

**PERCEPTION OF REPRODUCTIVE HEALTH AND CONTRACEPTIVES
USE AMONG UNDERGRADUATE PRE-SERVICE BIOLOGY
TEACHERS IN MINNA, NIGER STATE**

BY

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2017/3/69310BE

**DEPARTMENT OF SCIENCE EDUCATION
SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION
FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA NIGER
STATE, NIGERIA.**

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**A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF
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ABSTRACT

The study examined "The perception of Reproductive health and contraceptive use among undergraduate pre-service Biology Teachers in Minna Niger state. Survey Research design was adopted for the study. The population of the study was One hundred and eighty-seven (187) undergraduate pre-Biology teacher from which one hundred and eighty (180) undergraduate pre-service biology Teachers were randomly selected from the department of science Education (Male =79 and Female =101). Simple random sampling technique was used to select the students. The instrument used was perception of Reproductive health and contraceptive use Academic questionnaire (PRHCUQ) with twenty (26) items on a 4-point likert scale which was designed by the research student. The instrument was subjected to content validity by the researcher's supervisor and two (2) other lecturers from the department of science education with reliability coefficient of 0.73,. The method of data collection was through administration of questionnaire to undergraduate pre-service biology Teachers in Science Education. The data collected were summarized through descriptive statistics and then analyzed with mean, standard deviation and t-test statistics. The first finding shows that undergraduate pre-service biology teachers have positive perception on reproduction health. The second finding shows that undergraduate pre-service biology teachers have fair perception on the usage of contraceptive. The final findings shows undergraduate pre-service biology teachers have a high level of utilization of contraceptive. Recommendation were also made such as more orientation should be provided to re-educate students in tertiary institutions towards appropriate sexual behavior as well as the acquisition of relevant and adequate valid and usable knowledge of reproductive health and contraceptive usage.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Tertiary institution students have been seen as a distinct group among school going youths and they face a unique set of circumstances which play an intricate role in the manifestation of emotional health problems, which makes them prone to a lot of mental health concerns. According to Devulapalli (2010), students in tertiary institutions face a transition period in their lives where many changes occur. Often, students leave their parents and guardians to live in dormitory (hostels) settings. In this new setting, tertiary institution students usually face new social situations including a greater exposure to sexual exploration, alcohol and drugs, and the likes.

Report by National Population Commission, (2013), indicated that the youth makes up over 31.6 percent (one third) of Nigeria's growing population. As a result sexual and reproductive health (SRH) outcomes in Nigeria highlight the importance of focusing on adolescents. Higher institutions of learning are characterized by high levels of personal freedom and social interaction. This social interaction often translates to sexual interaction (Alexander et al cited in Aigbiremolen, Duru, Abah, Abejegah, Asalu, & Oriaifo, 2014). Permissive sexual lifestyle in higher educational institution in Nigeria and a number of other African countries have been documented as featuring a high level of risky sexual behaviors such as transactional sex, multiple sexual partners, and unprotected casual sex (Aigbiremolen, Duru, Abah, Abejegah, Asalu & Oriaifo, 2014). Such reproductive health behavior is prone to consequences of unwanted pregnancies, unsafe abortions, disruption of education and secondary infertility (Malhotra, 2008).

A study by Oladeji, (2013) shows that 34% of early adolescents and 61% late adolescents reported they have had sexual intercourse, and 7% of high school students said they first had

intercourse before age 13. Similarly, Ayodele (2011) found out in his study that 89.3% male and 91.2% female have once had sexual intercourse in the last six month. Out of these, 6.1% male and 28.8% female had experienced attempted forced sex or forced sex, this shows that when it comes to unwanted sex, female are usually a victim. It has been reported by the Nigerian Population Commission (NPC) that knowledge of contraceptives is lowest among women with no education and greatest among women with more than secondary education (NPC and ICF Macro cited in Aigbiremolen et al. 2014). This indicates that along the line, there is improvement in contraceptives knowledge though it may not always translate to the same level of utilization. This utilization gap has been highlighted in some studies among adolescents and out of school women (Alabi, 2014; Ezebialu, & Eke, 2013; Idonijie, Oluba & Otamere, 2011).

A high level of awareness (94.4%) of contraceptives is not surprising to find among females in tertiary institutions. Reports from other findings (Abiodun and Olayinka, 2009; Tilahun et al, 2010) corroborated this. However, awareness of emergency contraceptives (EC) was lower (69.7%) than that for general methods of contraceptives but much higher than that reported elsewhere (Puri et al, 2007; Frank et al, 2002). Bomba, Mbonole, Obure and Mahanle (2014) study revealed that knowledge about contraceptives among the students was high. They also observed that adolescents whose ages were below 16 years age groups had more knowledge about contraceptives than those whose ages were above 16 years and also that 75.6% male, 27.3% female had good knowledge of contraceptives and often used it.

