

Perception of Condoms and Emergency Contraceptive Pill Use among Students in the University of Bamenda

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How to cite this paper: Takang, W.A., Tana, A.A., Pisoh, W.D. and Atanga, M.B.S. (2023) Perception of Condoms and Emergency Contraceptive Pill Use among Students in the University of Bamenda. *Open Journal of Obstetrics and Gynecology*, 13, 589-608.

<https://doi.org/10.4236/ojog.2023.133051>

Received: September 16, 2022

Accepted: March 26, 2023

Published: March 29, 2023

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Abstract

Background: Globally, university students fall in the youth group prone to unattended sexual risks which may lead to unwanted pregnancy and STI/HIV. In Cameroon, more than a third of maternal deaths occur among adolescent girls and young mothers. Unwanted pregnancies results from the infrequent use of modern contraceptive methods and is one of the main causes of death in this population. Condoms are barrier contraceptive that have a beauty of dual protection-against pregnancy and transmission of STI/HIV, meanwhile emergency contraceptives has just one function which is protection against unwanted pregnancy. **Aim:** To assess the perception of condoms and emergency contraceptive pill use among students in the university of Bamenda, Cameroon. **Materials and Methods:** A university-based cross-sectional study was conducted among students in the University of Bamenda, North West Region of Cameroon, a cosmopolitan area approximately about 19 km from Bamenda main town (Commercial Avenue). The study was carried out over a period of three months. Data were collected using a structured interviewer questionnaire administered through Google form. Data collected were extracted into excel sheet and analysed with SPSSv23. **Results:** The study included 719 students (318 males and 401 females). The rate of male and female condom use was 28.5% and 8.1% respectively. The mean age of our study populations was 24.5 ± 4.97 years with 52.7% of population between 20 to 24 years of age. Knowledge about condoms was high at 98.3%, however, 91.9% of participants have never used the female condoms before. Highest factor recorded for non-utilisation of the male and females condoms were reduction in sexual pleasure (47.4%) and lack of knowledge on usage (44.1%) respectively. 95% of students have knowledge on Emergency Contraceptive Pills (ECPs) but just an average (52.4%) have used it before. Fear of side effects

(47.4%) was the main reason for not using ECPs. **Conclusion:** There is a very high knowledge about condom and emergency contraceptive pill among students. However, the rate of usage recorded was very low with highest source of information being the media/internet and lowest among relatives/family.

Keywords

Contraceptive, Unwanted Pregnancy, STI/HIV

1. Introduction

1.1. Background

Worldwide, university students fall in the youth group which is prone to unattended sexual risks behaviours [1]. This may lead to unintended pregnancy and Sexually Transmitted Infections (STIs) [1], which are contemporary public health concerns among university students. One of the key strategies used to prevent these problems is to use condoms and Emergency Contraceptive pills (ECP) as methods of modern contraception [1]. Though these problems are the most public health problems, they are still prevalent.

One fifth of the worldwide burden of illnesses and premature death is due to problems in reproductive and sexual health [2]. In September 2015, 193 countries of the United Nations General assembly adopted the Sustainable Development Goals (SDGs). One of these goals were aimed at reducing the global maternal mortality ratio to less than 70 per 100,000 live births and also to ensure universal access to sexual and reproductive health services [3]. Aspects of these strategies include access to family planning, information and education and the integration of reproductive health into national strategies and programs [3]. One aspect of this strategy includes providing high quality contraceptive services. Methods of contraception make it possible for individuals and couples to determine the number and spacing of their children [1] [2], prevent unwanted pregnancy which can lead to unsafe abortion and decrease incidence of Sexually Transmittable infections(STI) and HIV [4] [5].

Globally, pregnancy in young people has become a major public health concern. About 10% to 40% of young females encounter unwanted pregnancy in developing countries [6]. Women who start their first sexual intercourse at an early ages are less likely to use contraceptive methods due to the lack of knowledge and access to contraceptive method [5] [7]. The vast majority of unintended pregnancies are due to contraceptive non-use, inconsistent use and reliance on ineffective methods of contraception [5] [7]. Lack of a method of choice, knowledge about safety, effectiveness and availability of choices as well as financial constraints are listed among key barriers to contraceptive use worldwide [2]. Today, there are many modern methods of contraception with different routes of administration including hormonal pills, spermicides, male and female con-

doms, rings, and others [8]. Knowledge on use, immediate and direct access to these modern methods of contraception and especially emergency contraceptives is of great importance [9] [10]. Emergency contraceptive pill is a relatively new method which could also prevent a significant number of unwanted pregnancies [7].

Furthermore, incidence and prevalence of STI and HIV/AIDS can be reduced using condoms which are a form of modern method of contraception [11]. Condoms are barrier methods used to protect against STIs, HIV and unwanted pregnancies simultaneously [11] [12]. Consistent and correct use of condoms prevents acquisition and transmission of STI and HIV [11]. Worldwide, 33.9 - 43.8 million people were living with HIV at the end of 2021. An estimated 0.7% of adults aged 15 - 49 years worldwide are living with HIV [13].

Globally, six out of 10 of all unintended pregnancies end up in induced abortion [14]. WHO fact sheet 2022 reports recorded 121 million unintended pregnancy from 2015-2019 worldwide. 45% of abortions are unsafe, of which 97% take place in developing countries [14]. In a study among students in 42 universities in China, 31.8% had unintended pregnancies and 53.5% of them had two or more abortions [15]. Similarly in 2019 among undergraduate students in University of Ibadan Nigeria, 17% of students had unwanted pregnancy and 51% induced abortion rate [16].

