

# Determinants of Modern Contraceptive Uptake among the Youth in Akuse Township in the Lower Manya Krobo Municipality, Ghana

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## Abstract

**Background:** Access to safe and effective contraception is crucial for sexual and reproductive health to be at its best. This allows improved pregnancy results and the avoidance of unintended births. Teenagers' views on using contraceptives are influenced by the information available at their disposal. The study assessed the influential factors affecting the utilization of modern contraceptives among the youth in Akuse in the Eastern Region of Ghana. **Methods:** The data for the study were gathered from 378 consented youth aged 15 - 24 years using a quantitative cross-sectional study design and a well-structured questionnaire. Person's Chi-Square test was adopted to measure the association between the outcome variable and selected independent variables. Logistic regression models were utilized to measure the odds of the factors influencing modern contraceptive use among the respondents. **Results:** The results of the study suggested a high knowledge level of contraceptives; however, the prevalence of utilization was low. The level of education and age were factors found to influence the uptake of contraceptives. A bivariate analysis to examine the association between selected socio-demographic variables revealed that educational level ( $p = 0.044$ ), religious affiliation ( $p = 0.002$ ), and ethnicity ( $p = 0.016$ ) were statistically associated with modern contraceptive use among the respondents. All other tested demographic variables including the age groups, gender, marital status, and residential status proved otherwise at the observed p-values greater than the 0.05 threshold. Respondents who indicated staying with partners were 6.79 times more likely to use contraceptives compared to their counterparts staying with a parent, after controlling for all other covariates. **Conclusions:** Based on the findings of this study, it was concluded that high contraceptive knowledge influences the choice of contraceptive preferred by the youth, and contraceptive use is

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also influenced by the advancement in age and educational level of the youth. It is however recommended that parents, guidance, and teachers be entreated to offer relevant and timely sexual information or education as these will most likely improve the uptake of modern contraceptives among the targeted population.

## Keywords

Determinants, Modern Contraceptive, Youth, Akuse, Ghana

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## 1. Introduction

For sexual and reproductive health to be at its best, access to safe and effective contraception is crucial. This enables improved pregnancy outcomes and promotes the avoidance of unplanned births [1]. Modern contraception has a good impact on women's health and is a crucial part of reproductive health. Conception can occur at any moment throughout the fertile period when spermatozoa are mature and capable, and fertilization happens spontaneously and without any obstructions (unprotected coitus). However, there are situations when prevention against unintended pregnancy is necessary since it might have negative effects [2]. Contraceptive utilization prevalence has increased globally in recent times, and in many low-and middle-income nations, although little contraception is used in West Africa [3]. There are many unmet requirements and a low rate of family planning technique utilization in Sub-Saharan Africa. One of the biggest obstacles to the use of contraception in the area is the accessibility of these techniques [4].

According to empirical studies among adolescents, the use of modern contraceptives is frequently interpreted as having a sexually transmitted disease or being unfaithful to a partner. Adolescents avoid seeking contraception because of facility arrangements and a lack of assurance about their privacy and confidentiality [5]. Teenagers' opinions on using contraceptives are influenced by the information they learn at home, at school, and in the media. However, it has been shown that a lot of sexually related information is erroneous, confusing, and occasionally deceptive; this has a detrimental effect on sexual behaviour [6].

In Ghana, a study conducted by Nyarko (2015) on the prevalence and correlates of contraceptive use by female adolescents observed that factors such as adolescence, relationship status, religious affiliation, ethnic background, education and employment status, visiting healthcare facilities, and knowledge of the ovulatory cycle greatly impacted adolescents' use of contraceptives [7].

The usage of contraceptives among the youth has been linked to an interplay of factors through personal or individual level factors and intermediate factors. Such factors were indicated in a study as poor knowledge of contraceptives, misconceptions concerning safety, family-related factors, religion, sex education, poor access to services, low socio-economic status, societal stigmas associated

with pregnancy and premarital sex, and lack of formal education [8] [9].

