

# KNOWLEDGE AND USE OF MODERN CONTRACEPTIVES AMONG FEMALE UNIVERSITY STUDENTS: A CASE STUDY AT THE UNIVERSITY OF EDUCATION, WINNEBA.

**Comment [PG1]:** Consider "A SURVEY OF KNOWLEDGE AND USE OF MODERN CONTRACEPTIVES AMONG FEMALE UNIVERSITY STUDENTS AT THE UNIVERSITY OF EDUCATION, WINNEBA, GHANA"

## ABSTRACT

**Introduction:** Studies have shown that knowledge of contraceptives, especially among undergraduate female students, remains limited, and the rate of premarital unprotected sexual activity, unwanted pregnancies and illegal abortions remain higher among university students in Ghana.

**Aim:** This study was carried out to assess the knowledge and use of modern contraceptives among female undergraduate students in University of Education, Winneba.

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**Methodology:** A descriptive survey design was adopted as the framework for the study. Purposive sampling method was used to deploy 108 sexually active female undergraduate students from various departments in the Faculty of Science Education through structured questionnaires. Data were analysed using Statistical Package for Social Science (SPSS, Version 25) and presented using quantitative metric.

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**Results and discussion:** The results of the study showed that majority of the respondents (89.8%) have heard about a modern contraceptive method. 57.4% of the respondents reported that they used contraceptives in the past, while 36 (58.1%) were current contraceptive users. The most popular methods of contraception used were pills (96.9%), female condoms (72.2%), and injectable (52.6%). The main sources of information about contraceptives were found to be social media and followed by peers, radio/TV and health workers. Reasons that most influenced the decision of respondents to use modern contraceptives included knowledge of modern contraceptives, availability of service points, partner support, and religious beliefs. Even though participants were sexually active, the rate of contraceptive use was found to be relatively low.

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**Conclusion:** Addressing the issue of modern contraceptive utilisation requires a comprehensive strategy. Therefore, efforts must not only be focused on improving upon the knowledge the individuals have on modern contraceptives but also look at addressing other barriers including accessibility, availability and cultural factors associated with modern contraceptives.

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**Keywords:** Knowledge, Contraceptive, Influencing, Utilisation, Accessibility and Availability.

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## Introduction

Given the continuous increase in Ghana's population and its effect on the economy, strategies aimed at reducing fertility rates are necessary to addressing the issue. One of such strategies has been identified as improving reproductive health through the promotion of family planning methods such as the use of contraceptives [1]. Avoiding unwanted pregnancies through the promotion of family planning methods has become important in achieving the health-related Sustainable Development Goals (target 3.2) on reducing child mortality and improving maternal health [2]. Proper family planning through contraceptive use also has other health benefits such as preventing unplanned pregnancies, ensuring optimum spacing between births and improving the lives of women and children in general [3]. Modern contraceptives are products or medical procedures that interfere with reproduction from acts of sexual intercourse. There are however, some methods that do not fall under modern contraceptives, called non-modern methods. Some examples of these methods are fertility awareness, withdrawal, lactational amenorrhoea and abstinence [4]. The use of modern contraceptives in persons of reproductive age is a vital tool that helps in controlling births through child spacing. Modern contraceptive like condom also serves as a protection against sexually transmitted infection. Even so, the use of contraceptives is generally much lower in underdeveloped countries than it is in developed countries [5]. Current study showed that the proportion of modern contraceptive use among adolescents was highest in Northern America and Europe at 94.6% and it was lowest in Western Asia and Northern Africa at 71.0% [6]. It is said that approximately, 37% of single sexually active females aged 15–24 in Sub-Saharan Africa use contraceptives with 8% using a non-barrier method [2]. In Ghana, the issue of low contraceptive use is also a public health challenge. The use of modern contraceptives is found to increase from 22% in 2014 to 25% in 2017 among the women in their reproductive age [7]. The perception of contraceptive use according to a study done in the Kintampo district in Ghana revealed that majority of males compared with the females thought that contraception leads to female promiscuity [8]. It was also perceived that the use of contraceptives was the responsibility of women and so men should not be bothered about it. These perceptions of people did not enhance the use of contraceptives [8].

