

# Contraception Knowledge and Use Consistency among Female undergraduates in two North-East States, Nigeria

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## ABSTRACT

**Background:** Unsafe sexual intercourse can lead to negative sexual and reproductive health outcomes. Contraception is an important intervention to prevent these damaging effects. This study accessed the contraceptive knowledge and use consistency by female undergraduate students in two North-East States, Nigeria to close existing unmet needs for sexually active teenagers and young adults.

**Methods:** The study was an institutional-based cross-sectional survey. A multistage sampling method was used to select 299 female students from two universities in North-East, Nigeria. A structured, interviewer-administered questionnaire was used to elicit information on respondent's socio-demographics, knowledge, and regularity of contraceptives use. Data analysis was done with p-value at 0.05.

**Results:** One hundred and fifty-five (51.8%) respondents had good knowledge of contraception. The contraceptives most known were; Condoms (60.9%), implants (52.8%), and Oral pills (51.8%). While two-thirds of the respondents were sexually active, only 38.9% of them consistently use contraceptives. Marital status (AOR= 0.09, 95% CI = 0.01–0.79) and students' place of residence (AOR= 2.63, 95% CI = 1.27-5.41) significantly predicted consistent contraceptive use.

**Conclusion:** Knowledge of contraceptives among undergraduates was inadequate. Its consistent use among sexually active ones is lacking. There is a need to strengthen and expand existing social and behavioural change communication by utilizing new media to promote key contraceptive information.

## 1. INTRODUCTION

Adolescent sexual and reproductive health (SRH) behaviour is an increasing global concern and one of the determinants of human development<sup>1</sup>. Adolescents are between the ages of 10 and 19 years and account for 16% of the world's population<sup>2</sup>. They are a rapidly growing population and their contribution is vital in achieving several developmental goals<sup>2,3</sup>. Thus, decisions made by this group on their sexual and reproductive health are a key

priority as it impact world's well-being, education, and economy<sup>4,5</sup>.

In Nigeria and several other African nations, a high degree of personal freedom and social interactions occur at higher education institutions, which often translates to several sexual practices including transactional sex, multiple sexual partners, and unprotected sex<sup>5-7</sup>. These unsafe reproductive health practices run a risk of secondary infertility, HIV/AIDS infection, unsafe abortions,

interrupted education, and unplanned pregnancies<sup>7,8</sup>. In 2019, 21 million pregnancies were recorded among adolescents between the age of 15 and 19 in low- and middle-income countries (LMIC). Unfortunately, about 50% of these pregnancies were reported as unintended leading to unsafe abortions, maternal morbidity, and mortality<sup>9,10</sup>. Also, LMIC account for the highest death among adolescent girls due to pregnancy and childbirth complications<sup>11,12</sup>. Globally, out of 73 million induced abortions reported each year, Africa accounts for 60%<sup>13</sup>. Contraceptive use prevents sexual and reproductive health risks such as unplanned pregnancies and its detrimental effects<sup>14</sup>. Accessibility to SRH services including contraceptives is a key target of the Sustainable Development Goals (SDGs)<sup>15</sup>. An effective strategy to achieve this worldwide objective is to properly meet the needs of adolescents in terms of modern methods of contraception<sup>16,17</sup>. In 2017, modern contraceptives prevented 308 million unplanned pregnancies which indicates that its efficient use by adolescents would prevent unintended pregnancies by 59 per cent<sup>3,18</sup>. Additionally, contraceptives lessen the number of abortions and reduces the risk of maternal mortality in developing countries by about 25 per cent<sup>19</sup>. Almost 200 million women worldwide who require contraception include women who are enrolled in tertiary institutions of learning<sup>20,21</sup>. The National Population Commission (NPC) reported that 19% of women experience sexual debut at age 15 years and 57% by age 18 years in Nigeria<sup>22</sup>. Thus, given that these college-aged women engage in sexual activity but do not intend to become pregnant, it is crucial that sexually active teenagers and young adults consistently utilize contraception effectively and efficiently<sup>23</sup>. Research among adolescents have shown some gaps in the utilization of contraception including inconsistent and incorrect use<sup>23-25</sup>. Thus, the study accessed the knowledge and regularity of contraception use among female undergraduate students of tertiary institutions in North-East, Nigeria.