Additionally, (Greenberg *et al.*, 2013) found that youth do not use contraception for a variety of reasons, including age at the time of sexual activity initiation, having a sexual partner or companion, personal or religious beliefs, inadequate knowledge of the risks of pregnancy following unprotected sexual relations, limited decision-making capacity concerning sexual relations and contraceptive use, incest, and rape [10]. Fear of side effects, particularly those thought to impair reproductive function, remains the major identified barrier to the utilization of modern contraception as observed in the Demographic and Health Survey (DHS) [11]. The primary aim of this study is to identify the determinants of modern contraceptive use among the youth in Akuse in the Lower Manya Krobo Municipality of Ghana. The findings of this study will help fill the knowledge gap on the utilization of modern contraceptives among the youth in the studied geographical area and generally contribute to scientific knowledge.

## 2. Methodology

### 2.1. Study Design and Setting

The study design was a quantitative cross-sectional study. It was conducted among selected youth in the Akuse Sub-Municipal of the Ghana Health Service in the Eastern Region of Ghana between June and August, 2022. The Sub-Municipal is one of the six (6) administrative divisions of the Lower Manya Krobo Municipality. The study community is one of the oldest towns in the Municipality and shares boundaries with towns such as Kpong, Asutsuare, Shai Hills, and Somanya.

### 2.2. Study Population

The study focused on the youth aged 15 - 24 years and residents in Akuse in the Lower Manya Krobo Municipality of the Eastern Region, Ghana. The focus on this age was because it is the age most youths become sexually active and experience challenges such as adolescent pregnancy and also the consequences of contracting STIs/HIV.

### 2.3. Sample Size and Sampling Technique

To determine the appropriate recruits for the study, the projected sample size was calculated using Cochran's formula as shown in Equation (1) below:

$$n = \frac{Z^2 \times pq}{e^2}, \quad (1)$$

where,

$n$  = sample size [12].

$Z$  = the z-score that corresponds with a 95% confidence interval which is 1.96.

$p$  = prevalence of modern contraceptive use among the youth (34%) in Ghana [13].

$q = 1 - p$ .

$e$  = margin of error set at 5%.

Therefore,

$$n = \frac{(1.96)^2 \times (0.34 \times 0.66)}{(0.05)^2} \cong 344 \quad (2)$$

A 10% non-response rate was added bringing the total number to 378. The estimated sample size was obtained using a multistage sampling technique. A multi-stage sampling technique was adopted for the data collection, where a purposive sampling method was first used to select locations within the township where the youth often gather, this included apprenticeship shops, youth meetings in churches, etc. At each identified location, a systematic sampling technique was then used as the second approach to pick the consented participants with a skip pattern.

#### 2.4. Inclusion and Exclusion Criteria

All participants of the study were youth aged 15 - 24 years and residents of Akuse. The youth considered included those who were/were not sexually active at the time of the study. The exclusion criteria covered a youth outside the age bracket and not a resident of Akuse township. Also, a youth who is not willing to take part in the study.

#### 2.5. Ethical Considerations

Ethical approval was provided by Ensign Global College's Ethical Review Committee and additional administrative permission was sought from the Municipal Health Directorate of the Ghana Health Service. Survey respondents were asked to consent to their participation; however, for those under the age of 18 years, assent was obtained from their parents/guardians. All individuals were informed of their right to withdraw from the research at any moment without suffering negative effects on their reputation or self-esteem.

#### 2.6. Data Collection and Analysis

A structured survey instrument with both open and close-ended questions was used to gather data from the study participants. The questions were structured to cover the background factors, intermediate factors, and proximate intervening that contribute to the behaviours of the youth on modern contraceptives. The questionnaire was pretested in a neighbouring township before actual data collection. The youth in the town had similar characteristics as the youth in the study area. This helped to make necessary corrections before the actual data collection and in essence to ensure the validity and reliability of the questionnaire.