In Cameroon, the prevalence of induced abortion reported in 2015 was 25% [17] [18]. Unsafe abortion was responsible for 25% maternal deaths in Cameroon by 2015 [17] [18]. To the best of my knowledge, this has been the last study to have been carried out since then.

University students in Cameroon are mostly youths who enrol into any higher educational institution in the country. A youth is defined as a person between 15 to 24 years of age by the United Nation since 1981. This is a critical transition period from childhood dependence to adulthood independence, during which physical, psychological and sexual changes occur [19]. This is the time where most people start exploring their sexuality and having intimate relationships [19].

Most university students in Cameroon are between ages 15 to 24 years. According to the National Statistics Institute in 2018, young girls aged 15 to 24years constitute 10.4% of Cameroonian population [20]. Felix *et al.*, in 2019 reported high knowledge about condoms and EC but low utilisation. He reported a utilization rate of 42.3% for condoms and 37.6% for emergency pills among students in university of Yaoundé 1 [20]. Also, In Cameroon, more than a third of maternal mortality occurs among adolescents and young girls which are predominantly university students [20]. As such, getting the proper knowledge of contraception before starting the first sexual activity is essential for University Students to prevent Sexually Transmitted Infections, unwanted pregnancy and unsafe abortions [5] [7].

Some studies have elaborated on the consequences of non-use of condoms and ECP. If there is effective contraception usage among youth, it would reduce unintended pregnancies by 59%, unplanned births by 62%, abortion by 57%, and

miscarriage of unintended pregnancies by 71%. Moreover, nearly 32% of maternal mortality, 90% of abortions, and 20% of pregnancy-related morbidity and mortality could be prevented [21] [22]. Therefore, knowledge and correct use of condoms and emergency contraceptive pills among University Students will play an essential role in saving their lives by reducing unwanted pregnancies, unsafe abortion, and STI's.

1.2. Problem Statement

Maternal mortality is a major public health challenge in Cameroon with an estimated rate of 406 maternal deaths per 100,000 live births [23]. It remains a dilemma because young mothers and adolescent girls contribute to a third of the cases [24]. 10.4% of Cameroons populations constitute of young girls between 15 to 24 years and less than 15% of them use condoms and emergency contraception to prevent pregnancies [20]. This is coherent with the low rate of contraceptive use of 13% in the North West Region reported in 2018 with 81.5% not using any method of modern contraception [25]. This low rate of use of contraceptive indirectly limits the use of condoms and EC. This will increase incidence of unintended pregnancies and prevalence of STI. Consequently, this increases risk for unsafe abortions.

1.3. Justification

From the data which will be gathered from this study, we will use the information to come out with adapted sexual and reproductive programs as such reducing rate of unwanted pregnancies and unsafe abortions. Also, awareness programs will be developed for university students and programs to train peer educators to facilitate health education among university students.

1.4. Research Question

- 1) What is the prevalence of condom and emergency pill use among students in the University of Bamenda?
- 2) What is the knowledge of condoms and ECP among Students in the University of Bamenda?
- 3) What factors influence non-use of condoms and ECP by Uba Students?

1.5. Research Hypothesis

Ho: There is no significant relationship between knowledge of condoms and ECP and their use among students in the University of Bamenda.

Ha: There is a significant relationship between knowledge of condoms and ECP and their use among students in the University of Bamenda.

1.6. Research Goal

To assess the knowledge of condom and ECP among the university of Bamenda students.

1.6.1. General Objective

To determine the perception of condoms and ECP among students in the university of Bamenda.

1.6.2. Specific Objective

- 1) To determine the rate of condoms and ECP use.
- 2) To assess the knowledge of condoms and ECP use among students in the University of Bamenda.
- 3) To identify the factors influencing non-use of condoms and ECP.

2. Material and Methods

2.1. Study Design

This was a University-based cross-sectional study.

2.2. Study Period

This study was carried out from February to June 2022.

2.3. Study Area and Setting

The study area was in lone state university in the North West Region, the University of Bamenda. It has an estimated population of 15,000 students. The University of Bamenda has both undergraduate and pot-graduate education with a wide range of courses.

2.4. Study Population and Sampling

2.4.1. Study Population

The study population involved participants attending school in the University of Bamenda. The University of Bamenda is found in Bambili, a cosmopolitan area approximately about 19 km from Bamenda main town (Commercial Avenue). Being a state university, with verities of faculties and students from many ethnic and religious origins, it will serve as a true representation of other universities in Cameroon. The University of Bamenda is made up of 6 faculties and 7 schools.

2.4.2. Sampling Method

The multistage sampling technique was used. Firstly, the simple random sampling method (balloting) was used to select the North West Region to be our study area among all 10 regions in Cameroon. The Simple Random Sampling method (balloting) was still used to pre-select the University of Bamenda among all accredited higher institutes in the North West Region. Within the university, participants were approached online using the Google forms questionnaire sent to them by their respective class coordinators (**Figure 1**).

2.4.3. Inclusion Criteria

Everyone who gave their consent to participate in the study.