## METHODS

### Study Area

This study was conducted in the North-East region of Nigeria. The region is made up of six states including Adamawa, Bauchi, Borno, Gombe, Taraba, and Yobe states. The North-East zone is primarily divided between the semi-desert Sahelian savanna and the tropical west Sudanian savanna eco-regions. There are 17 Universities in

the North-East region of Nigeria.

### Study Design

An institutional-based cross-sectional study design was used for this study.

### Study Population

The study population was registered female undergraduate students of tertiary institutions in two North-East states, Nigeria.

### Inclusion and exclusion Criteria

The study included registered full-time female undergraduate students from all years of study who gave their consent to be part of the study. While part-time and post graduate students as well as student who refused consents or are ill, and physically unfit were excluded from the study.

### Sample Size Determination

The sample size was estimated using Cochran formula assuming a 95% level of confidence, 25.4% of contraceptive use among tertiary institutions in Ilorin Nigeria<sup>26</sup>, and 5% precision. The minimum sample size required for this study was 288 female undergraduate students.

### Sampling Technique

A multistage sampling technique was used to recruit respondents into this study. Stage one involved selection of 2 universities from the 17 universities in the region using simple random sampling. Stage two involved splitting the school environment into clusters including lecture halls, lecture theatres, university library, and student hostel. A systematic sampling was used to select participants from each cluster. The first respondent was selected using simple random sampling and a class interval of 5 was used to select the subsequent participants.

### Study Instrument

A structured, interviewer administered questionnaire was used for this study. The reliability of the instrument was determined by pre-testing among twenty-nine students at Federal University Gashua, Yobe State, Nigeria. This is a different location from the study area although share similar characteristics with the female students in the study area. Following the pretest, the questionnaire was divided into five sections namely; Respondents socio-demographic characteristics; Awareness of Contraception; Knowledge of

contraception; Use of Contraception; and Choices and source of Contraception.

### Data Collection

A total of 299 students participated in the study. The questionnaire was administered by trained Research Assistants. The data collection was done in May and June 2023.

### Data Management/Analysis

The data was analyzed using IBM Statistical Package for Social Sciences Software version 26.0. Demographic variables such as age and marital status was summarized using descriptive statistics. Continuous variable was summarized as mean and standard deviation, while categorical variables were summarized using frequencies and proportions.

To access the awareness of contraceptives among the study population, 4 questions with a positive (yes/true) and negative (no/false) responses were included in the questionnaire. Each correct response was awarded a mark, while incorrect responses were scored zero mark, thereby resulting in a range of 0 to 4 possible scores. The mean score was used to dichotomize the awareness score into good or poor awareness. Respondents whose score were 3 and 4 were categorized as having good awareness, while scores below 3 were regarded as poor awareness of contraception.

To assess the knowledge of contraceptives, 16 questions with a yes and no responses were included in the questionnaire. Each correct response was awarded a mark, while incorrect responses were scored zero mark, thereby resulting in a range of 0 to 16 possible scores. The mean score was used to dichotomize the knowledge score into good or poor knowledge. Respondents whose score were 8 and above were categorized as having good knowledge,

while scores below 8 were regarded as poor knowledge of contraception.

The Independent Sample t-test, analysis of variance and Tukey's Honestly Significant Difference post-hoc test were used to compare the differences in mean of the knowledge scores on contraception by respondent's socio-demographic variables. Consistency of contraceptive use was measured by asking respondent if they are sexually active and how often they used contraception. Their response was recoded into "Always" and "Not Always". Logistic regression analysis was used to determine the variables that are associated with regularity of contraceptive use. To control for confounding variables, multivariate logistic regression analysis was done.

### Ethical Consideration

Ethical approval for the study was obtained from the University of Maiduguri (Ref. No. UM/MC/ADM/VOL.17) and Adamawa State University (Ref No. ADSU/R/A1). Participation was voluntary, and written informed consent was obtained from the respondents after an adequate explanation of the study procedure. All personal identifiers were removed from the questionnaire and confidentiality was ensured through the protection of data collected from the participants.