These indicators so far clearly highlight the need for continuous research to examine the factors influencing the use of modern contraceptives among females in the Sub-Saharan Africa region. Previous studies have also emphasized on contraceptive use among females in the general population but have failed to look at the phenomenon within special populations like female university students who are expected to become agents of change in the foreseeable future. This gap in research needs to be addressed and for which reason this study has been occasioned. The aim for this study is therefore to assess the knowledge and use of modern contraceptives among female undergraduate students in the University of Education, Winneba through the achievement of the following objectives:

- I. Assess the knowledge of modern contraceptive methods among female undergraduate students of the University of Education, Winneba-South Campus
- II. Determine the modern contraceptive use prevalence among female undergraduate students of the University of Education, Winneba-South Campus

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- III. Identify the factors influencing modern contraceptive use among female undergraduate students of the University of Education, Winneba-South Campus.

## **LITERATURE REVIEW**

### **Knowledge of Modern Contraceptives among Young Women**

Adolescents or young people's especially in developing countries risky sexual behaviour has been recognised as an important health, social and demographic concern. These youth are susceptible to many health problems partly because of their multiple sexual relationships and inadequate knowledge on sexual and reproductive health (SRH) which contribute to their inconsistent use of contraceptives such as condoms [9]. Among adolescent sex workers in Kunming-China, knowledge on sexual and reproductive health was poor [10]. In their study on awareness of modern contraceptive use among physically challenged in-school adolescents in Osun State-Nigeria, Oladije and colleagues also found that only about two-fifths of the physically challenged (38%) had ever heard about modern contraceptives [11]. Similar finding was revealed by a study meant to determine the knowledge and use of emergency contraception among students in public secondary schools in Ilorin-Nigeria [12].

Meanwhile, assessing the knowledge of contraceptive use among female undergraduates in Kilimanjaro-Kenya, it was found out that contraceptive knowledge was high with 78% of respondents being familiar with condom and 60.4% reported to have heard about the pill. Other methods such as intrauterine device, lactation amenorrhea, female sterilisation, diaphragm, and spermicides were known by only a few respondents [13]. Nyongesa and Odunga in their paper articulate that there is abundant information that contraceptive knowledge and awareness is high among the Sub-Saharan Africa population [14]. One can therefore, infer from literature that there is a mixed result with regards to knowledge of contraceptives among the youth.

### **Modern Contraceptive Use among Women**

In 2015, 57% of married women of reproductive age used a modern contraceptive method globally, constituting 90% of contraceptive users [5]. Despite this, huge gaps remain in the proportion of total demand for contraceptive satisfied with modern methods in countries where overall contraceptive use is low or where many couples rely on traditional methods of contraception [5]. Assessing modern contraceptive use among women, Egzeabher and colleagues found that about 47.9% HIV positive reproductive age women are currently using modern contraceptive methods in Northwest Ethiopia [15]. However, they argue that utilisation of modern contraceptive methods was low and that condom and injectable are the most commonly use contraceptives. Sweya and colleagues also found in their study that 43.6% of sexually active women reported that they used contraceptives in the past, while 40.4% of them were current contraceptive users. The most popular methods of contraception used were condoms, withdrawal and periodic abstinence. They therefore came to conclusion of low utilisation of modern contraceptive among these women [13]. Another study found that approximately 38% of women were not currently using contraception in the

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United States and also alluded current contraceptive use to be higher among women aged 25–34 (67.4%) and 35–44 (70.0%) compared with women aged 15–24 (47.4%) [16].

A study on contraceptive use among young women in northern Ghana revealed that about 67% of sexually experienced young women had used contraceptives, but less than a quarter had used long-acting reversible contraception (LARC). Age was the only independent predictor of contraceptive use thus women in their 20s were more than twice as likely as adolescents to use contraceptives [17]. A similar study in Ghana by also showed that prevalence of contraceptive use was 43% among young women 15-24 years with 34% modern and 9% traditional methods. Contraceptive use was found to be significantly higher among respondents with secondary education compared with those with primary education and highest among respondents with a history of pregnancy [18].

### Factors Influencing Use of Modern Contraceptives among the Youth

One study identified partner's approval, proximity and quality of the services, friendliness of the staff administering the services and the individual religion and knowledge about modern contraceptive services as factors accounting for the use of modern contraceptives in Kenya's city slums [19]. Another, reveal that factors such as education, wealth index, region, residence (urban-rural), and desire for children influence contraceptive use among women in Uganda. Their findings also showed that the likelihood of using contraceptive is associated with educational attainment of women. Thus, the more educated a woman is, the more likely she is to report use of a modern contraceptive [20]. Discussions of contraceptive use with partner influenced contraceptive use among adolescents. Adolescents who discussed contraceptive use before their first sexual encounter were more likely to use contraceptives consistently when compared to those who had never discussed contraceptive use [21]. Community characteristics and socioeconomic circumstances were also identified as important factors of contraceptive usage among adolescents' by Odimegwu [22]. Women who had given birth before also have higher tendency of using contraceptives than others who have not [22]