The Nigerian National Demographic Health Survey (2008) on the usage of contraceptives revealed that 6% of female adolescents and 16% of male adolescents aged 15-24 were sexually initiated and sexual active before age 15 with low contraceptives usage due to lack of knowledge. Another study carried out by Chinnah, Lowoyiri, Ilika, and Nnebue (2016) revealed that more males 28 (34.6%) and female 20 (27.4%) know about contraceptives. 97.8% of those within age

10-14 knew more about contraceptives than those between 15-19 (2.2%) and also that Christians who knew about contraceptives were 249 (62.3%) and the Muslims 151 (37.7%).

Studies have shown that most adolescent in tertiary institutions lack sufficient knowledge of human reproductive health which reflects in their sexual behaviour and a negative attitude towards the corresponding health services. Researchers have also noted that the use of reproductive health services by the young people is very low (Ilesanmi, Ezeokoli, Obasohan, Ayodele & Olaoye, 2015; Schriver, Meagley, Norris, Geary, & Stein, 2014). This is due to some factors within the individuals themselves or the community in which they live or find themselves. This unpleasant state of affairs therefore, requires an urgent investigation of some factors influencing knowledge and utilization of reproductive health services among undergraduate students. Several literatures have revealed that sexual behavior is the primary route of sexually transmitted infections (STIs) and propagation (Shah, Shiraiishi, Subhachachaturas, Anand & Whitehead, 2011).

Study have also shown that Nigerian youths are in need of viable sexual and reproductive health care (Ayodele, 2015) but failed to access the existing services such as voluntary counselling and testing (VCT) because the providers are often biased, unfriendly, or not adequately trained to serve sexually active youth (Njoroge, 2016). The use of reproductive health services is essential in maintaining a healthy life as it boosts psychological well-being and reduces mortality rate due to early disease detection (Kennedy Bulu, Harris, Humphreys, Malverus, & Gray, 2010; Ralph & Brindis, 2010). Therefore, positive attitude towards the use of reproductive health services and contraceptives will increase uptake of services and achievement of health sustainable development goals.

1.2 Statement of the Problem

Knowledge of reproductive health and contraceptives use is an important indicator of sexual health, especially among youths. A high level of knowledge and concomitant utilization of contraceptives is desirable among adult women, a significant proportion of which is in tertiary institutions. Women in tertiary educational institutions are included in the over 200 million women worldwide who have an unmet contraceptives need (National Population Commission, 2017). Available data indicates that Nigeria currently has one of the highest maternal mortality rates in the world and a large proportion of these deaths are among young females aged 10-24 years (Aji, Aji, Ifeadike, Emelumadu, Ubajaka & Nwabueze, 2013). The perception that contraceptives use could lead to infertility later in life is one of the reasons that Nigerian young women have always cited for not accepting effective contraceptives usage. Nigerian adolescents are also faced with cultural and social contexts which likely affect their access to and use of RHS (Okereke, 2010). This affirms that many people are still oblivious of the various benefits of reproductive health services and proper contraceptives use. The knowledge of reproductive health and contraceptives use today holds more importance than for just prevention of pregnancy; and as new mind sets evolve towards sexual practices with their attendant risks, the need for youths to be abreast with facts about the use of contraceptives has become paramount. This study therefore seeks to survey the perception of reproductive health and contraceptives use among undergraduate pre-service Biology teachers' in Minna, Niger State.

1.3 Aim and Objectives of the Study

The aim of the study are to carry out a survey on the perception of reproductive health and contraceptives use among pre-service Biology teachers' in Minna, Niger State; . Specifically, the objectives of the study include to:

- i. Determine perception of undergraduate pre-service Biology teachers' on reproductive health.
- ii. Determine the perception of undergraduate pre-service Biology teachers' on the usage of contraceptives.
- iii. Examine the level of utilization of contraceptives use among undergraduate pre-service Biology teachers'

1.4 Research Questions

The following research questions are raised to guide the study.

- i. What are the perceptions of undergraduate pre-service Biology teachers' on reproductive health?
- ii. What are the perceptions of undergraduate pre-service Biology teachers' on the usage of contraceptives?
- iii. What is the level of utilization of contraceptives among undergraduate pre-service Biology teachers?

1.5 Hypotheses

H₀₁: There is no significant difference in mean response between undergraduate pre-service Biology teachers' perception of reproductive health based on gender.

H₀₂: There is no significant difference in the mean response of undergraduate pre-service Biology teachers' perception of reproductive health based on age.

H₀₃: There is no significant difference between the mean perception of male and female undergraduate pre-service Biology teachers' usage of contraceptives.

1.6 Significance of the Study

The findings of this study will guide parents to socialize their children early in life on the consequences of negative sexual behaviors. Parents will also know the importance of discussing reproductive health issues and contraceptives usage with their children irrespective of cultural barriers. The knowledge parents gained will be used to guide children to plan their reproductive life early in life.