### RESULT

**Socio Demographic Characteristics:** Two hundred and ninety-nine female undergraduate students participated in the study. The mean age of respondents was 23.6±4.4 years. Majority, (48%) were in the 20 to 24 years age group. Most (39%) of the students were in their 4<sup>th</sup> year of study and 51% reside off-campus. Almost all (91.6%) the students in the study were single.

Table 1: Socio-demographic characteristics of the Respondents (N = 299)

Variable	Frequency n (%)
<b>Age (years)</b>	
< 20	49 (16.4)
20 -24	144 (48.2)
25 -29	80 (26.8)
30 -34	17 (5.7)
≥ 35	9 (3.0)
<b>Marital Status</b>	
Single	274 (91.6)
Married	21 (7.0)
Divorced	4 (1.3)

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**Institution**

Adamawa State University	104 (34.8)
University of Maiduguri	195 (65.2)

**Year of Study**

First	39 (13.0)
Second	68 (22.7)
Third	57 (19.1)
Fourth	118 (39.5)
Fifth	17 (5.7)

**Place of Residence**

Off - campus	153 (51.2)
School Hostel	146 (48.8)

**Place of Residence (off-campus)**

Alone	23 (7.7)
With Friend	39 (13.0)
With Parent	70 (23.4)
With Partner	13 (4.3)
With Spouse	8 (2.7)
Not applicable	146 (48.8)

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Mean age 23.6±4.4

**Awareness of contraception:** Only 164 (54.8%) of the respondents had good awareness of contraception. While majority (84.9%) of the students had previously heard of contraception, 41.1% of them thought that it is 100% effective. One hundred and seventy-seven (59.2%) are aware that unprotected sex at least once can lead to pregnancy.

**Knowledge of contraception:** As shown in Table 2, 155 (51.8%) of the students had good knowledge of contraception. Two hundred and thirty (76.9%) knew natural contraceptive methods. The natural contraceptive methods most known were Calendar Calculation (60.2%), coitus interruptus/withdrawal method (47.2%), Cervical mucous monitoring (12.4%), Lactational amenorrhea (9.4%) and Basal body Temperature (8.0%). A high proportion of the study participant (83.3%) knew about modern contraception. The method most known was condoms (60.9%), followed by implants (52.8%), Oral pills (51.8%), and Injectables (38.8%).

Though almost all the respondents (93.0%) knew that implants and injectables are contraceptive methods for females, more than half (53.2%) had misconceptions that cervical mucous monitoring and lactational amenorrhea are contraception methods for males. Two hundred and fifty-eight of the respondents (86.3%) knew that there are female condoms as well as there are male ones.

Table 2: Distribution of knowledgeable respondents on contraceptives (N=299)

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Variable	Frequency n (%)
<b>Natural Contraception*</b>	
Calendar Calculation	180 (60.2)
Cervical mucous monitoring	37 (12.4)
Lactational amenorrhea	28 (9.4)
Coitus interruptus (withdrawal or pulling out)	141 (47.2)
Basal body temperature methods	24 (8 .0)

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**Modern Contraception\***

Condom use	182 (60.9)
Oral Contraceptive pills	155 (51.8)
Implants	158 (52.8)
Injectables	116 (38.8)
Intra Uterine Device (IUD)	71 (23.7)
Cervical mucous monitoring and lactational amenorrhoea contraceptives for male	140 (46.8)
There are male and female condoms	258 (86.3)
Intra uterine device is placed in a male reproductive organ	156 (52.2)
Implants and injectables are contraception methods for females	278 (93.0)
Contraceptive is 100% effective	176 (58.9)
Unprotected sex at least once can lead to pregnancy	177 (59.2)
<b>Overall knowledge of contraception</b>	<b>155 (51.8)</b>

Mean= 8.0, Median = 8.0, Mode = 7.0, SD = 3.5, \*= Multiple response

Table 3 showed that a statistical difference in mean knowledge score was recorded for age of respondents [F=8.320; p = <0.001]. Post-hoc test indicated mean score of students aged less than 20 years old (5.71±3.68) was significantly different from those aged 20-24 years (8.12±3.52), 25-29 years (8.99±2.80), and those aged 30-34 years (9.53±3.71). Furthermore, statistically significant difference in mean knowledge score was recorded for respondents' year of study [F=6.979; p = <0.001]. Post-hoc test indicated mean score for students in their fifth year of study (11.24±4.22) was significantly different from their counterpart in their first year (6.97±3.34), second year (8.44±3.01) and students in their fourth year of study (7.33±3.45). Although, students who were single (8.07±3.45) had more knowledge on contraception than married students (7.71±4.60), the difference was not strong enough to yield a statistically significant result [F=0.110; p=0.896].