The data collected were analyzed using the STATA statistical software package *StataCorp.2007. Stata Statistical Software. Release 17. StataCorp LP, College Station, TX, USA*). The results obtained were expressed in summary tables and graphs. Also, bivariate analyses and multivariate logistic regression techniques were used to respectively measure and predict the association and effects be-

tween the outcome variable and selected dependent variables. Statistical significance was defined as p-values less than 0.05.

### **3. Result**

#### **3.1. Demographical Characteristics**

Out of the total of 378 questionnaires administered only 370 were reliable for analysis after cleaning, yielding a 97.88% response rate. Socio-demographic data collected covered the age group, sex, highest educational level, religion, ethnicity, and who the respondent lives with. It was observed that respondents in the age group 18 - 20 years constituted the majority representing about 53.8% of the total study participants. Among the respondents, 192 (51.9%) were females indicating the majority. The analysis also revealed that most of the respondents 284 (76.8%) had their highest reported level of education to be Senior High School (SHS) at the time of engagement. Most respondents were Christians 335 (90.5%) with a couple of them reporting being married at the time of participation 19 (5.1%). Regarding the ethnicity of the respondents, most of the participants were Ga-Adangmes 151 (40.9%) with a very insignificant proportion categorized as “other” ethnic 3 (0.8%). The majority of the youth indicated they stay with their parents 257 (69.5%), with just 9 (2.43%) admitting they stay all by themselves (**Table 1**).

#### **3.2. Knowledge Level of Modern Contraceptives among the Youth**

Of the total study participants, 321 representing 86.8% mentioned they had ever heard of modern contraceptives whilst the rest admitted the contrary from any referenced source. Regarding the source of information, the majority 145 (45%) of the participants pointed to the mainstream media, while 73 (23%) heard from their peers and the least heard from their parents 5 (2%). Out of the 321 respondents who knew about modern contraceptives, the majority 275 (86.2%) had heard about pills, 263 (82.4%) had heard about condoms, 82 (25.7%) knew about injectables, 72 (22.6%) knew about implants and 40 (12.5%) knew about natural methods.

Also, of the 321 respondents who indicated having some knowledge, the majority 229, (71.3%) knew about both short-term and long-term contraceptives. Also, 307 representing 95.6% knew where to get a contraceptive within the community. The majority of 207 (67.4%) indicated a drug store/pharmacy was a place they could get a contraceptive with the least 7(2.3%) of the respondents indicating peers and friends.

#### **3.3. Association between Contraceptive Knowledge and Demographic Variables**

Pearson’s Chi-Square tests were conducted to ascertain the nature of the association between the outcome variable and the selected socio-demographic indicators in bivariate analyses. The results indicated a statistically significant association

**Table 1.** Socio-demographics characteristics of the study.

Variables	Frequency (n = 370)	Percentage (%)
<b>Age Group</b>		
15 - 17	113	30.5
18 - 20	199	53.8
21 - 24	58	15.7
<b>Gender</b>		
Male	178	48.1
Female	192	51.9
<b>Highest level of education</b>		
Primary	13	3.5
Junior High School (JHS)	38	10.3
Senior High School (SHS)	284	76.8
Tertiary	35	9.5
<b>Religious affiliation</b>		
Christianity	335	90.5
Islam	35	9.5
<b>Marital status</b>		
Married	19	5.1
Not married	332	89.7
Cohabiting	19	5.1
<b>Ethnicity</b>		
Ga-Adangme	151	40.8
Ewe	103	27.8
Hausa	38	10.3
Akans	75	20.3
Others	3	0.8
<b>Whom does the respondent stay with</b>		
Parents	257	69.5
Partner	17	4.6
Guardian	48	13.0
Self	9	2.4
School	39	10.5

between knowledge and the participants' gender ( $p = 0.049$ ), level of education ( $p < 0.001$ ), Marital status ( $p = 0.039$ ), and the individual(s) the respondent admitted staying with (0.001). However, the levels of association were not statistically significant with the other indicators such as age, religious affiliation, marital status, and ethnicity (**Table 2**).