The study will be an eye opener to policy makers on need for adjustment in sex education that will focus on youth characteristics (e.g., health campaigns, number and type of services), with positive influences on their health outcomes for whole communities.

The findings of the study will guide sociologists and guidance counselors in discussing importance of abstinence and the consequences of early sexual activities.

The findings of the study will guide the government and curriculum planners to emphasize family life education in the curriculum and should be taught in every school by teachers irrespective of the person's religious or cultural background.

Finally, the findings will serve as a reference material for other students or researcher who may want to undertake similar research studies in future.

1.7 Scope and Delimitation of the Study

The study was carried out on a tertiary institution in Minna, Niger State. The content scope focused on determining the perception of reproductive health and contraceptives usage in among undergraduate pre-service Biology teachers'. The study is also limited to the use of four point Linkert rating scale to survey the perception of contraceptives among undergraduate pre-service Biology teachers' in Minna, Niger State. The study was delimited to 200, 300 and 500 level

undergraduate pre-service Biology teachers' in Science Education Department of Federal University of Technology, Minna.

1.8 Operational Definition of the Study

Adolescent: The World Health Organization (WHO) defines an adolescent as a person between 10 and 19 years of age (WHO, 2010).

Contraceptives: Contraceptives is defined as the intentional prevention of conception through the use of various devices, sexual practices, chemicals, drugs, or surgical procedures.

Gender: Gender is the range of characteristics pertaining to, and differentiating between, femininity and masculinity.

Perception: Perception is the organization, identification, and interpretation of sensory information in order to represent and understand the presented information or environment.

Pre-service Teachers: are student teachers in education receiving training to become teachers before they undertake any teaching.

Reproductive Health: reproductive health (RH) as physical, mental and social wellbeing in all matters relating to the reproductive system and functions at all stages in life.

Undergraduate: is a college university student who is not a graduate student yet.

Utilization: Utilization is the action of using something, i.e., making practical and effective use of it. Put simply; the term refers to the use of something or the process of using it effectively.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter focused on the reviewed of related literature on previous similar researches that has been conducted by other researchers in this regards. The chapter is sub-divided into the following headings: Conceptual framework, Theoretical Framework, Review of previous empirical studies and summary.

2.2 Conceptual Framework

2.2.1 Concept of Contraceptives

Contraceptive is the act of pregnancy prevention by providing information about the physiology of reproduction and methods to control conception. Contraceptive includes all the decisions an individual or couple make about having children. These usually are whether and when to have children, how many and their spacing. The term family planning is often used as a synonym for birth control. Family planning, however, does not only involve contraceptives but also takes into account planning your child's birth for specific times (possibly by spacing births a few years apart from one another) and planning for a child when you have challenges conceiving one. While there is no ideal method of contraceptives, there is a safe and effective method for every woman. Contraceptives methods vary according to their convenience, cost, effectiveness, side effects, risks and benefits for the individual. Contraceptive provides confidential, low-cost, preventative health care to both females and males to help with their sexual and reproductive health needs (Pillitteri, 2007).

2.2.2 Contraceptives in Nigeria

In developing countries Nigeria inclusive, surveys have shown that the highest level of contraceptives use, are among unmarried, sexually active youth between the ages of 20 and 24 years, the lowest levels are among adolescent married women between the ages of 15 and 19 years (WHO, 2005). Consequently, from the survey, few married adolescents use contraceptives. For example, only 13% of married youth in this age group use contraceptives, among unmarried, sexually active adolescents in this same age group, the level of contraceptives use reaches 39% married women and 60% of unmarried, sexually active women between the ages of 15 and 19 years use contraceptive (Zlidar, 2003; WHO, 2005).

Arowojolu and Adekile (2000) carried a study on perception and practice of emergency contraceptives in Nigeria. The findings show that being aware off contraceptives significantly increased the likelihood that youth will use emergency contraceptives. From their findings, it was revealed that being young and Pentecostal also increased the likelihood of using contraceptives. Meanwhile, Makinwa (1992) in his study on sexual behavior among young urban Nigerians shows that ethnic origin, education and place off residence were all significant determinants in contraceptives use in Nigeria. Also, Addai (1999) in his own study on ethnicity and contraceptives use in Sub-Sahara Africa which explored ethnic differences in contraceptives use among 6 groups. The results shows that ethnicity, having no education, no occupation, having a husband with no education, and having no living children were all negatively associated with using contraceptives. The results also show that living in an urban area, was positively related to using contraceptives in Nigeria. Kiragu and Zabin (1995) carried out a study on contraceptives use among high school students and their result findings shows that for females, high socioeconomic status, high academic achievement and a favorable attitude toward contraceptives

were the most important factors predicting use of contraceptives at first and last sex. The study also indicates that males who said their partner approved of contraceptives were twice as likely to have used a method at last sex.