2.5. Sample Size

The closest study to this one was done by Nyambura *et al.*, in 2017 [25] in North

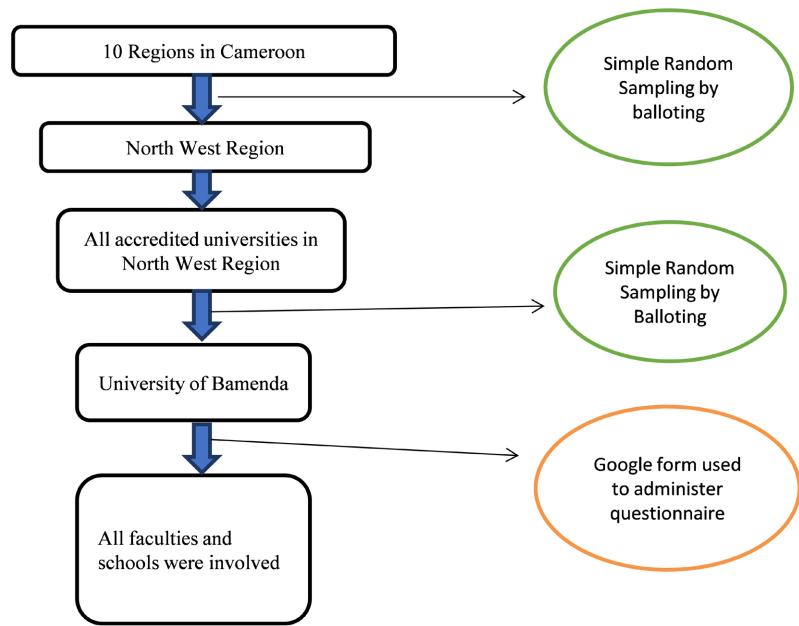


Figure 1. Sampling methods.

West Region. The rate of modern contraceptive use was 20% in the North West Region of Cameroon. Hence the Lorentz formula below will be used to calculate the minimum sample size for the study:

$$N = \frac{Z^2 p(1-p)}{d^2}$$

where,

N = sample size.

p = prevalence of modern contraceptive use = 20%.

Z = standard normal variant = 1.96 at 95% confidence interval.

d = margin of error to be tolerated = 0.05.

Therefore, $N = 245.86 \approx 246$ students will be sampled.

2.6. Study Procedures

2.6.1. Ethical and Administrative Procedures

An ethical clearance was obtained from the Institutional Review Board (IRB) of the Faculty of Health Science, University of Bamenda. When granted, Administrative authorisation was obtained from the Northwest Regional Delegation of Public Health.

2.6.2. Data Collection Tools and Procedure

Participants were approached through the online system by means of Google forms. Therefore, all those who filled in the Google form accepted to be part of the study.

2.7. Data Processing and Analysis

Following the responses generated from Google forms, all filled questionnaires

were checked for completeness and consistency, cleaned manually, and an MS excel 2013 document was generated and exported to SPSSv23 for analysis. Categorical variables are presented as frequencies and their proportions. Continuous variables are presented as means (and standard deviation) or median (and inter-quartile range) where appropriate, or as frequencies and percentages.

Results are represented on tables and figures (pie charts and bar charts) to ease organization and comprehension.

2.8. Variables

Independent Variable: Socio-demographic, sexual behaviour, variables relate to knowledge and utilisation of condoms and ECP.

Dependent Variable: knowledge, utilisation and factors associated with non-use of condoms and ECP.

Objective 1:

To determine the rate of condoms and ECP use.

Objective 2:

To assess the knowledge of condoms and ECP use among students in the University of Bamenda.

Objective 3:

To identify factors influencing non-use of condoms and ECP.

Operational Definitions

1) Condom Utilisation

- Ever use: A condition in which students had a history of utilisation of condoms at least once in the past.
- Currently use: The use of condoms within the past 12 months.

2) Emergency Contraceptive Pill Use: History of ever use of ECP on the basis of their knowledge of use at least once to prevent unwanted pregnancy.

3) Unintended pregnancy: Pregnancies which are not planned for.

4) Sexually Transmitted Infection (STI) is infections which are transmitted through sexual intercourse.

5) Knowledge on Condom or ECP: Ever heard of condoms or ECP: High Knowledge $\geq 70\%$ and Low Knowledge $< 70\%$.

6) Unprotected sexual intercourse: Is an intercourse taking place without use of condoms.

7) Sexual practice: Ever had sexual intercourse.

8) Unprotected sexual intercourse: having sexual intercourse without the use of condoms.

2.9. Ethical Consideration

The study started only after administrative and ethical clearance has been obtained. All participants signed a consent form on the initial page of the Google form explaining the details of study, including risks and benefits before being included in the study. The questionnaires were anonymous. Participants who

opted to withdraw from the study at some point in time could do so. The confidentiality of participants was maintained by using codes rather than names on questionnaires. Privacy was maintained during all stages of filling the questionnaire.

2.10. Resources Needed

Human Resources:

- A principal investigator.

Material Resources:

- Internet
- Smart Phone
- Laptop

3. Results

During the study period, 741 participants were approached. We excluded 22 participants with incoherent/incomplete data on questionnaire (Figure 2).