**Table 2.** Bivariate analysis between knowledge of contraceptives and sociodemographic variables.

Variables	Knowledge level of Contraceptives		Chi-Square <i>P</i> -value
	Have knowledge n = 321 (%)	Have no knowledge n = 49 (%)	
<b>Age Group</b>			
15 - 17	93 (25.1)	20 (5.4)	0.073
18 - 20	173 (46.8)	26 (7.0)	
21 - 24	55 (14.9)	3 (0.8)	
<b>Gender</b>			
Male	148 (40.0)	30 (8.1)	0.049*
Female	173 (46.8)	19 (5.1)	
<b>Highest level of education</b>			
Primary	7 (1.9)	6 (1.6)	<0.001*
Junior High Sch. (JHS)	26 (7.0)	12 (3.2)	
Senior High Sch. (SHS)	255 (68.9)	29 (7.8)	
Tertiary	33 (8.9)	2 (0.5)	
<b>Religious affiliation</b>			
Christianity	293 (79.2)	42 (11.4)	0.215
Islam	28 (7.6)	7 (1.9)	
<b>Marital status</b>			
Married	19 (5.1)	0 (0.0)	0.039*
Not married	283 (76.5)	49 (13.2)	
Cohabiting	19 (5.1)	0 (0.0)	
<b>Ethnicity</b>			
Ga-Adangme	126 (34.1)	25 (6.8)	0.097
Ewe	97 (26.2)	6 (1.6)	
Hausa	31 (8.4)	7 (1.9)	
Akans	64 (17.3)	11 (3.0)	
Others*	3 (0.8)	0 (0.0)	
<b>Whom do you stay with?</b>			
Parents	228 (61.6)	29 (7.8)	0.001*
Partner	17 (4.6)	0 (0.0)	
Guardian	33 (8.9)	15 (4.1)	
Self	9 (2.4)	0 (0.0)	
School	34 (9.2)	5 (1.4)	

### 3.4. Use of Modern Contraceptives among the Youth

Out of 370 respondents, 135 (36.5%) acknowledged they ever had sex, with 110

(84.5%) reporting they used contraceptives in their first encounter. Condoms ( $n = 51$ , 46.4%) were the commonest method utilized followed by the use of Pills ( $n = 31$ , 28.2%). The least utilized method during first sex was injectables and the safe period/calendar method with a percentage of 3.6% respectively. At the time of conducting the study, only 117 respondents mentioned ever using modern contraceptives before. From the study, 56 respondents indicated that they use modern contraceptives every time they have sex. Among the respondents, only 65 were using modern contraceptives during the time of the study, therefore, putting the overall prevalence of modern contraceptive use among the youth in Akuse at 17.6% (Males = 9.8%, Females = 7.8%).

### 3.5. Association between Socio-Demographic Factors and Contraceptive Use

A bivariate analysis was performed to examine the association between various socio-demographic variables and the use of contraceptives among the youth in Akuse who admitted to having ever used them. The respondent's highest attained educational level ( $p = 0.044$ ), religious affiliation ( $p = 0.002$ ), and ethnicity ( $p = 0.016$ ) were variables found to be statistically associated with modern contraceptives. All other tested variables including the age category, gender, marital status, and residential status proved otherwise at respective  $p$ -value thresholds greater than 0.05 (Table 3).

### 3.6. Factors Contributing to Contraceptive Use

A multivariate logistic regression analysis revealed a statistically significant association between contraceptive use and age groupings with increased odds of contraceptive usage as the individual advances in age. Individuals aged 18 - 20 years at the time of participation in the study were 2.62 times more likely to use modern contraceptives as against their counterparts in the 15 - 17 years bracket controlling for all other covariates in the model. Also, the analysis revealed a progressively increasing odds ratio in the level of education, with the highest odds of 17.2 among tertiary youth where respondents with a tertiary level of education had a statistically significant association using the primary level of education as a reference with a  $p$ -value of 0.025. Respondents who indicated staying with partners were 6.79 times more likely to use contraceptives compared to their counterparts staying with a parent, after controlling for all other covariates with a statistically significant  $p$ -value of 0.006 (Table 4).