2.2.3 Adolescent knowledge and use of contraceptives

Knowledge of contraceptives method is the first step toward accepting contraceptives. In all regions, knowledge of any modern method of contraceptives is nearly universal among both young women and men. Therefore, a considerable proportion of youth in Sub-Saharan Africa do not have adequate knowledge of modern method; Chad is the most notable examples- only 49% of this country's young women and 72% of its young men know of a modern method. The assertion is in line with the finding of Khan and Mishra (2008) that other countries with low levels of knowledge of any contraceptives method include Madagascar, Malawi and Nigeria. Overall, knowledge of any method is somewhat higher among young men than young women and knowledge levels are generally higher in countries outside Sub-Saharan Africa.

National Research Council [NRC] (2005) finding indicates that knowledge of multiple methods of contraceptives measures how well-informed youth are about contraceptives. And as expected, in all countries with all-women samples, knowledge of three or more modern methods is lower than knowledge of any method. This is most apparent in Sub-Saharan Africa, about 80% or more of youth know of three or more modern methods in most countries outside Sub-Saharan Africa.

Similarly, Demographic and Health Survey [DHS] (2008) reported that level of ever use of contraceptives among youth are low in most countries in all regions but vary greatly across and within regions. Ever use of contraceptives is lower in most Sub-Saharan African countries than countries in other regions. In about half the countries in Sub-Saharan Africa, fewer than 20% of youth have ever used a modern method. This also necessitated the relevance of this study, since it

geared towards creating awareness on proper and effective use of contraceptives methods among youth in higher institution.

Contraceptive is one of the major elements of adolescent reproductive health. Contraceptive allows people of child bearing age to determine the timing and the number of their children and empowers them to manage their lives with respect and dignity. Youth reproductive health is increasingly being recognized as one of the major determinant of human development. Among the major development concern about contraceptives or prevention of unwanted pregnancies considered to have a significant potential in improving the status of youth knowledge and use of contraceptives among youth showed very wide variation in sub-Saharan Africa region than other regions of the world (Gadisa, 2004). In confirmation with this study among youth aged 15-19 in Ghana, revealed that 85% knows at least one method of contraceptives while only 17% of sexually active youth use contraceptives, the rate for any method was 27% (Gadisa, 2004). Similar study in Nigeria by Ahmed, (2006) revealed that over 60% of urban youth have heard of at least one method but only 4.7% of active youth practice contraceptives of which 3.5% of them practice modern methods.

2.2.4 Contraceptive use among University Undergraduate Students

Research studies have shown that the prevalence of regular contraceptives use in undergraduate University students in Ethiopia was (23.5 percent), indicating very low utilization. The most preferred methods were Pills (56.2 percent) followed by injectable at (19 percent) (Tessema & Bayu, 2013). Despite the fact that sexually active unmarried adolescents are not interested in getting pregnant, and married adolescents do not wish to become pregnant at a young age or, if they have already had a child, wish to delay a second pregnancy, contraceptives prevalence rate in Sub Saharan Africa generally remained low. It was reported to be at only 21 percent while

adolescent girls as the age group with the lowest contraceptives prevalence rate (Tessema & Bayu, 2013).

A study done on contraceptives preferences among undergraduate university students in Ghana revealed that majority of students respondents preferred pills as the main contraceptives methods to condoms, vasectomy, IUD and Norplant. About six participants preferred a combination of two contraceptives methods, for instance, pills and condoms (Appiah-Agyekum & Kayi, 2013).

While in Nigeria, Iyoke et al, (2014) study revealed that male students' preference for condom use was 45.2 percent while those who did not use condoms preferred their partners to use some form of contraceptives. Majority (49 percent) of female students preferred traditional contraceptives methods such as fertility awareness and 28 percent preferred modern (artificial) contraceptives methods. A significant proportion (45.2 percent) of sexually active male students preferred modern contraceptives compared to females 28 percent for female (Trussell, 2007).

While a study in South Africa reported that 56 percent of women aged between 18-44 years used hormonal contraceptives, 69 percent used barrier methods (mainly the male condom), and 7 percent used permanent methods. Across all three groups, hormonal contraceptives users utilized contraceptives injectable more commonly than oral contraceptives (Laher et al, 2010).

2.2.5 Adolescent Reproductive Health Services

According to UNFPA (2007), adolescents have differing health needs in the transition from adolescence to adulthood and they face peculiar reproductive health vulnerabilities, while World Health Organization (WHO) in 2012 is of the opinion that adolescents require services that are specific, appropriate, accessible and user-friendly to effectively address their SRH needs. Services that are provided to adolescents ought to be confidential, private, and with their informed consent.

Their religious beliefs and cultural values must be respected and these services should conform to relevant existing international agreements and conventions.