3.1. Description of Study Population

Socio-Demographic Population

From the sample pool of 719 participants as presented in Table 1 below, the age ranged from 15years to participants above 35 years. In this pool, participants between 20 - 24 years were the majority (52.7%) and only 24 out of 719 (3.3%) were above 35 years. The gender demographics revealed that female participants were predominant (55.8%). The mean age of the study population was 24.59 ± 4.97 . Majority of the participants were not married (87.5%). More than 70% were undergraduate students. A graphical representation of the sample size is shown on the pie chart below (Figure 3). Table 1 below summarizes the socio-demographic characteristics of studied participants.

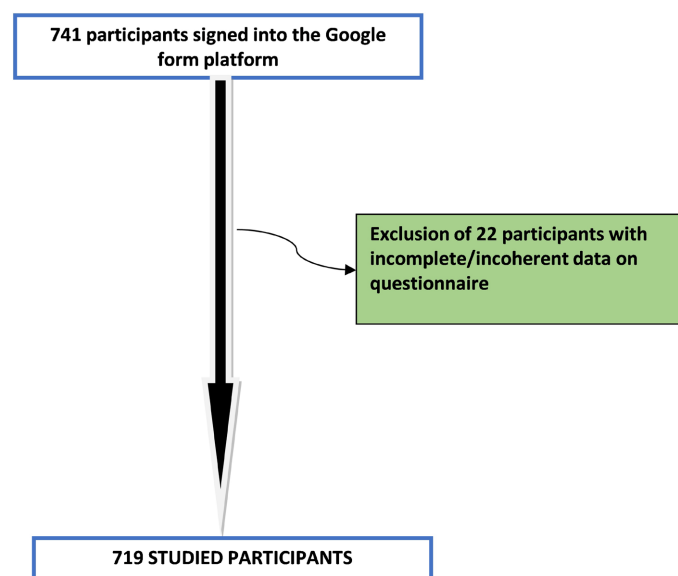
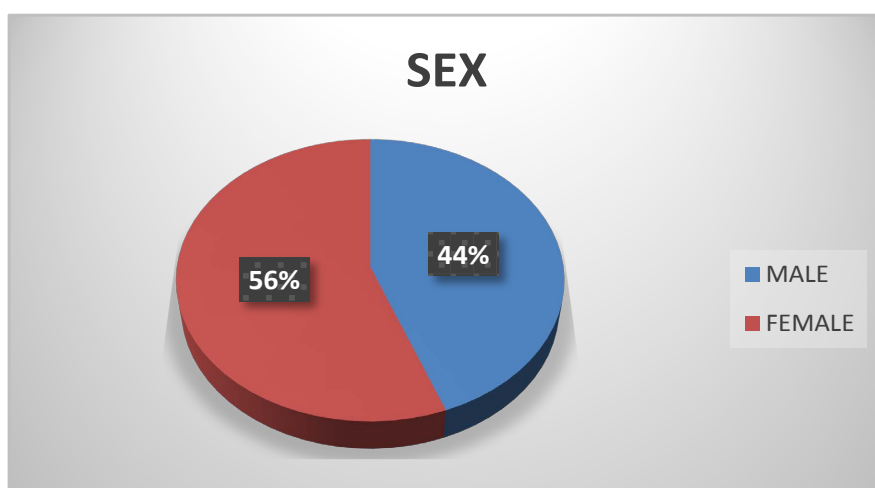


Figure 2. Flow chart depicting inclusion of participants.

Table 1. Socio-demographic characteristics of study participants.

	POPULATION CHARACTERISTIC	FREQUENCY (n)	PERCENTAGE (%)
AGE	15 - 19	54	7.5
	20 - 24	379	52.7
	25 - 29	214	29.8
	30 - 34	48	6.7
	>35	24	3.3%
	Total	719	100
SEX	Male	318	44.2
	Female	401	55.8
MARITAL STATUS	Single	629	87.5
	Married	90	12.5
LEVEL OF EDUCATION	Undergraduate	547	76.1
	Postgraduate	172	23.9
RELIGION	Christian	701	97.5
	Muslim	12	1.7
	Others	6	0.8

**Figure 3.** Pie Chart showing gender distribution across study population.

3.2. The Rate of Condoms and ECP Use among Students

Figure 4 below depicts the rate of contraceptive use among students in the University of Bamenda. There rate of condom use for both male and female condom were very low. Also, there was an average use of ECP among study participants.

3.3. Knowledge, Attitude and Practice Regarding Condoms amongst Respondents

3.3.1. Knowledge Regarding Condoms amongst Respondents

Table 2 below shows knowledge regarding condoms among the studied participants. The results show that more than 87.5% of the students have had sex

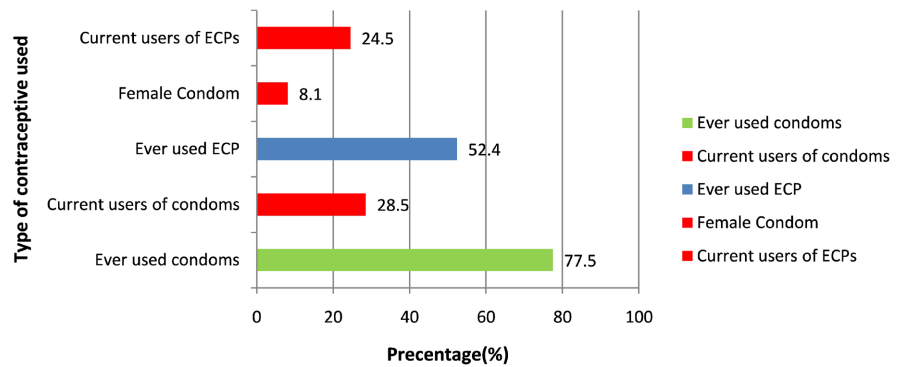


Figure 4. Rate of condom and ECP use among Students in the University of Bamenda, May 2022.

