

## **Influential Factors in the Adoption of Modern Contraceptives by Women at the Family Planning Clinic in Hoima Regional Referral Hospital, Hoima District, Uganda**

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### **ABSTRACT**

This study sought to identify the key determinants influencing the utilization of modern contraceptives among women attending the Family Planning Clinic at Hoima Regional Referral Hospital in Hoima District. A cross-sectional design included 320 women aged 15 to 49, who were eligible to participate. Participants were randomly selected, and data were collected through questionnaires, subsequently analyzed using SPSS version 20. The results were visually represented through pie charts, graphs, and tables. The findings revealed that the majority of participants were married (42.5%), had a secondary level of education (43.1%), lived in rural areas (66.3%), and were of the Catholic faith (28.8%). The utilization of modern contraceptives was determined to be 30.4%. Among individual-related factors, education level (secondary vs. uneducated) was significantly associated with modern contraceptive use. Women with a secondary education level were eight times more likely to use modern contraceptives than uneducated women. Regarding community factors, awareness of modern contraceptives was significantly associated with family planning usage. Participants lacking awareness of modern contraceptive methods were 94.7% less likely to use modern contraceptives compared to those with awareness. Lastly, participants who perceived the quality of contraceptive services as poor were 5.3 times more likely not to use modern contraceptives compared to those who regarded the quality as good (aRR 5.3, 95% CI 2.58-49.46, P=0.001). In conclusion, the utilization of modern contraceptives is negatively associated with a lack of awareness of modern contraceptive methods and positively associated with the quality of contraceptive services and a higher level of education.

**Keywords:** Family planning methods, Fertility rate, Family Planning Clinic, Modern contraceptive methods, Women.

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### **INTRODUCTION**

Contraceptive use involves the use of different contraceptive methods with the aim of preventing unwanted pregnancies among the population. In Uganda, the different methods of contraceptives used include; Contraceptive implants, contraceptive oral or hormonal methods, emergency pills, Intrauterine contraceptive devices, Exclusive breastfeeding methods and withdrawal methods [1]. Others include male and female condoms. The prevalence use of contraception in Uganda is estimated to be 41.8%, out of which 36.3% is the prevalence use of modern contraception [2]. I will present the background of the study which

explains the problem statement, the objectives of the study, the justification of the study and the conceptual framework which shows how the independent variables and intermediate variables combine to influence the dependent variable. In 2015, 64% of married or in-union women of reproductive age worldwide were using some form of contraception. However, contraceptive use was much lower in the least developed countries with 40% and was particularly low in Africa at 33% among the other major geographical areas. Contraceptive use was much higher, ranging from 59% in Oceania to 75% in Northern America.

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Within these major areas, there are large differences by region and across countries. 12% of married or in-union women are estimated to have had an unmet need for family planning; that is, they wanted to stop or delay childbearing but were not using any method of contraception [3, 4]. The unmet need for contraceptive use was much higher at 22%, in the least developed countries. Many of the latter countries are in sub-Saharan Africa, which is also the region where the unmet need was highest 24% double the world average in 2015. Globally in 2015, 57% of married or in-union women of reproductive age used a modern method of family planning, constituting 90% of contraceptive users. When users of traditional methods are counted as having an unmet need for family planning, constituting 90% of contraceptive users [5]. When users of traditional methods are counted as having an unmet need for family planning, 18% of married or in-union women worldwide are estimated to have had an unmet need for modern methods [6]. In Uganda, contraceptive use is low. The high levels of unintended pregnancy and unplanned births in Uganda can be attributed primarily to the nonuse of contraceptives by women who do not want a child soon. Married women's use of modern contraceptives has increased significantly since 2000, nearly doubling (from 18% to 26%) between 2000 and 2011. However, modern contraceptive use remains too low to address the high rate of unintended pregnancy. During the same time period, contraceptive use among sexually active unmarried women did not change, 44% were using a modern contraceptive method in 2000, and the same proportion was doing so in 2011. The use of modern methods varies greatly according to women's social and economic status. In 2011, Only 13-16% of Uganda's poorest and least educated married women used modern contraceptives, compared with 38-39% of the wealthiest and most educated women. A greater proportion of urban married women used modern contraceptives compared to their rural counterparts [7]. There are many reasons why women do not use contraceptives.

Lack of access to family planning services and information is often a barrier, rural women with unmet need for contraception are more than twice as likely as their urban counterparts to cite lack of access as a reason for not using contraceptives [8]. Male partners also may influence whether a woman will practice contraception. One qualitative study found that some Ugandan men believed that contraceptives can cause health problems, such as infertility and cancer, while others felt that contraceptive use might cause women to have extramarital affairs. Among sexually active married women, commonly cited reasons for not using contraceptives include personal or partner opposition to use (27%), breastfeeding or having recently given birth (26%) and concern about side effects or inconvenience (40%) [9]. These reasons suggest that many women lack accurate information about family planning, including its mechanisms of action, safety, side effects, efficacy and ease of use. Lack of availability of a range of contraceptive methods, or of any at all, makes it difficult for a woman to use a method continuously and to obtain a method that is appropriate to her needs [10, 11].