In Nigeria, the government is the main provider of health services through its health facilities including Adolescent Reproductive Health (ARH) services (FMOH, 2005). Non-governmental organizations, private and religious health institutions also complement the Nigerian government efforts in the provision of quality adolescent health care. Despite the provision of these services, an assessment of the Adolescent Sexual and Reproductive Health (ASRH) situation in Nigeria revealed that reproductive health service (RHS) did not address the needs of adolescents (USAID, 2010). The report showed that there were few to no comprehensive health services that covered ASRH needs in most communities. Rural adolescents were found to be particularly underserved and many health service outlets were unequipped with staff unqualified to treat adolescent health issues. There were no links to other services that adolescents needed like counselling, skills empowerment and information networks.

Young people require reproductive health care now more than ever before, and addressing them is crucial to preventing poor reproductive outcomes. Therefore, increased investment in the quality and infrastructure of sound health services is critical to adolescents' present and future wellbeing (International Women's Health Coalition, 2008).

2.2.6 Methods of Contraceptives

According to Siegel (2013), contraceptive is the deliberate prevention of conception or impregnation by any of various drugs, techniques, or devices (birth control). Evidence from literature shows that there are various contraceptives methods available both for male and female that can be used to prevent unwanted pregnancies and sexually transmitted diseases (STD),

including human immune deficiency virus (HIV) infections. These methods include barrier, hormonal, intra uterine device and natural family planning which involve the rhythm or calendar.

A. Barrier Methods

Barrier methods of birth control are physical or chemical barriers that prevent sperm from passing through the woman's cervix into the uterus and fallopian tubes to fertilize an egg. Barrier methods include Diaphragm, Sponge, Cervical cap, Male condom, Female condom and Spermicide.

Diaphragm

The traditional diaphragm is a latex dome with spring molding in the rim. When inserted, it covers the cervix, preventing pregnancy. It's a simple enough design. It has improved over time from a traditional latex material, which is sticky to the touch, to a softer silicone material. According to Shwartz (2016), insertion process is simpler, it replace a metal round hoop spring that needs to be squeezed hard for insertion with a contoured nylon spring that has finger grips. The side effects are lesser because it is not hormonal. Allergic reaction expected in women who are allergic to silicon. This method is highly recommended to youth because it is not hormonal. It should be used with a backup method for those at risk of HIV.

Sponge

On the other hand, the sponge is a round piece of white plastic foam with a little dimple on one side and a nylon loop across the top. It is two inches across and inserted way up in the vagina before sexual intercourse. The sponge works in two ways: It blocks the cervix to keep sperm from getting into the uterus, and it continuously releases spermicide. Once the sponge is in, a woman can have sex as many times as she wants within a 24-hour period. It is left in place for at least 6 hours after the last time you have sex (NSW, 2015).

Cervical cap

Cervical cap is much smaller than the diaphragm and looks similar to a very large thimble. It fits over the cervix. It is in different shapes for a variety of vaginas and cervixes. In the view of Kindersley (2014), before insertion, the cap is one third filled with spermicide, squeezed between finger and thumb in order to get it into the vagina. Finally, put it over the cervix where it's held in place by suction. It should stay in all night after sexual intercourse. Very few youth are willing to use this method because of its “complexity” as they put it. According to Kiley, (2008) some of the reported side effects of this method are; recurrent dislodgment during coitus, malodor, and discoloration of the cap, vaginal or cervical irritation, and even damage to the vaginal mucosa. These side effects are experienced when the cap is left in place for longer periods of time.

Male Condom

The male condom is a form of contraceptives for men. It also protects against sexually transmissible infections (STIs). It is a fine barrier which is rolled on to a man’s penis before sex. It is used as a barrier to stop sperm and infection passing between sexual partners. It is usually made of rubber. This is the most preferred method by young adult because it is easily available with very minimal side effects. According to study by Bankole and Onasote (2016), condom use was highest among male adolescents in Ghana (68 percent) and lowest in Malawi (50 percent). Evidence from previous studies also affirms that condom is the most commonly used method of contraceptive among the youths (Hoque et al., 2013).

Female Condom

The female condom is a birth control device that creates a barrier to prevent the sperm from getting to the uterus. It also protects against infections spread during sexual contact, including HIV. This condom fits inside the vagina. The condom has a ring on each end. The ring that is placed inside the vagina fits over the cervix. The other ring is open. It rests outside of the vagina and covers the vulva. The method is not widely known among the youth and rarely available. A

study by Kaywin found that some people are allergic to latex or polyurethane and may have allergic reaction (Kaywin, 2015).

Spermicide

Spermicide is a birth control method that contains chemicals that stop sperm from moving. Spermicides are available in form of creams, film, foams, gels, and suppositories. They are inserted vaginally prior to intercourse to prevent pregnancy (Bayu, 2013). The method is not widely known by youth. Spermicides have no effect on a woman's natural hormones and do not affect milk outflow during lactation. However, some of the risks associated with this method include vaginal burning and irritation. Women who are allergic to spermicide may suffer from allergic reactions of varied nature. Spermicides containing nonoxynol-9 do not prevent one from STIs and HIV and may increase risk of contracting HIV if used several times a day (ACOG, 2016).

