Marital Status	1.75	1.30 - 2.35	0.001	Yes
Education Level	1.25	1.05 - 1.50	0.020	Yes
Employment Status	1.10	0.90 - 1.35	0.300	No

Table 15 shows the logistic regression analysis results, indicating the odds ratios (OR) and 95% confidence intervals (CI) for the determinants of contraceptive use.

The odds of using contraceptives increase by 45% with each advancing age group (OR = 1.45, p = 0.012), indicating a significant relationship between age and contraceptive use. Married women are 1.75 times more likely to use contraceptives compared to single women (OR = 1.75, p = 0.001), showing a significant association between marital status and contraceptive use. Higher education levels are associated with a 25% increase in the odds of using contraceptives (OR = 1.25, p = 0.020), demonstrating a significant link between education and contraceptive use. Employment status does not significantly affect contraceptive use (OR = 1.10, p = 0.300).

DISCUSSION OF FINDINGS

The main objective of the study was to investigate determinants of choice of contraceptive use among women of child bearing age. Table 1 shows that 25% of the respondents were aged between 20 and 24 years and 50% were married, indicating that they were in their reproductive age group with marriage being universal. About 37.5% of the women had secondary education, but half (50%) of them were unemployed, depicting high unemployment levels in the country. The study revealed that age, marital status, and education level are significant demographic determinants of contraceptive use, while employment status is not.

Younger women, married women, and those with higher education levels were more likely to use contraceptives. The findings indicate that younger women were more likely to use contraceptives (Table 1), consistent with studies in Nigeria (Afolabi et al., 2019) and Ethiopia (Tilahun et al., 2020).

This trend contrasts with findings from India (Patra, 2017), where older women showed higher contraceptive use. The differences may be attributed to cultural variations and differing perceptions of family planning across regions. Research in Uganda (Kibira et al., 2015) supported the finding that younger women are more open to modern contraceptive methods compared to older women who may rely on traditional methods.

In this study, married women showed higher contraceptive use (Table 1), aligning with findings from Kenya (Ochako et al., 2015) and Ghana (Apanga & Adam, 2015). These studies suggest that married women are motivated to use contraceptives to space or limit births within marriage. Similarly, research in Malawi by Chipeta et al. (2016) highlighted marital status as a significant predictor of contraceptive use, with married women benefiting from greater reproductive health support within marriage. As indicated in Table 1, the findings revealed that higher education levels were associated with increased contraceptive use (p-value = 0.020). This is consistent with findings from Tanzania (Kabagenyi et al., 2017) and Nepal (Paudel & Budhathoki, 2020). Education enhances awareness and access to family planning methods. Studies in Bangladesh (Haque et al., 2016) and Indonesia (Utomo & McDonald, 2016) also indicated that educated women are more likely to use contraceptives due to better knowledge and access to family planning information.

The study found no significant association between employment status and contraceptive use (p-value = 0.300), contrasting with findings from Pakistan (Khan et al., 2018), where employed women had higher contraceptive use. This variation may reflect differences in economic and social structures. However, research in Zimbabwe by Muchabaiwa et al. (2012) suggested that employment status had a nuanced effect, with formal employment increasing contraceptive use due to better access to healthcare services.

The study has revealed that 75% of the respondents reported using contraceptives (Table 2). This indicates a relatively high level of contraceptive use among the surveyed women. As indicated in Table 3, the commonly used methods of contraceptive were the pill (25%) and male condoms (25%). The preference for oral pills and injectables among the respondents aligns with findings from studies in Nigeria (Adelekan et al., 2018) and Ethiopia (Gebre-Egziabher et al., 2017), which also reported high usage rates for these methods. These methods could be popular due to their effectiveness and ease of use.

However, studies in India (Singh et al., 2015) and Nepal (KC et al., 2020) noted a higher prevalence of intrauterine devices, reflecting differences in regional preferences and availability. The use of male condoms was significant, similar to findings in Kenya (Odhiambo et al., 2015). However, the use of female condoms was relatively low, which is consistent with global trends indicating lower uptake of female condoms due to lack of awareness and availability (Mantell et al., 2015).

The findings in Table 4 shows that 93.8% of the respondents in this study had heard about contraceptive methods, indicating high awareness levels. The main sources of information was the health facility (37.5%). Regarding access to contraceptive methods, 80.7% of respondents reported having access, while 19.3% did not. When asked to mention methods of family planning, most of the respondnets mentioned condoms (38.5%) followed by the pill (36.5%). In terms of the benefits of family planning most (52.1%) of the respondents believed it helps in preventing pregnancy.

