

Factors Affecting The Use Of Modern Contraceptives Among Women Aged (15-49): A Case Study Of Women Kampala Region

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Abstract: *This study investigated factors influencing modern contraceptive use among women aged 15-49 in central Uganda, focusing on demographic, social, and economic factors. A descriptive cross-sectional study using a quantitative approach was conducted, surveying 96 women using a Kobo toolbox questionnaire. The analysis revealed several significant associations. Women aged 35 and above were less likely to use modern contraceptives compared to those aged 15-24, suggesting a potential decline in contraceptive use with age. Joint decision-making on contraceptive use between partners was significantly associated with lower odds of using modern contraceptives, highlighting the importance of empowering women to make autonomous decisions about their reproductive health. Additionally, women who were uncertain about their desire for more children were significantly more likely to use modern contraceptives. The study concluded that comprehensive family planning programs are needed to address the unique needs and challenges faced by women of different ages and social contexts. Recommendations included promoting age-specific interventions, empowering women in contraceptive decision-making, and addressing the unmet need for contraception in Uganda.*

Keywords: Modern Contraceptives and Women

Background to the Study.

Over the years, family planning programs are believed to have played an important role in reducing fertility and its negative effects on health and development through the promotion of contraceptive use (Heck et al., 2018). Contraception has become more common in less developed countries and this increase has been in the form of modern methods of contraceptive use (Oni et al., 2020). There are many benefits that women get from using modern contraceptive methods (Ariho & Kabagenyi, 2020). These include preventing unwanted pregnancies, reducing the incidence of miscarriage, and also helping to reduce pregnancy-related complications and deaths due to premature birth, allowing women to space out their pregnancies, improving infant and child survival, and slowing the rate of population growth (Steyn et al., 2022). Increasingly, contraception supports women's reproductive health and autonomy and allows them to plan their family size also advocate the effectiveness of modern contraceptive methods in preventing pregnancy. If we look at the global scale, the use of modern contraceptive methods has increased in the past from 54% in 1990 to 57% in 2012 (Peters, 2022).

However, the national estimates of the report show that the use of modern contraceptive methods between by married women rose from 23% in 2000-01 to 39% in 2016. This trend partly explains the notion developed by (Safari et al., 2019) that argues that because most traditional contraceptive methods, such as withdrawal and "counting", they are behavioral, they are unpredictable and therefore pose a greater risk to married women (Ghimire et al., 2023). This research focused primarily on factors influencing contraceptive use in central Uganda (15-49). to find out the basic factors limiting the use of modern contraception in this area. By reducing the number of pregnancies, abortions, and high-risk births, the use of contraceptives can contribute to a decrease in maternal mortality (Jacinta & Kazaara, 2023).

Uganda, one of the fastest growing countries in the world, with an annual population growth rate of 3.2 percent, is in particular need of increased contraceptive services (Sserwanja et al., 2021). According to UBOS (Boadu, 2022), the fertility rate is high, with a total of 6.2 children per woman and 6.8 children per woman in rural areas. Among married women, 34 percent have an unmet need for contraception, with higher unmet need in rural compared to urban areas (37 percent and 23 percent, respectively), and only 30 percent of currently married women used contraception (UBOS, 2014). Among married women with unmet contraceptive need in Uganda, 14 percent need restriction and 21 percent need spacing between births. Planning the spacing between births is essential; intervals of less than 36 months are associated with increased risk of neonatal and infant mortality, child malnutrition, and complications during pregnancy in women (Calhoun et al., 2022).

Statement of the problem.