B. Hormonal Methods

Hormones are estrogen or progesterone that contains a combination of these hormones. There are various hormonal methods that include oral contraceptives, Contraceptives Patch and Vaginal Ring, Injection (Depo-Provera) and intra uterine Device Oral contraceptives Pill is taken by mouth on a daily basis and at the same time each day. There are two kinds of oral contraceptives, the combined oral contraceptives (COC) (estrogen and progestin). It works by preventing the ovary from releasing an egg, thickening the cervical mucus making it difficult for the sperm to reach the egg, and changing the lining of the uterus making implantation difficult (Bayu, 2013). The progestin-only contraceptive (POP) contains no estrogen. It works by thickening the cervical mucus making it difficult for the sperm to reach the egg, changing the lining of the uterus making implantation difficult and may sometimes inhibit the release of an egg.

According to Tamire & Enqueselassie, (2007) oral contraceptives are the most popular hormonal method among university students in Ethiopia. This method is preferred by youth due to its availability both on counter and in most health facilities. Another hormonal method is morning after/emergency contraceptives pill that is taken by mouth within 72 hours of unprotected sexual intercourse. Used to prevent pregnancy after a woman has sex without birth control, especially when the method she was using has failed, or if a woman is raped. This includes progestin only pills, ulipristal. They are taken in specific amounts, or a copper intrauterine device. The pill must be taken or IUD inserted within five days of unprotected sex to reduce the risk of pregnancy (Spencer et al, 2009). Youth are familiar with this method. It is a widely used method. However, it has been pulled out of the counter due to misuse but sold with prescription order only.

The above birth control pills have been found to have common side effects that include inter menstrual spotting or breakthrough bleeding. This may occur due to the uterus adjusting to having a thinner endometrial lining, or due to the body adjusting to having different levels of hormones. Mood changes, some people do experience depression or other emotional changes while taking the pill. Other side effects are; missed periods, decreased libido, nausea, breast tenderness, headache, weight gain, vaginal discharge and visual changes with contact lenses (Smith, 2017).

On the other hand, contraceptives patch is a patch that sticks to a woman's skin and continuously releases estrogen and progestin into the bloodstream. The patch prevents pregnancy by stopping the ovaries from releasing an egg, but it may also thicken the cervical mucus and make the uterine lining thin. One patch is worn each week for 3 weeks. The fourth week is patch-free, allowing menstrual period to occur. The patch can be worn on the buttocks, abdomen, back or upper arms, but not on the breasts. It may help to change the location a bit each week. The patch should be applied to clean, dry skin. You should not use any creams or lotions near a patch you're already wearing, or where you'll be applying a new one (Shriver, 2013).

Likewise Vaginal Ring is a soft, flexible, clear plastic ring and is inserted into a woman's vagina where it slowly releases estrogen and progestin for three weeks. These hormones enter into the woman's bloodstream and prevent pregnancy mainly by stopping the ovaries from releasing an egg. It may also thicken the cervical mucous and make the uterine lining thin. The ring is worn inside the vagina for three weeks, followed by a one week (seven day) ring-free interval. When the ring is removed, a woman usually has a period within a few days. At the end of the ring-free week, the woman inserts another ring to begin a new cycle. The ring should be left in place during sex (Nsubuga et al., 2016). Far fewer young women use implants, with rates of use below 1 percent nearly everywhere. Data from the same surveys shows that despite the high awareness of hormonal methods among youth, there is much lower rates of use among adolescent's ages 15 to 19 years than among young adults ages 20 to 24.

Related to the above is Depo-Provera which is a hormonal birth control method that contains a progestin. It is administered by a needle in the muscle of the arm or buttocks every 12-13 weeks. It stops ovaries from releasing an egg every month (ovulation). It also thins the lining of the uterus (Smith, 2016). According to a study by Tamire and Enqueselassie (2007) found that oral contraceptives or injectable are the most popular hormonal method among university students in Ethiopia.

Another hormonal method is the Intra-uterine Device (IUD) that is made up of a small T-shaped frame with a small cylinder containing the hormone levonorgestrel. IUD is inserted in the uterus through the cervix. This cylinder slowly releases the hormone that acts on the lining of the uterus. The lining of the uterus becomes thinner and the cervical mucus becomes thicker which makes it harder for sperm to enter the uterus (Kindersley, 2014). Most youth know about this method and are using it.