Table 2. Knowledge regarding condoms among the participants.

VARIABLES	RESPONSES	FREQUENCY (n)	PERCENTAGE (%)
Have you ever had sexual intercourse?	Yes	629	87.5
	No	90	12.5
Do you know condoms?	Yes	707	98.3
	No	12	1.7
Does condom protect against sexually transmitted infections/HIV?	Yes	659	91.7
	No	18	2.5
	Don't Know/Not Sure	42	5.8
Does condom protect against pregnancy?	Yes	671	93.3
	No	18	2.5
	Don't Know/Not Sure	30	4.2

intercourse and about 83.5% had sexual intercourse in last 12 months. A whooping majority (98.3%) claimed to have heard or had knowledge of what a condom is. As concerns where the participants got condom related information from (Figure 5), a good majority obtained information from social media or the internet (34.2%) and the least from relatives (12.4%). Assessing their knowledge on whether condoms can prevent sexually transmitted infections and pregnancy, there was a high knowledge as to regards of condoms preventing pregnancy and STI/AIDS (93.3% and 91.7%) respectively.

3.3.2. Attitude and Practice towards Condom Usage

Table 3 below shows the students attitude and practices of condom at the time of the study. More than 75% of students are currently sexually active. Out of this, 96.7% and 92.5% have heard about the male and female condoms respectively. 91.9% participants have never used female condoms. Those who used condoms got their condoms mostly from pharmaceutical/drug stores (54.9%) and less so from hospitals (45.1%). Only 3.3% of condom users used it always. The

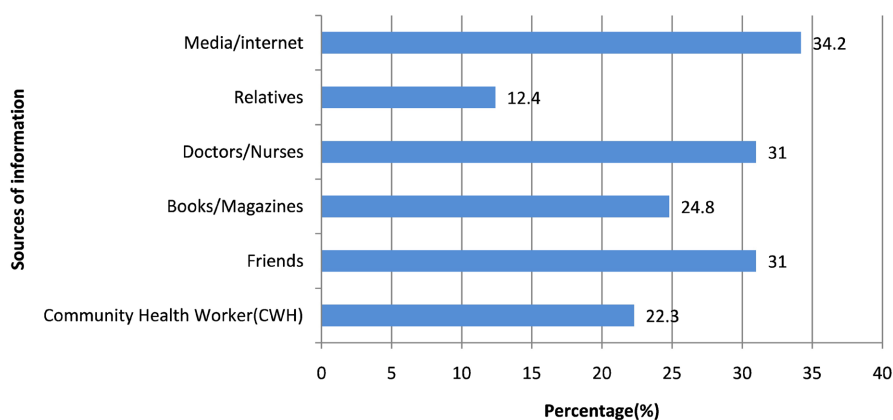


Figure 5. Sources of information about condoms.

Table 3. Attitude and Practice towards condom usage.

VARIABLE	RESPONSES	FREQUENCY (n)	PERCENTAGE (%)
Are you sexually active?	Yes	545	75.8%
	No	174	24.2
Have you ever heard of the male condom?	Yes	695	96.7
	No	24	3.3
Have you Ever used male condom during sexual intercourse?	Yes	557	77.5
	No	162	22.5
Do you know how to correctly use it?	Yes	533	74.1
	No	186	25.9
When last did you use male condom?	Between 1 and 3 months	181	25.2
	Greater than 3 months	514	71.5
	Always	24	3.3
Have you ever heard of the female condom?	Yes	665	92.5
	No	54	7.5
Have you ever used a female condom?	Yes	58	8.1
	No	661	91.9
Where do you get condoms?	Hospitals	324	45.1
	Pharmaceutical/Drug Store	395	54.9
	Uba Health Center	0	0

frequency of utilisation was a majority greater than 3 months after last use (71.5%). The main reason given by the participants for not using condom is that it reduces satisfaction (47.4%).

3.3.3. Knowledge Regarding ECPs amongst Respondents

More than 70% of the students have had unprotected sexual intercourse. About

95% have heard of emergency pills (ECPs). Above 50% know how to correctly use ECP (Table 4 and Figure 6).

3.3.4. Attitude and Practice towards Emergency Contraceptive Pill of Participants

Of the 719 participants, 377 (52.4%) have ever used Emergency contraceptive pill during sexual intercourse. These participants mostly got their ECPs from Drug stores/pharmaceuticals (65%) and less so from Hospitals (35%). Fear of side effects was the main reason (47.4%) chosen by participants for not using ECPs. A good majority (74.1%) of ECP users were doing so without prescription. Table 5 and Figure 7 below summary these findings.

3.4. Factors Influencing Non-Utilisation of Condoms and ECPs

The following factors were stated as reasons for not using either condoms or emergency contraceptive pills among the studied participants. These are illustrated graphically on the following figures.

Table 4. Knowledge of emergency contraceptive pill among participants.