### 3.7. Preferred Contraceptives

From the study, most of the respondents 192, (51.9%) indicated that they prefer short-term contraceptives. Among the study respondents, 222 (60%) indicated they could get a modern contraceptive by themselves if they wanted to use and 148 (40%) indicated they could not get it by themselves. Condoms and Pills were the most preferred contraceptives by the youth in the study with a percentage of



**Table 3.** Bivariate analysis of socio-demographic factors and contraceptive use.

Variables	Ever used modern contraceptive		P-value
	Yes (n = 117)	No (n = 18)	
<b>Age Group</b>			
15 - 17	17 (12.6)	5 (3.7)	0.357
18 - 20	65 (48.2)	8 (5.9)	
21 - 24	35 (25.9)	5 (3.7)	
<b>Gender</b>			
Male	65 (48.2)	11 (8.2)	0.658
Female	52 (38.5)	7 (5.2)	
<b>Highest level of education</b>			
Primary	1 (0.7)	1 (0.7)	0.044*
JHS	11 (8.2)	1 (0.7)	
SHS	77 (57.0)	16 (11.9)	
Tertiary	28 (20.7)	0	
<b>Religious affiliation</b>			
Christianity	110 (81.5)	13 (9.6)	0.002*
Islam	7 (5.2)	5 (3.7)	
<b>Marital status</b>			
Married	11 (8.15)	2 (1.5)	0.931
Not married	97 (71.9)	15 (11.1)	
Cohabiting	9 (6.7)	1 (0.7)	
<b>Ethnicity</b>			
Ga-Adangme	35 (25.9)	6 (4.4)	0.016*
Ewe	48 (35.6)	2 (1.5)	
Hausa	9 (6.7)	5 (3.7)	
Akans	24 (17.8)	4 (3.0)	
Others	1 (0.7)	1 (0.7)	
<b>Who do you stay with</b>			
Parents	73 (54.1)	14 (10.4)	0.684
Partner	13 (9.6)	1 (0.7)	
Guardian	12 (8.9)	1 (0.7)	
Self	4 (3.0)	1 (0.7)	
School	15 (11.1)	1 (0.7)	

39.5% and 28.1% respectively. From **Table 5** below, other traditional methods were indicated by the remaining respondents as their preferred contraceptives.

A bivariate analysis revealed a strong statistical association between the knowledge of contraceptives and the choice of reliable contraceptives with a

**Table 4.** Multivariate logistic regression of contraceptive use and sociodemographic factors.

Variables	Categories	Unadjusted		Adjusted	
		P-value	OR (95% CI)	P-value	AOR (95% CI)
Age Group	15 - 17	R	1	R	1
	18 - 20	0.001*	2.74 (1.51 - 4.96)	0.004*	2.62 (1.35 - 5.0)
	21 - 24	<0.001*	8.60 (4.11 - 17.95)	0.052	2.92 (1.0 - 8.6)
Gender	Male	R	1	R	1
	Female	0.052	0.65 (0.42 - 1.00)	0.111	0.66 (0.39 - 1.02)
Highest level of education	Primary	R	1	R	1
	JHS	0.149	4.89 (0.57 - 42.26)	0.261	3.63 (0.38 - 34.27)
	SHS	0.154	4.46 (0.57 - 34.90)	0.393	2.56 (0.30 - 22.09)
	Tertiary	0.001*	48 (5.31 - 433.94)	0.025*	17.24 (1.42 - 209.26)
Religious affiliation	Christianity	R	1	R	1
	Islam	0.126	0.51 (0.22 - 1.21)	0.523	0.61 (0.13 - 2.82)
Marital status	Married	R	1	R	1
	Not married	0.012*	0.3 (0.12 - 0.77)	0.204	0.48 (0.16 - 1.48)
	Cohabiting	0.517	0.65 (0.18 - 2.36)	0.463	0.54 (0.11 - 2.78)
Ethnicity	Ga-Adangme	R	1	R	1
	Ewe	<0.001*	2.89 (1.68 - 4.97)	0.001*	2.92 (1.57 - 5.41)
	Hausa	0.947	1.02 (0.45 - 2.38)	0.973	0.97 (0.22 - 4.30)
	Akans	0.157	1.55 (0.84 - 2.88)	0.222	1.54 (0.77 - 3.10)
	Others	0.684	1.65 (0.15 - 18.82)	0.949	0.91 (0.05 - 16.78)
Who do you stay with	Parents	R	1	R	1
	Partner	<0.001*	8.19 (2.59 - 25.95)	0.006*	6.79 (1.71 - 26.96)
	Guardian	0.629	0.84 (0.41 - 1.70)	0.950	1.03 (0.46 - 2.31)
	Self	0.306	2.02 (0.53 - 7.72)	0.994	1.01 (0.20 - 5.16)
	School	0.203	1.57 (0.78 - 3.17)	0.351	1.50 (0.64 - 3.55)