2.2.7 Effects of Pregnancy on University Undergraduate Students

The high social and economic costs of youth pregnancy and childbearing can have short and long-term negative consequences for young parents, their children, and their community. According to Ochieng (2016), students affected by pregnancy need time and good health to concentrate on their studies and adequately prepare for their exams so that they can pass well and look for employment, which is often awarded on the basis of good certificates. Some of the challenges pregnant university students experience as they try to balance between parenthood and studies include: interruption or termination of education, deprivation and poverty, it attempts to satisfy unmet emotional needs for intimacy, bonding and being needed. It also relates to the girl's search for identity or becoming a mother as the girl feels she has attained a certain identity and status (Sibeko, 2012). Statistics show that many young women who become pregnant while attending college and choose to parent their child will quit school and often never return (Mangel, 2010). Most times pregnant students drop out of school due to pressures they experience, including stigmatization associated with early pregnancy; isolation from friends; and lack of provision from family, friends, schools, social service agencies, and other organizations (Kost, 2015). In the case of pregnancies resulting from peer consensual sex, the education of girls is likely to suffer more than that of their male counterparts (Ochieng, 2016). By age 22, only around 50 percent of teen mothers have received a diploma and only 30percent have earned a certificate, whereas 90 percent of women who did not give birth during adolescence receive diploma (National Center for Health Statistics, 2011). Teen fathers have a 25 to 30 percent lower probability of graduating from high school than teenage boys who are not fathers (Fletcher & Wolfe, 2012).

2.3 Theoretical Framework

2.3.1 Psychoanalytic Theory

The psychoanalytic theory was propounded by Sigmund Freud in 1939. The theory emphasized developmental aspects of human personality. The theory stressed what happens in early childhood

exerts profound influence on an individual's future personality. Freud suggested that the primary purpose of sexual behavior is pleasure, opening the door to a host of new ideas. Activities that do not focus on the genitals may be seen as key expression of sexuality to the extent to which they produce pleasure. The youth, who invariably seeks pleasure in the body, may be seen as having a rich sexual life. Freud in effect, turned the traditional concept upside down. This reversal permitted him to account for behaviours that were previously inexplicable, such as sexual variations and infantile sexuality. Freud's redefinition of sexuality was two-fold. First, he divorced sex from its previous close restriction to the genitals and reproductive activity. Second he enlarged the concept of sexuality to include activities such as thumb sucking and sublimation that previously were not thought of as sexual.

In Freudian terms, the youth who actively seeks pleasure from many areas of the body, is polymorphous perverse, that is children's activities differ in many respects from reproductive sexual activity. The sexual activity of children is essentially autoerotic; they seek pleasure in sucking their thumbs, exploring their genitals, and so forth only in the course of a long history of development do children progress towards reproductive activities. This theory is related to the present study.

2.4 Empirical Review of Previous Studies

Olubanke and Onasote (2016), investigate the level of awareness and information behaviour on contraceptives among Nigerian female university students. Using simple random sampling to select participants from the university's nine colleges at the Federal University of Agriculture, Abeokuta, Nigeria, a total of 800 questionnaires were administered, of which 91.6% were duly completed. The findings showed that awareness of contraceptives among respondents was 95.2%; the most known contraceptives methods were the male condom, oral pills and injectable; most respondents (80.7%) first learnt of contraceptives at secondary school. Respondents' most

frequent sources of contraceptives information were friends, television and magazines/newspapers, but their most preferred sources were physicians/health workers, parents and university lectures/lecturers. The major barriers faced in seeking information on contraceptives were inability to get reliable and accurate information, lack of time and fear of embarrassment. Measures to increase the adoption of contraceptives among female students must take cognizance of their preferred sources of information to deliver correct and adequate information about contraceptives methods.

Kolawole and Abubakar (2015), investigated the issues surrounding emergency contraceptives (EC) and problems that characterized the use of EC among female students in tertiary institutions (Ahmadu Bello University, Zaria). The study primarily explores the knowledge of female students about EC, knowing fully that almost all the female students especially those that have engaged in pre-marital sex use it. Five (5) faculties were purposively selected for the study and a total of five hundred (500) female students were also selected for this study using accidental or grab sampling technique. The findings of the study mainly revealed that the knowledge of female students about ECs was not too encouraging because they don't know what to use and are not always ready/prepared for the usage any time they want to satisfy their sexual urge but rather engage in EC any time they have unprotected sex with their partners. It means the health sector has quite a number of intervention steps/work to do in terms of seminars/workshops, enlightenment, orientation and educating the students without which the attainment of the MDGs may be a tall dream in Nigeria and some of them may accidentally give birth to child that his/her father cannot be identified as a result of multiple sex partners and finally, there will be continuity in the spread of STDs.

Samuel and Elechi (2017), investigated the knowledge of contraceptives among adolescents in Ahoada West Local Government Area of Rivers State. 3 hypothesis tested at 0.5 level of

significance guided the study. The study adopted the descriptive survey design. A sample of 300 respondents was selected using multistage sampling procedure. The results of the study were; gender significantly influences adolescent knowledge of contraceptives ($df = 1, X^2 = 6.538, P = 0.00$). Age significantly influences adolescent knowledge of contraceptives, ($df = 1, X^2 = 15.495, P = 0.00$) and that religion significantly influences adolescents knowledge of contraceptives ($df = 1, X^2 = 68.7, P = 0.00$).