VARIABLE	RESPONSES	FREQUENCY (n)	PERCENTAGE (%)
Do you have unprotected sexual intercourse	Yes	528	73.4
	No	191	26.6
Ever heard of Emergency contraceptive Pills (ECPs)? e.g. Postinor, Norlevo	Yes	683	95
	No	36	5.0
Can ECPs protect against STI/HIV?	Yes	36	5.0
	No	593	82.5
	Don't Know/Not Sure	90	12.5
Can ECPs protect against pregnancy?	Yes	365	50.7
	No	203	28.3
	Don't Know/Not Sure	151	21.0
Maximum time after sex within which ECPs should be taken	12 hours	12	1.7
	24 hours	96	13.4
	48 hours	72	10.0
	72 hours	383	53.3
	Don't know	156	21.7
When should ECPs be taken?	After Sexual intercourse	472	65.6
	Before sexual intercourse	6	0.8
	Either before or after sexual intercourse	127	17.7
	Don't know/Not sure	114	15.9
Is it Ok to use ECPs as a regular contraceptive method?	Yes	104	14.5
	No	615	85.5

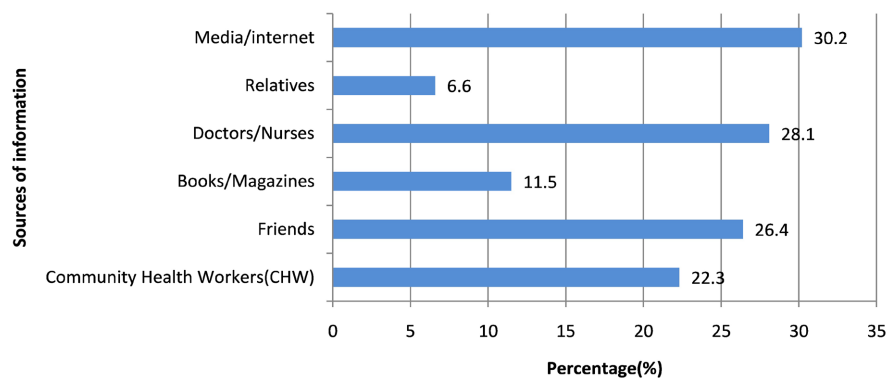


Figure 6. Sources of information about ECPs.

Table 5. Attitude and Practice towards ECP among participants.

VARIABLES	RESPONSES	FREQUENCY (n)	PERCENTAGE (%)
Have you ever used Emergency contraceptive pill (ECP)?	Yes	377	52.4
	No	342	47.6
Have you used in last 12 months?	Yes	176	24.5
	No	543	75.5
Where do you get ECPs	Hospitals	252	35.0
	Pharmaceutical/Drug Store	467	65.0
Do you use ECP with prescription?	Yes	186	25.9
	No	533	74.1

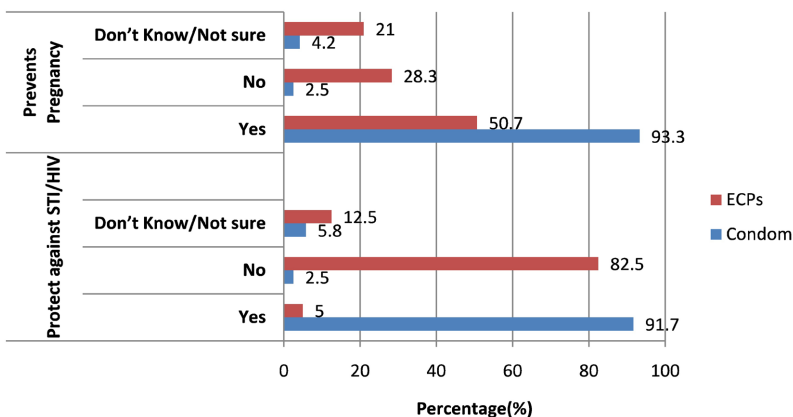


Figure 7. Knowledge about prevention of pregnancy and STI/HIV among studied participants.

3.4.1 Factors Influencing Non-Utilisation of Condoms

Based on the outcome of the findings most of the students (48.9%) claimed using a condom reduces the pleasure obtained during intercourse. However as seen on **Figure 8**, other reasons account for the non-utilisation of condoms like religious reasons (5.8%), non-availability (5.8%) and not reliability in preventing

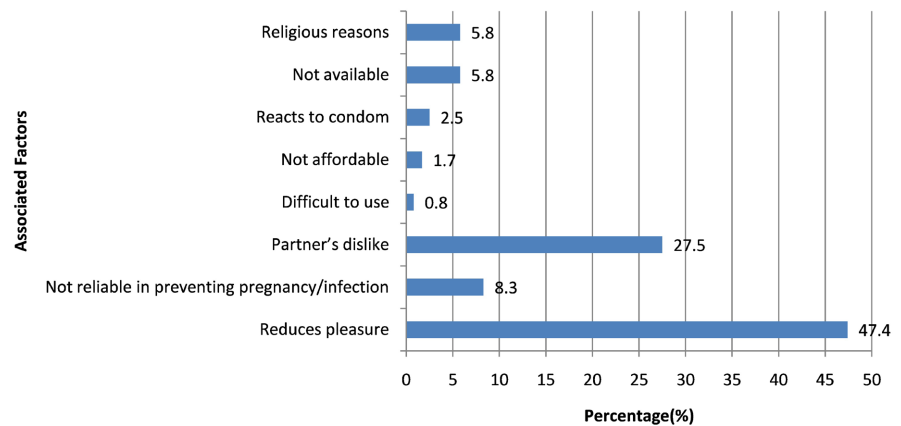


Figure 8. Factors associated with non-utilisation of male condoms among students in the University of Bamenda, May 2022.