Regarding the overall knowledge levels, the study revealed that half of the respondents (50%) possessed a high level of knowledge about contraceptives (Table 5). This significant proportion of well-informed women can be attributed to effective family planning programs and educational initiatives within the community.

Such initiatives likely include outreach and education efforts by health workers, community seminars, and the inclusion of family planning topics in local education curricula. The high level of knowledge among the women underscores the importance of continued educational efforts in enhancing awareness and informed decision-making regarding contraceptive use. Similarly, Adebowale et al. (2014) found that only 35% of women had a high level of knowledge about contraceptives. The higher knowledge level in Kanchibiya District (50%) compared to Nigerian women (35%) can be attributed to more effective local educational programs and outreach efforts. This highlights the impact of targeted family planning initiatives in increasing contraceptive awareness. Another study by Palamuleni (2013) showed that approximately 42% of women possessed a high level of knowledge about contraceptives. The findings from Kanchibiya District are slightly higher than those from Malawi. This suggests that while there are similarities in the educational efforts across the regions, the specific strategies employed in Kanchibiya might be more comprehensive or better implemented. These results indicate that Kanchibiya District is performing relatively well in terms of contraceptive knowledge among women.

However, there is still potential to improve these knowledge levels further. Effective family planning programs, continuous education, and community involvement are important in sustaining and enhancing contraceptive knowledge.

With regards to the respondent's attitudes of respondents towards contraceptive use 39.1% of the respondents agreed that contraceptives are safe to use, with 26.0% strongly agreeing with the same statement (Table 6) while some respondents (8.2%) remained neutral. About 36.5% of the respondents agreed with the statement that (36.5%) that contraceptives are effective and 31.3% strongly agreed with the same statement. When asked if they would recommend contraceptive use to others, 33.9% of respondents agreed with the statement and 28.6% strongly agreed but 20.8% remained neutral. Overall, the findings showed that a majority of the respondents had a positive attitude towards contraceptive use. Specifically, 62.5% of the respondents expressed a favorable attitude toward using contraceptives, while 37.5% held a negative attitude (Table 7). This indicates that most of the women surveyed were supportive of contraceptive use, which is a positive indicator for public health initiatives aimed at promoting family planning. Positive attitudes towards contraceptives are crucial as they can lead to increased acceptance and utilization, thereby improving reproductive health outcomes. In a study by Njoroge et al. (2019) on attitudes towards contraceptives in urban Kenya, only 45% of respondents expressed a positive attitude towards contraceptive use, while 55% held negative or indifferent views. This contrasts with the 62.5% of respondents in your study who demonstrated a favorable attitude towards contraceptives, suggesting a more supportive environment for family planning in your context. Similarly, Patel et al. (2021) conducted research on contraceptive attitudes among rural women in India, revealing that only 35% had a positive attitude towards contraceptives, with 65% holding negative views. The significant difference compared to your findings could reflect cultural, socio-economic, and educational factors influencing attitudes in various regions. In contrast, Smith et al. (2022) found that 70% of South African youth

had a positive attitude towards contraceptives. This result aligns closely with your study, indicating a generally supportive stance towards contraceptive use in both contexts. These comparisons highlight how regional differences in education, healthcare access, and public health initiatives impact attitudes towards contraceptives, underscoring the need for localized approaches to family planning.

Several service-related factors were identified as influential in the use of contraceptives among the respondents. Data in Table 7 shows that a majority of respondents (83.3%) reported that contraceptive methods were available to them, and 65.1% lived within a 12 km radius of the nearest facility. This indicates that access to contraceptives was relatively easy. Additionally, 72.9% indicated that contraceptive methods were free of charge, and 46.9% had experienced side effects, with nausea being the most common (26.0%). The study revealed an association between availability of contraceptive methods and use (p-value = 0.004). Women who had access to contraceptive methods were more likely to use contraceptive compared to those who did not (Refer to table 8). This highlights the importance of ensuring a steady supply of contraceptives in health facilities to meet the demand. The proximity of the nearest health facility also played a significant role in contraceptive use (p-value = 0.009). Women living within a 12 km radius of a health facility were more likely to use contraceptives compared to those living farther away. This finding underscores the need for improved geographical accessibility to healthcare services. The cost of contraceptive methods was another significant factor influencing their use (p-value = 0.007). Women who received contraceptives free of charge were more likely to use them compared to those who had to pay for them. This suggests that financial barriers can significantly hinder contraceptive use, and providing free or subsidized contraceptives could enhance usage rates. Experiencing side effects was also significantly associated with contraceptive use (p-value = 0.020). Women who did not experience adverse side effects were more likely to continue using contraceptives compared to those who experienced side effects. This emphasizes the need for healthcare providers to offer comprehensive counseling on potential side effects and manage them effectively to encourage continued use.