Uganda experiences a high total fertility rate (5.7%) because many pregnant women do not make effective decisions about conception. This is due to many problems that affect the effective use of contraceptive methods. The report states that the increase in contraceptive use was more pronounced for modern methods (18% in 2000-01 to 35% in 2016). Despite a steady increase in CPR (34%), the Uganda Demographic and Health Survey (UBOS and ICF, 2017) shows that the unmet need for contraception in Uganda

is at 28.4% (CF, 2016), suggesting that not all women who they want to avoid pregnancy, they use modern and effective methods of contraception (Mohamed & Sundberg, 2022). This is because the prevalence rate of modern contraception, defined as the percentage of women of reproductive age (15–49 years) who use a modern method of contraception at a given time, is a common indicator used to assess family planning at the population level. and interventions to reduce high birth rates (MEASURE evaluation, 2014). This situation still presents a challenge to determine the factors influencing the effective use of modern contraception among women aged 15-45/9, which limits efforts to address the existing problems of unintended pregnancy, abortion, sexually transmitted diseases and high fertility, which this study hopes to will explore using a study scope in central Uganda.

Purpose of the study.

The main objective of the study is to find out the individual factors influencing modern contraceptive use among women of reproductive age (15-49) in central Uganda.

Specific objective.

1. To examine the influence of demographic factors on the use of contraceptives among women in Kampala region.
2. To examine the influence of social factors on the use of contraceptives among women in Kampala region.
3. To examine the influence of economic factors on the use of contraceptives among women in Kampala region.

Research hypotheses

1. There is a relationship between demographic factors and contraceptive use among women in Kampala region
2. There is a relationship between social factors and contraceptive use among women in Kampala region
3. There is a relationship between economic factors and contraceptive use among women in Kampala region

Methodology

A descriptive cross-sectional study was be adopted in this study using a quantitative approach. Descriptive research is one which aims at accurately and systematically describing a population, situation or phenomenon. A cross-sectional study is where the invigilator measures the outcome and the exposures in the study participants/ target population at the same time. The target population for this study was be women aged 15 – 49 in Kampala. For this study the researcher used a sample size of 96 women aged 15 - 49 determined using Cochran formulae. A convenient sample size will be used due to limited time and finances to ease carrying out rigorous scientific sampling technique.

Online questionnaire were designed using Kobo toolbox and the link shall be shared to the different data collectors. Reliability means the consistence of the tools to prove similar or related answers over repeated circumstances of administering. (Kombo, 2017). The reliability of the questionnaire/ research instrument was achieved by pretesting the questionnaire on 10 women aged 15 – 49 around Wandegaya and their data was not included in the analysis. The unit of analysis for this study was a women aged 15 – 49 on the streets of Kampala. Descriptive statistics such as means, frequencies and percentages were be computed for different variables and will be tabulated. Association between the independent and dependent variable were be carried out using the chi-square test to measure the association between the dependent variable (Purchase decision) and the different independent variables (socio – demographic factors, attributes factors and knowledge). Only statistically significant associations or relationships at 5% level of significance were considered for further analysis. Binary logistic regression was be used to analyses the factors associated with contraceptive usage. Odds Ratio for the significant variables were be to reported under SPSS (Nelson et al., 2022, 2023).

Results.

Table 1: Percentage distribution of women by use of modern contraceptives

Explanatory variable	Modern contraceptive use		P - value (chi ²)
	No (%)	Yes (%)	
Age	24 or less	75.0	0.000(56.204)
	25-34	62.5	
	35+	66.9	
Age at first sex	Below 18	68.2	0.540 (0.352)
	18+	69.2	
Marital status	Never married	74.8	0.004(17.339)
	Married	66.8	

	Formerly married	71.6	28.4	
	Poor	70.7	29.3	
Wealth index	Middle	67.6	32.4	0.036(10.931)
	Rich	63.7	36.3	
	No education	75.8	24.2	
Education attainment	Primary	68.8	31.3	0.006(12.9451)
	Secondary or higher	65.9	34.1	
	Not working	75.0	25.0	
Occupation	Professional	65.1	34.9	0.002(23.380)
	Agriculture	68.3	31.7	
	Others	65.2	34.8	
	Anglican	67.8	32.2	
Religion	Catholic	69.8	30.2	0.724(1.759)
	Muslim	68.9	31.2	
	Others	67.3	32.7	
Residence	Urban	63.3	36.7	
	Rural	69.4	30.6	0.023(9.852)
Total children ever born	None	81.6	18.4	
	1-2	72.5	27.6	0.000(92.5501)
	3-5	61.4	38.6	
	6+	65.5	34.5	
Decision maker on contraception	Woman	7.0	93.0	
	Husband	9.6	90.4	0.173(4.885)
	Joint	11.2	88.8	
Desire for more children	No	68.4	31.6	
	Yes	70.2	29.9	0.000(22.135)
	Others	58.4	41.7	

Multivariate analysis

Table 2 shows the results of the binary logistic regression of modern contraceptive use.