(8.3%). After key factor is seen on the figure is the dislike of the partner (27.5%). To a lesser extent other reasons like reaction to condom (2.5%), affordability (1.7%) and difficulty in usage (0.8%) also account for the non-utilisation of the condom.

The students of students of the University of Bamenda among the sample that represented claimed that their reluctance to use male condoms could be attributed to lack of knowledge of usage (44.1%). Some also hold it that their reluctance is due to personal reasons (23.4%) and to a lesser extent very few attribute their reluctance to difficulty/comfortability (12.5%), and not readily available (18.4%). A negligible number of the student population believe the condom is expensive (1.7%) as shown on **Figure 9**.

3.4.2. Factors Influencing Non-Utilisation of ECPs

As far as the use of ECPs is concerned most of the students claimed they avoid using it for fear of side effects (46.1%). A good number also attributed their reluctance to use ECPs to personal reasons (16.1%), religious reasons (15.2%) and unsupportive partner (15%). Very few said ECP is just costly (7.6%) and so they won't go for it easily (**Figure 10**).

4. Discussion and Conclusion

4.1. Discussion

The aim of this study was to determine the perception and utilization of condoms and ECPs among students of the University of Bamenda. A total of 719 students were recruited for this study. In Bamenda, particularly in Bambili where University of Bamenda is located, sexual intercourse has become very common. The mean age of the participants was 24.59 ± 4.97 years, majority of the students were single. Among the 719 participants, 76.9% were undergraduates.

The study shows that the prevalence of sexual intercourse is 87.9% and majority have had sexual intercourse within the last 12 months. With the high prevalence of sexual activity, the knowledge about condom was high (96.7%)

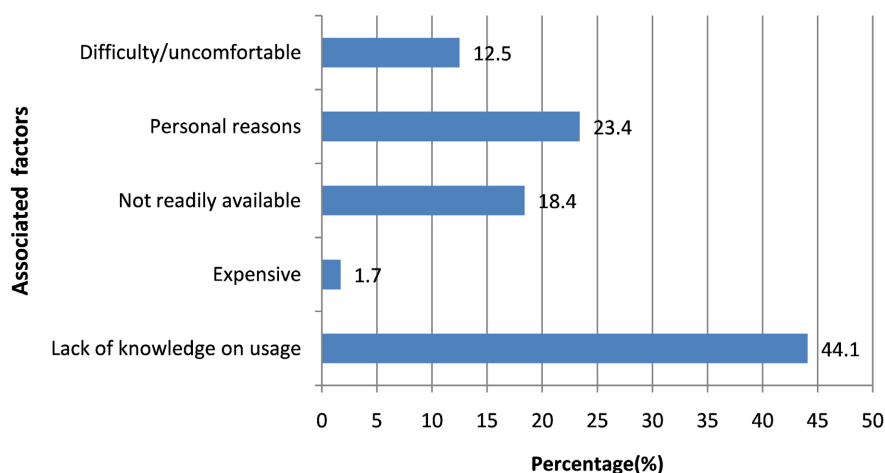


Figure 9. Factors associated with non-utilisation of female condoms among students in the University of Bamenda, May 2022.

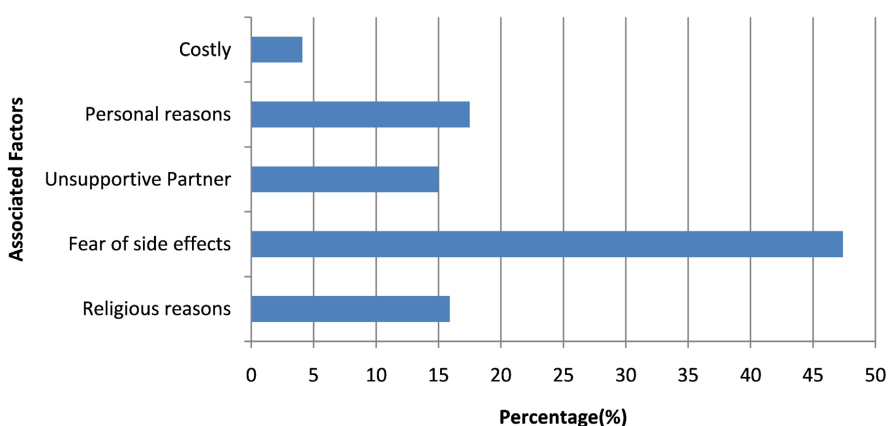


Figure 10. Factors associated with non-utilisation of ECPs among students in the University of Bamenda, May 2022.

about male condoms and 92.5% know about female condoms. This finding is similar to that of Oranu and colleagues in Port Harcourt, Nigeria 2020 who recorded 97.8% and 78.8% for male and female condoms respectively. Felix *et al.*, in 2019 in the University of Yaoundé 1 [20] recorded similar findings as per the knowledge on male condom use at 100% but however knowledge on female condom was below 50%. The difference in knowledge of female condoms (increase in this study) could be attributed to rapid increase in media/internet use from 2019 to 2022 and also increase in primary health care activities nationwide over the years. Sources of information about condoms were investigated. The highest source of information enlisted was the media/internet (34.2%) and the lowest from relatives/family (12.4). This is however not similar to what Felix and colleagues did in 2019 in university of Yaoundé 1 as they recorded the highest source of information from schools (68.1%) and least from family (25.1%). This could be explained by increase in media/internet use these days. Furthermore, a study carried out in Ghana by Issah *et al.*, 2022 [24], recorded the highest source

of information to be from friends (38.1%) and the lowest from family/relatives (9%).