R: Reference, \*Statistical significance at p-value < 0.05.

p-value of 0.003. Also, there was an association between knowledge of contraceptives and the type of contraceptive they deem reliable ( $p = 0.049$ ) (Table 6).

In contrast to the observed predictive factors for the utilization of modern contraceptives, the data also revealed that some reasons for non-usage among respondents included Fear of side effects (267, 72.2%), Embarrassment to buy (99, 26.76%), and Fear of being seen by parents (98, 26.49%). Other insignificant reasons in terms of counts included “preferred sources too far”, “chastity”, “no interest in utilization” and “not ready”. The majority ( $n = 304$ , 82.2%) of the respondents in the study agreed that sex education can influence modern contraceptive use.

**Table 5.** Preferred contraceptives and ability to get.

Variable	Frequency (n = 370)	Percentage %
<b>Which of them would you prefer to use or deem reliable?</b>		
Long term	178	48.1%
Short term	192	51.9%
<b>Which method do you prefer/deem reliable?</b>		
Implants	54	14.6%
Pills	104	28.1%
Condoms	146	39.5%
Injectable	17	4.6%
Withdrawal	16	4.3%
Calendar Method	21	5.7%
Celibacy	12	3.2%
<b>If you wanted to use a modern contraceptive, could you get any by yourself?</b>		
Yes	222	60%
No	148	40%

**Table 6.** Bivariate analysis between preferred contraceptives and knowledge level youth of Akuse.

Variables	Knowledge of contraceptive		P-value
	Yes (n = 321)	No (n = 49)	
<b>Which method do you prefer/deem reliable?</b>			
Implants	52	2	0.003*
Pills	90	14	
Condoms	128	18	
Injectable	13	4	
Withdrawal	14	2	
Calendar Method	18	3	
Celibacy	6	6	
<b>Which of them would you prefer to use or deem reliable?</b>			
Long term	148	30	0.049*
Short term	173	19	

## 4. Discussion

### 4.1. Knowledge of Modern Contraceptives

About 87% of the study respondents demonstrated knowledge of contraceptives. This finding corroborates that of the Ghana Demographic and Health Survey

(GDHS) which indicates that contraception knowledge is widespread in Ghana [14]. Knowledge of contraceptives in the community could be partly attributed to the current media broadcasting which was the most common source a respondent heard about contraceptives. A study by Hindin *et al.* (2014) indicated that knowledge of modern contraceptives is disseminated through a variety of channels, including educational institutions, print and electronic media that broadcast instructional messages and commercials, to increase awareness as evident in this study [11].

The study further revealed that condoms and pills were the most known contraceptives by the respondents of the study. These findings agree with that of Osei *et al.* (2014) who observed condoms and pills among others were the popularly stated known contraceptives [15]. Similarly, a study by Buxton and Hagan, pointed out that teenagers are more acquainted with condoms and oral medications, which may be due to a lack of awareness about other techniques [16]. There was also an observed statistically significant association between selected sociodemographic characteristics of respondents such as their level of education and their knowledge level on contraceptives. These findings corroborate the observation made by Reyna *et al.* (2019) in a study conducted among adolescents in Mexico [17].