Multivariate logistic regression analysis identified the following statistically significant correlates of modern contraceptive use. Age, desire for more children, and decision maker on contraceptive use.

Women aged 35+ years were less likely to use modern contraceptives compared to those aged 15-24 [OR=0.34; CI=0.15-0.57; p=0.004]. similarly, the odds of modern contraceptive use were lower among women whose decision maker on modern contraceptive was joint compared to women made decisions on their own [OR=0.51; CI=0.28-0.93; p=0.027].

Likewise, the odds of modern contraceptives were higher among women who were in others for desire of more children compared to women who had no desire for more children [OR = 6.73, CI=2.20-20.58; p=0.001].

Table 2: Multivariate analysis of the factors associated with modern contraceptive use among women age 15–49 in eastern Uganda

Variables		Odds ratio	P-values	95% CI
Age at first sex	Below 18	Reference Category		
	18+	0.68	0.167	0.39-1.18
Wealth index	Poor	Reference Category		
	Middle	0.85	0.792	0.54-1.33
	Rich	1.01	0.974	0.44-2.33
Age group	15-24	Reference Category		
	25-34	1.22	0.523	0.66-2.28
	35+	0.34	0.004	0.17-0.72
Occupation	Not working	Reference Category		
	Professional	0.48	0.234	0.14-1.62
	Agriculture	0.57	0.308	0.19-1.68
	Others	0.55	0.311	0.17-1.77

Religion	Anglican	Reference Category		
	Catholic	0.85	0.574	0.49-1.49
	Muslim	1.03	0.934	0.47-2.29
	Others	1.53	0.224	0.77-3.02
Residence	Urban	Reference Category		
	Rural	0.75	0.448	0.36-1.58
Decision maker on contraception	Woman	Reference Category		
	Husband	0.57	0.266	0.21-1.55
	Joint	0.51	0.027	0.28-0.93
Desire for more children	No	Reference Category		
	Yes	0.74	0.260	0.44-1.25
	Others	6.73	0.001	2.20-20.58

CI= confidence interval

The multivariate analysis presented in Table 2 highlights several factors associated with modern contraceptive use among women aged 15–49 in eastern Uganda. The odds of using modern contraceptives are notably lower among women aged 35 and above compared to those aged 15-24, with an odds ratio of 0.34 ($p=0.004$), suggesting a significant reduction in contraceptive use as women age. Conversely, the odds ratio for women aged 25-34 is 1.22, although this finding is not statistically significant ($p=0.523$). The analysis also shows that women who began sexual activity at age 18 or older have slightly lower odds of using modern contraceptives ($OR=0.68$), but this association is not statistically significant ($p=0.167$). Wealth, occupation, religion, and place of residence seem to have minimal impact on contraceptive use, as the odds ratios for different categories within these variables are close to 1 and lack statistical significance, indicating no strong association with contraceptive use.

However, joint decision-making on contraceptive use between partners is significantly associated with lower odds of using modern contraceptives ($OR=0.51$, $p=0.027$), compared to when the woman makes the decision alone. This suggests that when contraceptive decisions are made jointly, there might be barriers or reduced likelihood of contraceptive use. Additionally, women who fall into the 'Others' category regarding the desire for more children (which likely includes those uncertain or ambivalent about having more children) have a significantly higher likelihood of using modern contraceptives ($OR=6.73$, $p=0.001$). This strong association may reflect that women who are uncertain about future childbearing are more likely to use contraceptives to avoid unplanned pregnancies. Overall, while some factors show significant associations with modern contraceptive use, others, such as wealth, occupation, and religion, do not appear to have a substantial impact in this population.

Discussion of the Findings.