### MATERIALS AND METHODS

A descriptive survey design was adopted as the framework for this study. This quantitative research design enabled the researchers to unveil in-depth knowledge on the issue under study and also investigate more accurately the multiple variables involve in the study. The study was carried out at University of Education, Winneba-Ghana with a population comprising of female undergraduate students in the faculty of science education. The study took into consideration inclusion and exclusion criteria in the selection of participants from the study population thus, only female students from the faculty of science education who professed to be sexually active were deployed for the study. Hence a total of 108 sexually active female students from the various departments in the faculty were deployed for the study through purposive sampling method. The main instrument used for the study was a structured questionnaire with close ended questions. The questionnaires were administered to the respondents at the comfort of their halls and hostels by the various department female course representatives who served as volunteers. These female course representatives were briefed about the study including the content of the questionnaires and the

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exclusion criteria. One week was taken to complete the data collection exercise. Questionnaires were checked for completeness before they were collected.

Data collected were entered into and analysed using Statistical Package for Social Science (SPSS, Version 25). Questionnaires were numbered during data entry to ensure that they were not entered twice. The results thereof were presented using quantitative metrics such as Tables and figures.

Meanwhile prior to the study, permission was sought from the University of Education, Winneba and a letter of acceptance was issued through the researchers' department by the University for the Study to commence. Also, during the research, consent from the participating respondents was sought before their participation. Throughout the study, efforts were also put in place to ensure the respect, dignity, anonymity and confidentiality of the study participants so as to ensure that the research was conducted in line with the code of ethics of the University of Education, Winneba and general ethical standards.

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## PRESENTATION OF FINDINGS

### Socio-Demographic Characteristics of Respondents

The socio-demographic information of respondents was taken to put the results of this study in the right context. The results of the analysis have been summarised in *Table 1* below.

**Table1: Socio-Demographic Characteristics of Respondents**

Variable	Options	Frequency	Percentage%
Age	15-20 years	9	8.3
	21-26 years	83	76.9
	27-32 years	15	13.9
	33 years and above	1	0.9
	Total	108	100%
Religion	Christian	100	92.6
	Islam	8	7.4
	Total	108	100%
Marital status	Married	8	7.4

	Single	95	88.0
	Other	5	4.6
	Total	108	100%
Level in	100	36	33.33
University	200	25	23.15
	300	25	23.15
	400	22	20.37
	Total	108	100%

Source: Researchers' Field Survey (December, 2021).

The results of the study as shown in **Table 1** above indicates that majority of the female students who responded were within the age brackets of 21-26 years (76.9%). Most of the respondents were Christians (92.6%) and single (88.0%) with significant number of them being in their first year (33.33%) in the university.

#### Knowledge of Modern Contraceptives

Results of the study as shown on **Table 2** depict that at least 89.8% of the respondents have heard about a modern contraceptive method. Social media (63.9%), peers (61.9%), radio/TV (47.4%), and health workers (46.4%) were the common media through which respondents heard about modern contraceptive methods. Pills (96.9%), female condoms (72.2%), and injectable (52.6%) are the most popular modern methods known to respondents. Also, information on the knowledge of respondents on the accessibility of modern contraceptive was assessed and the results have been summarized on Table 2 below.

**Table 2 Knowledge of Modern Contraceptive Methods**

Variable	Options	Frequency	Percentage %
Have you ever heard about any modern contraceptive method?	Yes	97	89.8
	No	11	10.2
	Total	108	100
If yes, through what medium did	Radio/TV	46	47.4

you hear about it?	Peers	60	61.9
	Parents	16	16.5
	Partner	19	19.6
	Health worker	45	46.4
	Teacher/lecturer	37	38.1
	Social media	62	63.9
Modern methods respondents have knowledge of.	IUD	38	39.2
	Pills	94	96.9
	Female Condom	70	72.2
	Injectable	51	52.6
	Lactation amenorrhea (LAM)	18	18.6

Source: **Researchers' Field Survey (December, 2021).**

Assessing the knowledge of respondents on the accessibility of modern contraceptive as presented in **Table 3** revealed that that majority of the respondents (93.5%) have knowledge of where to get access to modern contraceptives. When asked about the places to get access to modern contraceptives, the most popular places mentioned were pharmacy (96.0%) and family planning clinic (46.5%). Also, majority of the respondents were aware that modern contraceptives do not provide 100% protection against pregnancy.