According to Uganda's population demographics, the population of Uganda was 42 million in 2019, the main reason attributed to the rapid increase is the increased early marriage in Uganda due to reasons such as low literacy rate. The population of Uganda has been growing rapidly over the years. Uganda's mid-year population estimates stood at 38.8 million, with an annual growth rate of 3.5 per cent [11]. The main reason for such a high population growth rate is the country's fertility rate, which stands at 5.4 births one of the highest in the world resulting from the low usage of family planning methods. Nearly half of the population of Uganda is under the age of 15 years. This has inevitably led to high levels of child dependency and a built-in momentum for future growth. Over 80% of Uganda's population is rural and because of the nonexistence of healthcare facilities, there is a significant bearing on access to family planning methods. Only 21% of rural

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married women compared to 43% of their urban counterparts use modern contraceptive methods [12]. Rural women have higher levels of unmet needs for family planning methods, unmet needs for spacing and unmet needs for limiting, with only thirty-three per cent of the total demand for the use of contraceptives being satisfied. Interestingly, awareness of family planning methods is almost universal, with over 90% of people of

reproductive age having some knowledge of at least one modern method [12]. Despite the wide knowledge and awareness of the various contraceptives, the use of these methods is still very low particularly modern methods. Therefore, this study will assess the factors determining the use of modern contraceptives among women attending a family planning clinic at Hoima Regional Referral Hospital in Hoima District.

## **METHODOLOGY**

### **Study Design**

A descriptive cross-sectional study design was employed with qualitative and quantitative data collection and analysis methods [13].

### **Study Area**

The proposed study took place in HRRH Family Planning Clinic-Hoima City. Hoima is in the Western part of Uganda approximately 200km by road, Northwest of Kampala the capital city of the country. The coordinates of Hoima city are 1°25'55.0" N and 31°21'09.0" E; latitude 1.431944, longitude 31.352500 (Wikipedia). Maps of Uganda and Hoima can be seen in appendices IV and V.

### **Study Population**

The proposed study targets all women attending the Family Planning Clinic at HRRH.

### **Inclusion Criteria**

All women from 15 to 49 years of age attend the Family Planning Clinic at HRRH. Among the above, they are willing to participate.

### **Exclusion Criteria**

All women below 15 years and those above 49 years attend the Family Planning Clinic at HRRH. Not willing to participate.

### **Determination of Sample Size**

The sample size was determined using the [14] formula:

$$n = Z^2 p (1-p) / E^2$$

Where: n = Estimated minimum sample size required

p = Proportion of contraceptive use in a sample (Hoima district), 29.6% [15]

Z = 1.96 (for 95% Confidence Interval)

E = Margin of error set at 5%

$$n = 1.96^2 \times 0.296(1-0.296) / 0.05^2$$

$$n = 320$$

### **Sampling Technique**

In this study, probability-sampling methods using simple random sampling were used.

### **Data Collection Method**

Both Questionnaire and interview methods were used for data collection. A standard structured both closed and open questionnaire was designed. Respondent bias and researcher bias were checked by comparing data with the one summarized in the literature review, documented in chapter two [16].

### **Data Analysis**

Data analysis method is the process through which a researcher summarizes raw data in a way that makes sense and meaning. In other words, data analysis methods are a way of giving meaning to research data. SPSS was used to analyze data for descriptive and inferential statistics. Descriptive data was analyzed for correlations and cross-tabulations. Data was computed and presented in summarized tables for easy interpretation.

### **Quality Control**

Only questions on the questionnaire are to be answered by the respondents. For those who could not write or read, those questions were read to them in an understandable language. Questions were read at normal speed (not too fast nor too slow). Only questions relevant to the respondents were asked (skip rules are to be followed). The exact answers of the respondents were coded, with no interpreting responses. Pretesting of the tools was done and data management was executed professionally.

### **Ethical Consideration**

Individuals were included in the study upon giving informed consent for

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participation. Any information obtained was handled with a high degree of confidentiality as there was no mention of people's names but the signatures of the participants were captured on the data

collection tools for those who can write [16]. For those who were not able to write, a thumbprint was preferred or a consent tick was indicated.