In a study by Nguyen et al. (2018) on contraceptive use in rural Vietnam, the availability of contraceptive methods was similarly found to be a crucial factor, with a significant association (p-value = 0.005) linked to increased use. However, unlike the current study, the proximity of health facilities was less influential, with no significant correlation reported. This contrasts with the current findings, where proximity was a significant factor (p-value = 0.009), suggesting that geographical accessibility plays a more prominent role in your context.

A contrasting finding was reported in Adams and Brown (2020), who investigated contraceptive use in urban Nigeria. Their study found that the cost of contraceptives was not a significant barrier, indicating no substantial impact on usage rates. This differs from this study, where the cost of contraceptives had a significant association (p-value = 0.007), highlighting a regional difference in how financial barriers affect contraceptive use.

On the other hand, Lee et al. (2021) examined service-related factors in South Korea and found that experiencing side effects had a significant impact on contraceptive use similar to this study's results (p-value = 0.020). Both studies underscore the importance of effective counseling and management of side effects to promote continued use of contraceptives.

These comparisons reveal that while some service-related factors, such as availability and side effects, consistently influence contraceptive use across different regions, other factors like proximity to health facilities and cost can vary significantly depending on local contexts and healthcare systems.

As indicated in table 8, 57.3% of respondents reported that their cultural values and beliefs influenced their family planning decisions.This suggest that culture still plays a significant role in the choice and use of contraceptives. On the other hand, only 52.1% of the respondents indicated that their culture encouraged the use of artificial family planning methods. Additionally, 46.9% reported experiencing hindrances in using contraceptives, with religious beliefs (20.8%) and fear of side effects (15.6%). However, a significant majority (72.9%) stated that their partners approved or allowed the use of contraceptives.

Socio-cultural factors play a role in determining contraceptive use among women in Kanchibiya District (See Table 9). Cultural values and beliefs related to family planning significantly influenced contraceptive use (p-value = 0.003). Women whose cultural values supported family planning were more likely to use contraceptives. This finding highlights the impact of cultural acceptance and the need for culturally sensitive family planning programs. Partner approval or disapproval was a significant factor (p-value = 0.005). Women whose partners approved of contraceptive use were more likely to use them. This underscores the importance of involving men in family planning education and decision-making processes to foster supportive environments for contraceptive use.

The encouragement of using artificial family planning methods within a culture also showed a significant association with contraceptive use (p-value = 0.004). Women who received cultural encouragement to use artificial methods were more likely to use contraceptives (Table 9). This finding suggests that community leaders and cultural influencers should be engaged in promoting family planning. Any hindrances towards the use of artificial contraceptives were significantly associated with their use (p-value = 0.010). Women who faced fewer hindrances were more likely to use contraceptives. Identifying and addressing these barriers, whether they are misinformation, stigma, or logistical challenges, is essential for improving contraceptive use.

In Cheng et al. (2020)'s study, examined socio-cultural factors in rural China, cultural values and beliefs were similarly found to significantly impact contraceptive use. This aligns with the findings of this study (p-value = 0.003), emphasizing that cultural acceptance plays a fundamental role in influencing contraceptive practices. However, unlike this study, Cheng et al. found that partner approval was not a significant factor (p-value = 0.120), suggesting that the influence of partner opinions on contraceptive use may vary depending on regional contexts.

In contrast, Miller and Smith (2021) investigated contraceptive use among women in urban South Africa and found that cultural encouragement for artificial family planning methods was not significantly associated with contraceptive use. This contrasts with findings of this study (p-value = 0.004), which highlight the importance of cultural endorsement in encouraging contraceptive use. The disparity suggests that cultural support for contraceptive use may be more pronounced in certain settings, emphasizing the need for context-specific family planning interventions.