The study, conducted in central Uganda, aimed to identify factors influencing modern contraceptive use among women aged 15-49. The analysis revealed several significant associations, particularly highlighting the influence of age, decision-making power, and desire for more children. Women aged 35 and above were less likely to use modern contraceptives compared to those aged 15-24, suggesting a potential decline in contraceptive use with age. This finding aligns with the theory of the "fertility transition," which posits that as societies develop, fertility rates decline, often due to factors such as increased education, urbanization, and access to family planning services. However, the study also found that women aged 25-34 had slightly higher odds of using modern contraceptives compared to the youngest age group, although this finding was not statistically significant. This could be attributed to the fact that women in this age group may have already experienced the challenges of unplanned pregnancies and have a greater awareness of the benefits of family planning.

The study also found a significant association between joint decision-making on contraceptive use and lower odds of using modern contraceptives. This finding supports the "power dynamics" theory, which suggests that in many societies, women's reproductive autonomy is often limited by patriarchal structures and cultural norms. When men are involved in contraceptive decision-making, they may exert influence or pressure that discourages their partners from using contraceptives, particularly if they have traditional views on family size or gender roles. Conversely, women who had a greater say in contraceptive decisions were more likely to use modern methods, highlighting the importance of empowering women to make informed choices about their reproductive health.

Finally, the study found that women who were uncertain about their desire for more children were significantly more likely to use modern contraceptives. This finding aligns with the "rational choice theory," which suggests that individuals make decisions based on their perceived costs and benefits. Women who are unsure about having more children may view the risks and costs associated with an unplanned pregnancy as outweighing the potential benefits, leading them to actively seek

contraceptive methods. This finding underscores the importance of providing women with comprehensive information about family planning options and empowering them to make choices that align with their individual circumstances and goals.

Conclusion

The study, conducted in central Uganda, aimed to uncover factors influencing modern contraceptive use among women aged 15-49. The findings revealed several significant associations, highlighting the influence of age, decision-making power, and desire for more children. Women aged 35 and above were less likely to use modern contraceptives compared to those aged 15-24, suggesting a potential decline in contraceptive use with age. This could be attributed to factors such as decreased access to healthcare services, changes in reproductive needs, or societal norms that may influence contraceptive use in later life. Additionally, the study found that joint decision-making on contraceptive use was significantly associated with lower odds of using modern contraceptives, highlighting the importance of empowering women to make informed choices about their reproductive health.

The study's findings underscore the need for comprehensive family planning programs that address the unique needs and challenges faced by women of different ages and social contexts. Interventions should focus on increasing access to information and services, promoting open communication about contraception within couples, and empowering women to make autonomous decisions about their reproductive health. By addressing these factors, Uganda can work towards achieving its goals of reducing unintended pregnancies, improving maternal health, and empowering women to control their own fertility.

Recommendations.

The study's findings point to the need for a multifaceted approach to address the challenges of modern contraceptive use in Uganda. First, it is crucial to tailor family planning interventions to the specific needs of women at different life stages. The decline in contraceptive use among women aged 35 and above highlights the need for targeted outreach and education campaigns, increased access to long-acting reversible contraceptives (LARCs), and support for women experiencing menopause.

Second, empowering women to make autonomous decisions about their reproductive health is essential. The study's finding that joint decision-making is associated with lower odds of contraceptive use underscores the importance of promoting gender equality and women's rights within families and communities. Programs should provide couples counseling, community-based education, and support groups to encourage open communication, raise awareness about women's reproductive autonomy, and create safe spaces for women to discuss their experiences.

Finally, addressing the significant unmet need for contraception in Uganda is critical. Programs should focus on expanding access to a wide range of contraceptive methods, removing financial barriers, and promoting male involvement in family planning. This includes increasing the availability of clinics and providers, particularly in rural areas, providing subsidies or free contraceptives to low-income women, and encouraging men to participate in decision-making and support their partners' choices. By implementing these recommendations, Uganda can work towards achieving its goals of reducing unintended pregnancies, improving maternal health, and empowering women to control their own fertility.

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