Despite the high knowledge of condoms recorded, we however had a poor utilisation rate among studied participants. A rate of 77.5% of participants was recorded for students who have ever used the male condoms whilst rates of 25.2% of participants are current users. Oranu and collaborators had as findings a rate of ever use of male condoms to be 74.0% which is similar to our study but however had as consistent use as 58.5%. The difference in the later result could be as a result of difference in the type of question answered [25] [26] [27].

Also, just 8.1% of students reported to have ever used the female condoms. This study is consistent with Felix *et al.*, in 2019 [20] in the university of Yaoundé 1 who recorded a rate below 10%. Similar findings of 19.6% were also recorded by Donatus *et al.* [28]. Both rates are not numerically same because of probable difference in sample size used.

Condoms are readily available everywhere but many people don't use it because of some reasons best known to them. Despite the high knowledge on condoms among the students, the utilization of condoms among sexually active students was low. Majority of the students had used condoms and only 25.2% of the students are currently using the male condoms. Some factors influencing non-use of male condoms were enumerated by students in our study. Highest factor recorded was reduction in sexual pleasure (47.4%). This was similar to the study done by Nyambura *et al.*, in 2017 which was 57.1% [25]. The highest reason associated with the very low rate of female condom use was lack of knowledge of its use (44.1%) and the next attributed to personal reasons (23.4%).

Furthermore, this study sorts to seek the knowledge and practice of ECP use. In this study, majority of students (73.4%) have had unprotected sexual intercourse either once or twice. The study shows that majority of students had good knowledge and awareness on ECPs (95.0%). The results of study are consistent with the results obtained in a similar study carried out by Nyambura *et al.* in Nairobi Kenya in 2017 [25] who reported an awareness as high as 86.4%; Felix *et al.*, University of Yaoundé 1 in 2019 [20] an awareness of more than 75%. However, other studies done which were contrary to our studies are that of Roberts *et al.*, South Africa in 2004 [26] reported the level of awareness of ECPs to be 57%; Simegn and collaborators in Ethiopia in 2020 [1] at a level of 53.3%. The low awareness in these studies could be accounted for the differences in specific questions asked to capture awareness levels regarding ECP, as well as the target population. The high level of awareness in our study can be attributed to increase use of media/internet nowadays and which is the main source of information in our study.

Despite the high level of awareness recorded in our study, the rate of use however is low. We recorded 52.4% and 24.5% of students who have ever used and currently use ECP. Emergency contraceptive pills (ECPs) are now available in many countries over-the counter but many individuals don't use it due to many reasons. Emergency contraceptive pills are essential, although it is an of-

ten-underutilized contraceptive option in most parts of the world including Sub Sahara Africa. The rate utilization of ECPs among sexually active students was very low as seen on the results despite the high level of awareness. Majority of the participants have never used ECPs with 52.4% students had ever used it. This finding is not consistent with findings conducted in 2017 by Nyambura *et al.*, Nairobi Kenya [25] who reported a utilisation rate of 20%; Felix *et al.*, 2019 [20] reported a utilisation rate of about 38%. These disparities in rate of use could be because there has been an increase in level of knowledge and awareness over the years, increase in media/internet use as source of information as seen in our study and also due to disparity in sampling size.

The low utilisation rate of ECPs recorded in our study was accountable by several factors enlisted by students. These factors have contributed to the reasons why students of the University of Bamenda do not use ECPs. Majority of students fear side effects of ECP (47.4%). Among other factors were personal reasons (17.5%) as second highest. This study is closely related to that done by Simegn *et al.*, Ethiopia 2020 with highest factor hindering ECP use was fear of side effects (28%). Other studies done by Issah *et al.*, Kenya 2022 [24] reported religious practice/against faith (26%) to be the highest followed by fear of side effects (25%). This disparity could be accounted for by difference in geographic location where studies were done.

4.2. Strength and Limitations

4.2.1. Strength

- To the best of our knowledge, this is one of very few studies carried out in Cameroon and first in North West Region.
- Good randomisation was done as the Google form was used to issue questionnaire.
- A school-based research, making it more precise in the results as the university in Cameroon harbours a greater majority of the youthful population.

4.2.2. Limitations

The study was carried out in only one university in the country. It might be more rewarding to carry out a similar study involving many more universities.

4.3. Conclusion

This study was aimed at evaluating the Perception of condoms and Emergency Contraceptive Pill use among students in The University of Bamenda. The results of this study revealed that:

- There was a high level of knowledge about condoms and ECP among students.
- Utilisation rate of condoms and ECP was low.
- Relatives were found to be the lowest source of information to students.
- The rate of current condom use and ECP use among University students were low.

Despite a high level of knowledge and awareness on contraceptive use among students, the level of utilization of contraceptives among the students was low.

Conflicts of Interest

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

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