## RESULTS

### Socio-Demographic Findings

Table 1: Socio-demographic findings

Variable	Frequency (n)	Percent (%)
<b>Marital status</b>		
Married	136	42.5
Single	81	25.3
Widow	65	20.3
Divorced	38	11.9
<b>Level of education</b>		
Primary	59	18.4
Secondary	138	43.1
Tertiary	62	19.4
Uneducated	61	19.1
<b>Place of residence</b>		
Rural	212	66.3
Urban	108	33.7
<b>Religion</b>		
Catholic	92	28.8
Pentecostal	64	20.0
Anglican	86	26.9
Muslim	78	24.3

Table 1 shows that the majority 136 (42.5%) of the participants were married, 138 (43.1%) were of secondary level of

education, those who lived in rural areas 212 (66.3%), and 92 (28.8%) were Catholics by religion.

### Utilization of modern contraceptives among women attending the family planning clinic at HRRH in Hoima District

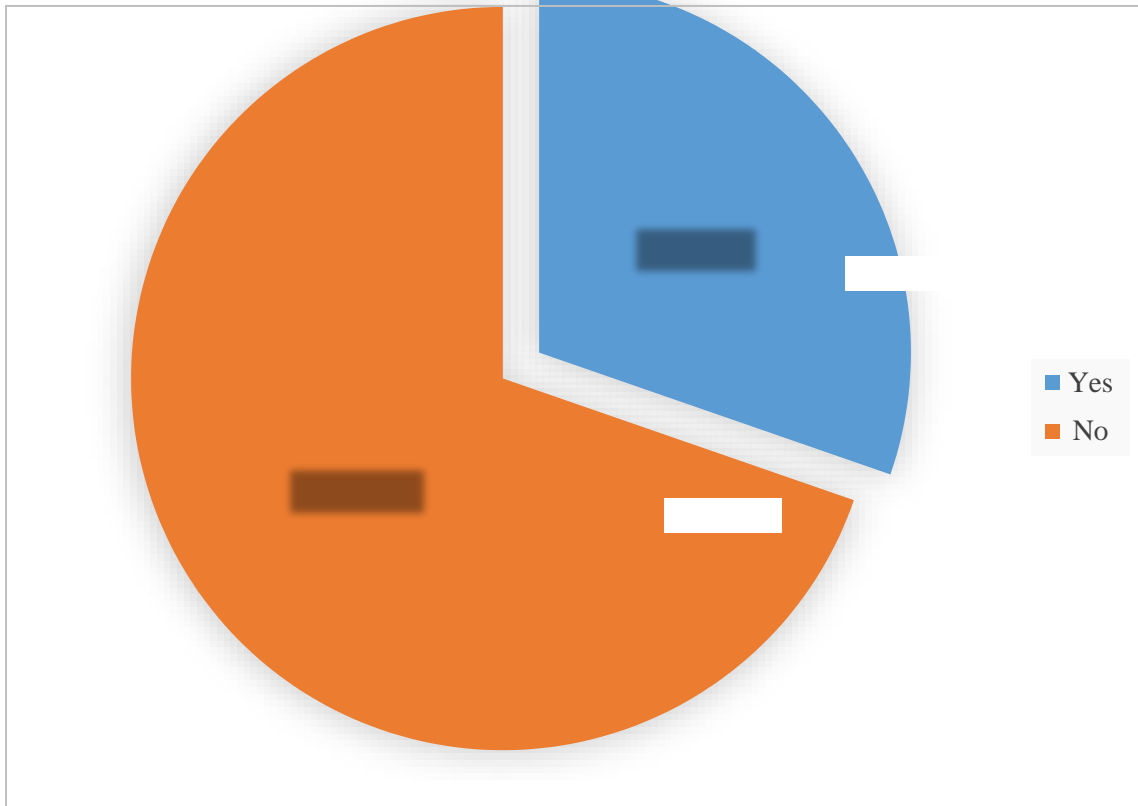
Table 2: A Table showing the level of utilizing modern contraceptive

Have you ever used modern contraceptives?	Frequency	Per cent
Yes	97	30.4
No	223	69.5
<b>Total</b>	<b>320</b>	<b>100</b>

From the above majority 223 (69.5%) had never used modern contraceptives and 97

(30.4%) had ever used modern contraceptives. Therefore, the level of

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utilizing modern contraceptives was found to be 30.4%.



**Figure 1: Pie chart shows that the majority 223 (69.5%) had never used modern contraceptives.**

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### The relationship between individual factors and modern contraceptive use among women attending family planning clinic at HRRH in Hoima District

**Table 3: Bivariate analysis of individual factors associated with the use of modern contraceptive**

		Have you ever used family planning?		p-value	Crude odd ratio
		Yes	No		
Age	20 years and below	12	53	0.197	1.039
	21 to 34 years	71	78		
	35 years and above	14	92		
Marital status	Single	10	71	0.063	0.137
	Married	81	55		
	Divorced/widow	6	97		
Religion	Catholic	32	60	0.567	1.203
	Muslim	13	65		
	Anglican	46	40		
	Pentecostal	5	59		
Education	Primary	34	25	0.17	0.248
	Secondary	43	95		
	Tertiary	6	56		
	Uneducated	14	47		

From Table 3 above, marital status, and education level had P-values <0.2 thus

being taken for the multivariate analysis.