Table 3: Respondents mean contraceptive knowledge score by demographics characteristics

Variables	N	Mean (SD)	Test Values	p-value
<b>Age group</b>			8.320 <sup>a</sup>	<0.001
< 20	49	5.71 (3.68)		
20 – 24	144	8.12 (3.52)		
25 – 29	80	8.99 (2.80)		
30 – 34	17	9.53 (3.71)		
≥ 35	9	8.11 (2.76)		
<b>Year of Study</b>			6.979 <sup>a</sup>	<0.001
First	39	6.97 (3.34)		
Second	68	8.44 (3.01)		
Third	57	8.79 (3.43)		
Fourth	118	7.33 (3.45)		
Fifth	17	11.24 (4.22)		
<b>Marital Status</b>			0.110 <sup>a</sup>	0.896
Single	274	8.07 (3.45)		
Married	21	7.71 (4.60)		
Divorced	4	7.75 (2.06)		

<sup>a</sup> = F -values from one-way ANOVA; P-value = 0.05

**Contraceptive use among female undergraduate students:** One hundred and eighty (60.2%) respondents were sexually active at the time of this study. However, only seventy (38.9%) responded that they always and consistently use contraception. Most (61.1%) of the sexually active students in this study do not use contraceptive or use inconsistently. For test of significance to identify factors associated with the use of contraceptives, Chi-square test was used at  $P= 0.05$ . Only significant variables were included in the final model for multivariate analysis (Table 4). Among the variables, marital status was significantly associated with consistent use of contraceptives, female undergraduate students who were married are 90% less likely to utilize contraceptives consistently (AOR= 0.09, 95% CI = 0.01 – 0.79) compared to female students who were single. Place of residence in school was also found to be significantly associated with contraceptive use. Female students who reside in-campus are 3 times more likely to use contraceptives consistently (AOR= 2.63, 95% CI = 1.27 - 5.41) than their counterparts who reside outside the school campus.

Table 4: Factors associated with the use of contraceptives among female undergraduate students

Variables	COR (95% CI)	P-Value	AOR (95% CI)	P-Value
<b>Age Group</b>				
< 20	1			
20 – 24	0.65 (0.16 – 2.61)	0.55		
25 – 29	0.39 (0.10 – 1.60)	0.19		
30 – 34	0.44 (0.08 – 2.27)	0.32		
≥ 35	0.23 (0.03 – 1.77)	0.16		
<b>Marital Status</b>				
Single	1			
Married	0.06 (0.01 – 0.49)	0.01*	0.09 (0.01 – 0.79)	0.03*
Divorced	0.43 (0.04 – 4.19)	0.47	0.68 (0.07 – 7.16)	0.75
<b>Year of Study</b>				
First	1			
Second	0.47 (0.11 – 2.08)	0.32	0.70 (0.15 – 3.19)	0.64
Third	0.18 (0.04 – 0.83)	0.03*	0.25 (0.05 – 1.19)	0.08
Fourth	0.19 (0.04 – 0.78)	0.02*	0.32 (0.07 – 1.39)	0.13
Fifth	0.38 (0.67 – 2.03)	0.26	0.77 (0.12 – 4.93)	0.78
<b>Place of Residence</b>				
Off-campus	1			
School Hostel	4.03 (2.07 – 7.82)	0.00*	2.63 (1.27 – 5.41)	0.01*
<b>Awareness of contraception</b>				
Poor awareness	1			
Good awareness	0.60 (0.33 – 1.10)	0.10		
<b>Knowledge of contraception</b>				
Poor	1			
Good	0.57 (0.31 – 1.05)	0.07		