**Table 3: Knowledge of Access to Modern Contraceptive Methods**

Variable	Options	Frequency	Percentage %
Do you know where to get any modern contraceptive within the community?	Yes	101	93.5
	No	7	6.5
Total		108	100

If 'Yes', where is this place?	Clinic	29	28.7
	Pharmacy	97	96.0
	Health worker	21	20.8
	Family planning clinic	47	46.5
	Peers/ friends	15	14.9
	Family members	8	7.9
Do you think the use of modern contraceptives provides 100% protection from becoming pregnant?	Yes	34	31.5
	No	68	63.0
	Do not know	6	5.6

Source: Researchers' Field Survey (December, 2021).

#### Modern Contraceptive Use Prevalence

As presented in *Table 4*, the result of the study showed that majority of the respondents has ever used modern contraceptives (57.4%). Out of this percentage, all of them (100%) reported using pills. The rest of the modern contraceptives were unpopular among the respondents. Also, 58.1% of those who reported that they have ever used contraceptives were still using them. Understandably, majority of them were still using pills (94.4%). Majority of those who reported that they have stopped using modern contraceptives said they stopped because of the side effects (84.6%). On the issues of how often they use modern contraceptives, majority of them said they use it once a while (50%). Most of them also said they used contraceptives in order to avoid pregnancy.

**Table 4: Modern Contraceptive Use prevalence**

Variable	Options	Frequency	Percentage %
Have you ever used a contraceptive before?	Yes	62	57.4
	No	46	42.6
	Total	108	100
If Yes, which of the methods	IUD	3	4.8

have you used before?	Pills	62	100.0
	Implants	2	3.2
	Female condom	4	6.5
	Injectable	5	8.1
	LAM	2	3.2
Are you currently using a contraceptive method?	Yes	36	58.1
	No	26	41.9
	Total	62	100
If YES which one are you using?	IUD	1	2.8
	Pills	34	94.4
	Implants	0	0.0
	Female condom	1	2.8
	Injectable	2	5.6
	LAM	0	0.0
If NO why have you stopped using?	To become pregnant	3	11.5
	Side effects	22	84.6
	No longer have a partner	9	34.6
How often do you use any of the methods?	Every time	8	7.4
	Once a while	53	50.0
	Not at all	46	42.6
Why did you use or are you using	Delay childbirth	5	8.1

modern contraceptives?	Avoid pregnancy	45	72.6
	Prevent STIs	10	16.1
	My partner wants it	3	4.8

Source: Researchers' Field Survey (December, 2021).

### Factors Influencing Modern Contraceptive Use

From the analysis of the data as evidenced in *Table 5*, availability of service points (45.4%), partner support (43.5%), knowledge of modern contraceptives (62.0%), and religious beliefs (34.3%) were the factors that most influenced the decision of respondents to use modern contraceptives. Also, an overwhelming majority (91.7%) of the respondents were confident they would go to facilities where there was place dedicated to sexual reproductive health issues to get access to modern contraceptives. Moreover, most (62.0%) of the respondents agreed that the public held a negative perception of females who used contraceptives. However, more than half (58.3%) of them claimed that they were not influenced by that perception.

**Table 5: Factors Influencing modern contraceptive Use**

Variable	Options	Frequency	Percentage %
Which of the following can influence you to or not to use a modern contraceptive?	Attitude of health workers	20	18.5
	Availability of service points	49	45.4
	Partner support	47	43.5
	Knowledge of modern contraceptives	67	62.0
	Religious/cultural beliefs	37	34.3
	Peer influence	9	8.3
	Parent support	9	8.3
Will you go to any facility	Yes	99	91.7

if there is a place made specially to take care of sexual reproductive health related issues?	No	9	8.3
	Total	108	100
Does the public perceive females who use modern contraceptives as promiscuous?	Yes	67	62.0
	No	41	38.0
	Total	108	100
Will this perception of the public stop you from using modern contraceptives?	Yes	45	41.7
	No	63	58.3
	Total	108	100

Source: Researchers' Field Survey (December, 2021).