**Table 4: Multivariate analysis of individual factors associated with the use of modern contraceptive**

		P-value	Adjusted odd ratio (aOR)	95% Confidence Lower Bound	Interval for aOR Upper Bound
Marital status	Single	0.116	0.091	0.005	1.809
	Married	0.648	1.694	0.176	16.283
	Widow		1.00	.	.
Education level	Primary	0.183	3.459	.556	21.518
	<b>Secondary</b>	<b>0.046</b>	<b>7.883</b>	<b>1.034</b>	<b>60.077</b>
	Tertiary	0.77	0.860	0.321	2.344
	Uneducated.		1.000	.	.

According to Table 4 above, education level (secondary vs. uneducated) was significantly associated with the usage of modern contraceptives. That is the odds of

using modern contraceptives were eight-fold higher among women of secondary level of education as compared to women who were uneducated.

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### The association between community factors and modern contraceptive use among women attending family planning clinic at HRRH in Hoima District

**Table 5: Bivariate analysis of community factors associated with use of modern contraceptives**

		Have you ever used modern contraceptives		P-value	Odd ratio
		Yes	No		
Are you aware of modern contraceptives methods	Yes	4	16	0.00	0.075
	No	67	17		
Taboos that prevent women from using contraceptives	Infertility	51	25	0.957	0.976
	Family increment	16	4		
	Evil	8	4	0.842	0.950
Reason for discouraging family planning	Reduce clan size	31	9		
	Cause abnormalities in children	4	8		
	Cause infertility	14	12		
	Interference with sexual enjoyment	9	4		

From Table 5 above, only awareness of modern contraceptives had P-values <0.2

thus taken for the multivariate analysis.

**Table 6: Multi-variate analysis of community factors associated with use of modern contraceptives**

95% Confidence Interval for aOR				
	P-value	aOR	Lower Bound	Upper Bound
Are you aware of modern contraceptives methods	Yes	1.000	0.019	0.214
	No	0.063		

According to Table 6 above, awareness of modern contraceptives was significantly associated with the usage of family planning. That is, participants who were not aware of modern contraceptive

methods were 94.7% less likely to use modern contraceptives than those who were aware of modern contraceptive methods.

## DISCUSSION

### The relationship between individual factors and modern contraceptive use among women attending family planning clinic at HRRH in Hoima District

In this study, the odds of using family planning were eight-fold higher among women of secondary level of education as compared to women who were uneducated. This is in line with a study by [17] which showed that the education level of the women has a highly significant effect on contraceptive use and it is

expected that the better-educated women may delay to marry and freely discuss family planning with their partners or spouses. Therefore, in a place with a large number of women being illiterate or having attained little formal school education, informal channels such as mass media will play an important role in bringing about modernization and thereby influencing and motivating women about their reproductive rights and choices.

### The association between community

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### factors and modern contraceptive use among women

In this study, awareness of modern contraceptive methods was significantly associated with the usage of family planning. That is, participants who were not aware of modern contraceptive methods were 94.7% less likely to use modern contraceptives than those who were aware of modern contraceptive methods. Similarly, a study by [18] showed a strong association between awareness of contraceptive methods and women's use of modern contraception in both urban and rural areas. In addition, the awareness of contraceptive options impacts a woman's contraceptive use choices and determines the method mix among users. This was observed in the recent shift from male condoms and pills to injectables and implants among contraceptive users in many sub-Saharan African countries due to the considerable donor support in increasing the supply and availability of these two methods in this region

according to [19].

### The association between Health services factors and modern contraceptive use among women

In this study, study participants who considered the quality of contraceptive services as good were 5.3 times more likely not to use modern contraceptives than participants who considered the quality of contraceptive services as bad. Consistently, other studies done in Bangladesh and Cambodia highlighted that good quality contraceptive services such as outreach activities by FP workers and accessibility to FP-related information to women of reproductive age were significantly associated with the use of modern contraceptives [20]. In addition, the likelihood of using contraceptive services was increased with good quality contraceptive services according to findings done in Bangladesh, Tanzania and Pakistan [21].

## CONCLUSION

In conclusion, the use of modern contraceptives is negatively associated with being not aware of modern contraceptive methods and positively associated with the Quality of contraceptive services as well as higher level of education.

### Recommendation

Therefore, the researcher recommends the following;

- The government and other family planning providers should promote all family

planning methods to give a variety of choices to women willing to use FP so as to increase the level of using FP.

- Informal channels such as mass media will play an important role in bringing about modernization in uneducated women.
- Women should always seek family planning information from health experts.
- Academicians, researchers and organizations should carry out more studies related to family planning usage.

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