#### 4.2. Preference for Modern Contraceptives by Respondents

Among the sexually active youth in the study, a majority have utilized contraceptives before with condoms being the commonest method used. This is in line with a study in Botswana among youthful students by Hoque *et al.* (2013), which found that condom was their most often used contraceptive method followed by the oral contraceptive pill [18]. This finding is also in line with the GDHS, 2014 which points out male condoms and pills as the most popular contraceptive techniques among sexually active youth [14]. The finding from this study is partly in line with Lun *et al.* (2021) who found that sexually active adolescents used more contraception than sexually inactive adolescents. Unlike their study, poor usage was not identified because from the study 62.4% of sexually active youth were currently using contraceptives at the time of the study [19].

In the bivariate analysis, the level of education, religious affiliation, and ethnicity were found to be statistically associated with modern contraceptive use. However, the multivariate logistic regression analysis revealed an increased likelihood between contraceptive use with age and level of education. This finding is in line with Nyarko (2015) on the sociodemographic characteristics significantly influencing contraceptive utilization among adolescents [7]. Additionally, the bivariate analysis revealed a significant association between the knowledge of modern contraceptives with the method and type of modern contraceptives deemed preferable. It revealed that the level of knowledge on modern contraceptives influences the method and type of modern contraceptive uptake respectively. This finding is consistent with a qualitative study by (Dombola *et al.*,

2021) in Malawi [20]. The study identified that inadequate health information on contraceptives, in turn, serves as a barrier to the utilization of contraceptives.

### 4.3. Determinants of the Utilization of Modern Contraceptives among the Youth

The individual's age, level of education, and whether he or she is staying with the partners at the time of participation in the study stood out to be predictive indicators of the uptake of contraceptives. This finding conforms with studies by (Oppong *et al.*, 2021; Gbagbo, 2020) [13] [21]. However contrarily, (Mutumba *et al.*, 2018) found that a high level of education correlated with lower odds of modern contraceptive use [22].

However, it was also identified in the study that the fear of side effects contributes significantly to the non-use of contraceptives among the majority of the participants. This finding confirmed the same observation established several parallel qualitative study findings where female adolescents cited fears of contraceptives causing cancer [9] [11] [20]. This has led to a perceived decrease in fertility amidst the utilization of modern contraceptives.

From the study, religious affiliation appeared as a protective factor in the utilization of modern contraceptives. Respondents felt religious doctrine and stigmatization most often hinder the notion of exploring the use of contraceptives. This corroborated with (Nsubuga *et al.*, 2016) who identified contraceptive use as wrong by some religious groups [23]. In a similar view, (Gipson *et al.*, 2011) reported that Catholics and Muslims see contraceptive use as free will for extramarital sexual behaviour or indiscriminate sexual behaviour [24]. The majority of the youth (82.2%) indicated that sex education would greatly improve the utilization of modern contraceptives.

## 5. Conclusions

The study concluded that the contraceptive knowledge level among the youth in the Akuse community is high, 87% with a prevalence rate of 17.6%. There was an observed statistically significant association between knowledge of contraceptives and sociodemographic characteristics including gender, level of education, and whom respondents stay with. Also, the level of education and religious affiliation of an individual was found to be associated with contraceptive use.

The major factor affecting the non-use of modern contraceptives was fear of side effects. Other significant factors included embarrassment buying and afraid of being seen by parents. Sex education was identified as a remedy to promote contraceptive use by the majority.

## 6. Limitations

Data from the study was generated from a cross-sectional study and some variables were measured retrospectively exposing the study to a recall bias. Also, data from respondents were self-reported and there was no way to confirm or

refute their claims. Given the limited data size, it will not be feasible to generalize the finding over a larger population.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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