\*= significant P-value

**Type of contraceptive used and reason:** The contraception method most used among the respondents was condoms (32.8%), followed by Oral pills (9.0%) and injectables (4.7%). When asked the reason for their choice of contraceptive, fifty-six (18.7%) said it was easy to use, thirty-eight (12.7%) reported that it is readily available. Other reasons include affordability (10.7%), and being the only method known (7.7%). Out of the total respondents in this study, 72.9% said they know where to access contraceptive if they need one. Majority of respondents (43.8%) said pharmacy/drug shop is their most preferred source to access contraceptives, while others chose hospital/clinic (25.8%), supermarket/stores (7%), community outreach (1.3%) and Community Based Organization (1.3%)

## DISCUSSION

Contraception is an important intervention to prevent the damaging effects of sexual and reproductive health risks<sup>14</sup>. Its accessibility and use are an essential part to achieve the Sustainable Development Goal 3<sup>15</sup>. The study assessed the knowledge and consistent use of contraception by undergraduate students to close the unmet needs of sexually active teenagers and young adults to effectively and efficiently use contraceptives.

Knowledge of contraception positively impacts timely and effective contraceptive use<sup>27</sup>. The overall knowledge of contraception by female undergraduates in this study was just fair. This is a major concern as it suggests that contraceptives may be inadequately utilized. A similar report of contraception knowledge dearth was reported by Ijirigho (2010) in the study to assess the use of reproductive health information on contraception among female undergraduates in Ibadan, Nigeria as well as a study by Sharma *et al.* (2021) among adolescents and young adults at Staten Island University Hospital in 2021<sup>28,29</sup>. The contraceptive method most known was condom use, this outcome can be attributed to the extensive education and marketing campaigns on condom use to prevent pregnancy and sexually transmitted diseases like HIV/AIDS<sup>30</sup>. Implants was also well known by the respondents who also correctly mentioned that they are contraceptive methods used by females. Similar studies of good knowledge of implants were reported by Mulekhwa and Nakasolo (2022) who studied the knowledge, attitude, and practice towards utilization of implants among women 15 – 45 years old and reported that the source of knowledge were majorly through friends, peer-groups, and health workers<sup>31,32</sup>.

Despite being one of the most effective forms of contraception with 99% efficacy in preventing pregnancies<sup>33</sup>, only a few respondents had a good knowledge of Intrauterine devices (IUD). Many of our study participants thought that IUD is a contraceptive method for males. This underscores that knowledge gap still exists regarding contraception among the study group. This low knowledge on IUD may be attributed to very minimal education and campaign on its use in the media. Our study was corroborated by Sharma *et al.* (2021) whose study also showed limited knowledge of IUD among adolescents and young adults in 2021<sup>28</sup>. The need to strengthen and expand the existing health promotion and education structures to include other less promoted contraceptive methods is imperative. A good number of our respondents had the misconception that contraceptives are 100% effective and that one will need to have engaged in

unprotected sex multiple times before they are exposed to sexual and reproductive health risk such as unintended pregnancy. Adolescents spend more time on new media like social media and networking platforms than they engage in any other activities<sup>32</sup>. Thus, there is need to saturate these media with key contraceptive information to bridge knowledge gaps. Utilizing the social platforms of local content creators/skit makers who enjoys a wide range of audience who are mostly young adults will be an innovative and effective way for targeted contraceptive messaging to reach our age group of interest.

Unsafe sexual intercourse at least once can lead to negative sexual and reproductive health outcomes such as unintended pregnancy and sexually transmitted diseases. Our study focused on the regularity and consistency of contraceptive use. Two-third of our respondents were sexually active at the time of this study, however, only 38.9% of them reported to always and consistently use contraceptives. This high level of risky sexual activities is alarming and further emphasize the need to intensify efforts on social and behavioral change communication tailoring messages on contraceptives to suit young adults.