#### Discussion of Results

The result of the study revealed majority of the respondents (89.8%) asserting that they have heard about modern contraceptives with Pills followed by female condom being the modern contraceptives that they are most knowledgeable of. The prominent means through which they got to hear of these modern contraceptives was found in the decreasing order of social media (63.9%), peers (61.9%), and radio/TV (47.4%), and health workers (46.4%). Most respondents also knew of where to get these contraceptives and also recognised the fact that the contraceptives they are familiar with cannot guarantee 100% pregnancy prevention. These findings seems to be in line with similar study meant to assess the knowledge of contraceptive use among female undergraduates in Kilimanjaro-Kenya which indicated majority of the respondents knew of some modern contraceptives with 78% and 60.4% of respondents being familiar with condom and the pill respectively [13]. The result also seems to partly support the assertion made by Nyongesa and Odunga in their paper which articulates that there is abundant information

regarding contraceptive knowledge and awareness among the Sub-Saharan Africa population [14]. This is because even though the results suggest majority of the respondents being knowledgeable in some modern contraceptives, it is worth recognising that these respondents are tertiary students and so are prone to large access to information through the various media platforms as even evidenced by the study (refer to Table 2). Their location thus being in the city and age (most above 21 years) may also play a role in their level of knowledge on contraceptives however, same argument cannot be made for the significant number of Sub-Saharan Africans or Ghanaians who have less or no level of education and are also situated in rural areas where there is poor network and speaking of sex issues seems abomination. Such assertions can only be true when it is made with respect to certain group of the people in the population such as tertiary students.

Even though respondents seem to have some level of knowledge on some modern contraceptives, the results of the study showed a significant number of them (46%) not utilising these modern contraceptives even though they were all sexually active. These findings seem to support other studies whose findings also showed a significant number of respondents not utilising contraceptives [15, 13, 17]. Pills were found to be the most utilised contraceptive in the study perhaps because of its accessibility and convenient mode of usage, however, as evidenced in the study participants were not using it any longer mainly because of its side effects (refer to table 5). This infers that if we want even the very few who are using contraceptives example pills to continue using it, there is the need for more scientific enquiry to produce contraceptives (pills) which are more biologically friendly with very minimal side effect on the user. There must also be intensive education on the need to utilise the other equally effective contraceptives with very minimal side effect like the female condom which also has extra advantage of preventing STDs during copulation. There is the need to emphasize the ultimate reason to prevent STDs and prevent unwanted pregnancy to the very small reduction of "enjoyment" which is often associated to the usage of Condoms. There must also be continual improvement of production of condoms especially the female ones to help alleviate this perceived challenge that comes with its usage.

Assessing the factors influencing respondents' contraceptive usage revealed that respondents' knowledge on a type of modern contraceptive and presence of special facility to offer sexual reproductive healthcare services played a major role in their decision to utilise contraceptive. This matches with a study which also identified knowledge about modern contraceptive as one of the factors accounting for the use of modern contraceptives in Kenya's city slums [19]. Knowledge does not only sensitise or create awareness about a particular phenomenon but, it also has the ability of influencing decisions as it is even being emphasized in many marketing concepts. People who have knowledge about a given product or service are potential customers or clients of that product or service and same is true in health decision making. One's knowledge on the long term effect of STDs and pregnancy may deter him/her from having an unprotected sex. However, as evidenced by this study, knowledge alone is not always enough. Other factors that can equally influence modern contraceptives utilisation include availability of service points, partner support and public influence are as it is also indicated in other previous studies [19, 21]. Taking Ghanaian society for example, it is not uncommon to hear even a very typical educated Ghanaian male and female assert "I want it raw" implying he/she does not want any rubber intermediary in as much as sex is concerned and so in this

context, approval from the male side is very critical for the utilisation of a modern contraceptive like female condom by the female. It obvious that irrespective of the knowledge one may possess, if one cannot get access or if there is no availability of a particular modern contraceptive then one can equally not be able to utilised it. The public will continue playing a major role in the utilisation of modern contraceptives especially in a Ghanaian society where the culture of almost all the ethnic group seems to portray utilisation of modern contraceptives with negative connotation. If the youth and the elderly must improve their contraceptive usage then a lot of work must be done to sensitise and educate the general public on the need to embrace and accept the use of modern contraceptive.

### **Conclusion**

The study was carried out in University of Education, Winneba South Campus with the aim of assessing the knowledge and use of modern contraceptives among female undergraduate students. The study indicated that majority of respondents have heard of at least one modern contraceptive. Even though majority of the respondent knew of a particular contraceptive, yet a significant number of them were found not utilising it. Major factors found to be influencing utilisation of modern contraceptives were knowledge of the modern contraceptive, availability of modern contraceptive service point and public perception concerning modern contraceptives.

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