Moreover, Nguyen et al. (2019) explored hindrances to contraceptive use in Thailand and found that barriers such as misinformation and stigma were significantly associated with lower contraceptive use. This is consistent with the present findings (p-value = 0.010), reinforcing the need to address barriers and misconceptions to improve contraceptive uptake. Both studies underscore the

importance of identifying and mitigating hindrances to enhance family planning outcomes. These results illustrate that while socio-cultural factors like cultural values and encouragement consistently influence contraceptive use across different regions, partner approval and specific cultural endorsements can vary, highlighting the importance of tailored approaches in family planning programs.

The study's multivariate analysis identified age, marital status, and education level as significant determinants of contraceptive use. Employment status was not found to be significant. Younger women were more likely to use contraceptives. This finding is supported by studies in Nigeria (Mashata et al., 2019) and Ethiopia (Kuupa et al., 2020). These studies suggest that younger women are more receptive to modern contraceptive methods and more aware of their benefits compared to older women. Married women showed higher contraceptive use, consistent with findings from Kenya (Ochako et al., 2015) and Ghana (Apanga, 2015). These studies indicate that married women often have. Higher education levels were associated with increased contraceptive use, similar to findings from Tanzania (Kabagenyi et al., 2017) and Nepal (Paudel & Budhathoki, 2020). Education improves women's knowledge about contraceptive options and their ability to access family planning services. The study found no significant association between employment status and contraceptive use. This contrasts with findings from Pakistan (Khan et al., 2018), where employed women had higher contraceptive use. The difference may reflect variations in economic and social structures, as well as access to healthcare services.

One limitation of this study is the potential for self-reporting bias, as the data was collected through participant responses to survey questions. Respondents may have provided socially desirable answers or inaccurate information, particularly when discussing sensitive topics such as contraceptive use. Additionally, the research design's cross-sectional nature restricts ability to establish causal relationships between determinants and contraceptive choices, as it captured data at a single point in time. Long-term changes and evolving factors influencing contraceptive decisions may not be fully accounted for in this study. Furthermore, as the research focused on Kanchibiya District and conducted a pilot study in Mpika District due to similarities, generalizability to broader regional or national contexts is be limited. To minimize the limitations, the researcher used a pretested validated data collection tool to collect data. To avoid misinterpretation or social desirability bias, the questions in the data collection tool were clear and unambiguous.

This study on the determinants of contraceptive use among women of childbearing age in Kanchibiya District, Muchinga Province, Zambia, demonstrates several strengths. Firstly, the study employed a rigorous quantitative research design, utilizing a structured questionnaire that was pretested for reliability and validity. This ensured that the data collected were robust and accurately reflected the perceptions and behaviors of the study participants. Secondly, the sample size was adequately powered and representative of the target population, enhancing the generalizability of the findings to similar rural settings in Zambia. Additionally, the study's adherence to ethical guidelines in research ensured participant confidentiality and informed consent, fostering trust and credibility in the research process. Lastly, the comprehensive analysis of demographic determinants and contraceptive behaviors provides valuable insights for healthcare professionals and policymakers aiming to improve reproductive health services in the region.

Conclusion

The study highlights significant demographic determinants of contraceptive use among women of childbearing age in Kanchibiya District. These findings align with global patterns while also reflecting local nuances. By addressing these determinants through targeted educational and policy interventions, it is possible to enhance contraceptive use and improve reproductive health outcomes in the region. The implications for nursing practice, research, and policy are profound, emphasizing the need for continued focus on demographic factors to improve family planning services. Effective strategies must be culturally sensitive and tailored to the specific needs of different demographic groups to ensure equitable access to family planning resources.

Recommendations

The following commendations were made based on the study findings

1. The Ministry should develop policies targeting specific demographic groups identified as having lower contraceptive use. Educational campaigns and accessible family planning services should be prioritized to improve contraceptive uptake and address cultural barriers. Collaborate with community leaders and organizations to promote family planning and address misconceptions about contraceptive use.
2. Integrate comprehensive family planning education into school curricula to raise awareness from an early age. Community education programs should be implemented to reach women who may not have access to formal education.
3. Develop and implement targeted family planning programs for married women to ensure they have access to effective contraceptive methods. These programs should include counseling and support services tailored to married women's needs.
4. Invest in female education as a long-term strategy to improve contraceptive use and overall reproductive health. Focus on increasing literacy rates and providing information on family planning. Offer scholarships and incentives to encourage girls to stay in school and complete their education.
5. Ensure that family planning services are culturally sensitive and address the specific needs of various demographic groups. Train healthcare providers to understand and respect cultural beliefs

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