Condoms and oral pills were the most frequently used contraceptives among females in our study. This may be because most of the respondents reported that it was easy to use, readily available, and affordable than other methods. Similar findings were reported by Nsubuga *et al* (2016) among female university students in Uganda as well as Todd and Black (2020) who researched on contraceptives for adolescence in 2020 and attributed the most choice of condom to affordability and lack of need for prescription<sup>14,34</sup>. Injectables was also common among our respondents, this may give credence to recent study by Olike *et al* in 2021 whose research on contraceptive use among sexually active female adolescents reported that adolescent girls are shifting away from condoms and pills and choosing injectable contraceptive method<sup>35</sup>. IUD had no reported user, this may be due to limited publicity, availability, fear of side effect, and misconceptions<sup>36,37</sup>. Due to inconsistency and incorrect use, condoms have been reported to have a failure rate of up to 18%, thus, this supports the need to promote other efficacious, long-acting, and reversible contraceptive methods adapting similar publicity structure as condoms to increase their usage<sup>25,38,39</sup>.

We found that Marital status was significantly associated with consistent contraceptive use. Married students were 90% times less likely to use contraceptive consistently than students who are not married. While this appears understandable, this practice poses a risk to the success of

several family planning programs in the country, can lead to greater likelihood of pregnancy which will increase fertility and population growth, impacts girls' education, and abuse of emergency contraceptive. Our study agrees with a study by Sombo *et al* (2014) among female undergraduate students in Tanzania who also found that marital status was significantly associated with contraceptive use<sup>39</sup>. Additionally, students place of residents significantly predicted frequent contraception use, students who reside in school hostels are likely to consistently use contraceptives than those who live outside the school campus. This may be because majority of the students who live off-campus in our study reported they lived with their parents, where normally parents inspect the bedrooms of their young children as well as emphasize on abstinence from sexual activities for young adults<sup>40</sup>. Knowledge of contraceptive did not yield a significant association with usage in our study, this agrees with findings from other investigators in Africa<sup>14,41</sup>.

Furthermore, most of our respondents reported they knew how to access contraceptives if they need one. Pharmacy and Hospitals were the most preferred sources stated. This study is limited in that due to the sensitive nature of the subject matter and response being self-reported, finding may be subjected to information bias. Despite this, the study provides an important information on the regularity of contraceptive use among the study population and gives insights on how to best tailor contraceptive messaging among adolescents and young adults to improve behavioral change.

### Conclusion

Certain inadequacies on the knowledge and use of contraception for school-aged women still exist. While abstinence should remain the main message of focus for this group, expanding and strengthening the health programs and utilization of new media for key contraceptive message delivery for those who are sexually active is recommended. This proactive approach will ensure comprehensive support for young women's reproductive health needs while promoting responsible decision-making and reducing unintended pregnancies.

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### Competing interests

The authors declare no competing interests.

### Authors Contribution

IOS, AKA, NT, and AA conceptualized the study and carried out the field work. DCE and IOS analyzed the data. DCE and IOS contributed to writing the initial manuscript as well as read and approved the final manuscript.

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## Study Instrument (Questionnaire)

### ASSESSMENT OF KNOWLEDGE AND USE OF CONTRACEPTIVES AMONG FEMALE UNDERGRADUATE STUDENTS OF TERTIARY INSTITUTIONS IN NORTH-EAST, NIGERIA

My name is \_\_\_\_\_. I am conducting this study as part of my academic Research. Your responses are for research purposes and will be treated with utmost confidentiality. Do note that your identity is protected as sensitive personal identifiers are excluded from this questionnaire. I seek your indulgence to respond to all questions and provide accurate answers.

#### INTRODUCTION

This study is designed to assess the knowledge and use of contraceptive among female undergraduate students of tertiary institutions in North-East, Nigeria. Only female undergraduate students are to fill this questionnaire. This questionnaire will take few minutes of your time and participation is entirely voluntary.

Do you give informed consent to participate in this study?

Yes                       No

Thank you for accepting to take part in this voluntary assessment.

#### SECTION A: SOCIO-DEMOGRAPHIC INFORMATION

**Age:**

**Sex:**

Female ONLY

**Marital Status**

Married             Single             Others

**Institution**

Adamawa State University

University of Maiduguri

**Year of undergraduate study:**

1<sup>st</sup> year             2<sup>nd</sup> year             3<sup>rd</sup> year             4<sup>th</sup> year             5<sup>th</sup> year

**Place of residence:**

Hostel residence on campus                       Accommodation off-campus

**Accommodation off-campus shared with:**

Alone    Parent    Friend             Partner             Spouse

#### SECTION B: AWARENESS REGARDING CONTRACEPTION

1. Have you ever heard of contraception?
  - a) Yes
  - b) No
2. Contraception can result in pregnancy.
  - a) True
  - b) False
3. Contraception is 100% effective.
  - a) True
  - b) False
4. Unprotected sex at least once cannot result in pregnancy.
  - a) True
  - b) False

**SECTION C: KNOWLEDGE ON CONTRACEPTIVES**

5. Do you know about natural contraception methods?
  - a) Yes
  - b) No
6. Select the natural contraception method that you know (multiple answers is permissible).
  - a) Calendar calculation
  - b) Cervical mucous monitoring
  - c) Lactational amenorrhea
  - d) Coitus interruptus (withdrawal or pulling out)
  - e) Basal body temperature method
7. Do you know about modern contraception methods?
  - a) Yes
  - b) No
8. Select the modern contraception method that you know (multiple answers is permissible).
  - a) Condoms
  - b) Oral contraceptive pills
  - c) Implants
  - d) Injectables
  - e) Intra Uterine Device (IUD)
9. Cervical mucous monitoring and lactational amenorrhea are contraception methods for males.
  - a) True
  - b) False
10. There are male condoms as well as female condoms.
  - a) True
  - b) False
11. Intra uterine device is placed in a male reproductive organ.
  - a) True
  - b) False
12. Implants and injectables are contraception methods for females.
  - a) True
  - b) False

**SECTION D: CONTRACEPTION USE**

13. Have you ever had sex?
  - a) Yes
  - b) No
14. If yes, have you used contraception before?
  - a) Yes
  - b) No
15. If sexually active, how often do you use contraception?
  - a) Always
  - b) Sometimes
  - c) Never
16. What contraception method have you used before? (Multiple answers is permissible)
  - a) Condoms
  - b) Oral contraceptive pills
  - c) Implants
  - d) Injectables

- e) Intra uterine device (IUD)
  - f) Calendar calculation
  - g) Cervical mucous monitoring
  - h) Lactational amenorrhea
  - i) Coitus interruptus (withdrawal or pulling out)
  - j) Basal body temperature method
17. Do you currently use contraception?
- c) Yes
  - d) No
18. What contraception method do you currently use?
- a) Condoms
  - b) Oral contraceptive pills
  - c) Implants
  - d) Injectables
  - e) Intra uterine device (IUD)
  - f) Calendar calculation
  - g) Cervical mucous monitoring
  - h) Lactational amenorrhea
  - i) Coitus interruptus (withdrawal or pulling out)
  - j) Basal body temperature method
19. If no to current contraception use above, what is your reason for non-usage?
- a) I dislike using contraception.
  - b) It affects my body.
  - c) It is not affordable.
  - d) It is not readily available.
  - e) My partner dislikes contraceptive use
  - f) No reason at all
20. Have you ever heard of emergency contraceptive pill?
- a) Yes
  - b) No
21. What is emergency contraception used for?
- a) To terminate/abort pregnancy
  - b) To prevent menstrual flow
  - c) To prevent pregnancy after unprotected sexual intercourse.
  - d) For lactating mothers to facilitate breast milk flow
22. Have you used emergency contraception before?
- a) Yes
  - b) No
23. Have you had unprotected sexual intercourse before?
- a) Yes
  - b) No

**SECTION E: CHOICE AND SOURCE OF CONTRACEPTIVES**

24. What is the reason for the choice of the contraception method you use?
- a) It is affordable.
  - b) It is readily available.
  - c) It is easy to use.
  - d) It is the only method I know.
  - e) Good fit for my body
25. Do you know where you can access contraceptives?

a) Yes

b) No

26. What is your preferred source of contraceptives?

a) Hospital/Clinic

b) Pharmacy/Drug store

c) Supermarket/Stores

d) Community Based Organizations

e) Community Outreach