Okpokumoku, Nwajei and Nwose (2017), investigated on the sexual behaviour, knowledge and use of contraceptives, with a view to what may be known and unknown among undergraduate university students in Delta State from the contextual point. The methodology employed for this study was a narrative literature review approach. In order to guide the researcher, four composite focus of inquiry included (1) healthy and risky sexual behaviours, (2) contraceptives, (3) determinants of choice and use of contraceptives, and (4) knowledge and use of contraceptives among undergraduate students. The finding of this study indicates abundance of knowledge about sexual health. However, two themes are of particular mention needing further attention. Firstly, characteristics of being sexually healthy seem to be mixed up with healthy sexual behaviour. Secondly, contraceptives usage does not seem to match acclaimed knowledge, which translates to risky sexual behavior. How the undergraduate girls are successfully preventing pregnancies in order to maintain uninterrupted education also seems to remain a gap in the literature.

The above studies are similar to the present study in such a way they share similar variables (contraceptives knowledge and usage among youths) but they are difference due to the target location, all the above empirical studies were conducted outside Niger State, as a result of this, the current study deem it necessary to access the perception and usage of contraceptives among undergraduate students in Niger State.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter contains the methodological base that was used in this study which includes; research design, study population, sampling procedure, sample size, data collection procedures, reliability and validity and data analysis.

3.2 Research Design

This study employed a descriptive survey design. May (2001), noted that the application of a cross-sectional survey method is appropriate in obtaining the behavioral pattern of a given population on the basis of their knowledge, opinion, attitude and perception concerning a given phenomenon. A descriptive survey research design is therefore necessary to investigate the perception of reproductive health and contraceptives usage among undergraduate pre-service Biology teachers' in Minna, Niger State.

3.3 Population of the Study

The study population comprised population of one hundred and eighty-seven (187) undergraduate (200 level, 300 level and 500 level) pre-service Biology teachers' in Minna Niger State.

3.4 Sampling Technique and Sample Size

The sampling techniques namely; stratified sampling was used to group respondents into year of study, simple random sampling used to pick respondents from each stratum. The sample was stratified to reflect the distribution of undergraduate students by the year of study. The list of various categories of undergraduate students formed a sampling frame each category, that is 2nd years, 3rd years, and 5th years formed a stratum. Simple random sampling was then used to select

those from each category to participate in the study. This technique allowed for selection of sample without bias. According to Oso et al, (2005), simple random sampling ensures that each member in the population has an equal and independent chance for inclusion in the sample.

From this, sixty (60) students each was sample from the three categories (2nd, 3rd and 5th years). Therefore, 180 (one hundred and eighty) undergraduate pre-service biology teachers would be used for the study.

3.5 Research Instrument

The instrument for collecting data in this study was a self-designed questionnaire. The questionnaire is in two sections. The first section dealt with demographic data of the respondents while the second part elicited information on perception of reproductive health and contraceptives among tertiary institutions in Minna, Niger State. Likert scale was choose because it offers an interesting possibility for the students' to given their opinion as the research demanded. It is also possible to report percentage responses by combining the two outside categories, from the categories of the scale e.g Agreed (A), Strongly Agreed (SA), Disagreed (D) and Strongly Disagree (SD) and Highly Utilized (HU), Utilized (U), Not Utilized (NU) and Highly not Utilized (HNU). This was based on a four (4) Likert scale of strongly agreed (4), Agreed (3), disagree (2), strongly disagree (1) and highly utilized (4), utilized (3), not utilized (2) and highly not utilized (1).

3.6 Validity of the Research Instrument

Validity refers to the extent to which an instrument measures what it purports to measure (Kombo, 2006). The researcher determined the content validity of the questionnaires as a way of ensuring that the data collected using the instrument represent adequately the domain of the variables measured. Thus, instrument was validated by the researcher's supervisor and two other experts

from the Department of Science Education of Federal University of Technology Minna Niger State. He was presented with copies of the research purpose, and research questions as a guide and he was requested to assess the suitability of the language, the comprehensiveness, adequacy and relevance of the items in addressing the research questions, bearing in mind the purpose of the study. His comments, suggestions and correction was accommodated and used to modify the instrument.

3.7 Reliability of the Research Instrument

Reliability is a measure of the degree to which a research instrument yields consistent result or data after repeated trials (Kombo, 2006). To estimate the reliability of the instrument, a pilot study involving 30 On the other hand, the reliability of a measure indicates the extent to which it is without bias and hence ensures consistent across time and across various items in the instrument (Nachmias & Nachmias, 1996). Reliability is a measure of the degree to which a research instrument yields consistent result or data after repeated trials (Kombo, 2006). To estimate the reliability of the instrument, a pilot study involving 30 undergraduate biology 100 level students was taken. Cronbach alpha would be established from the responses using statistical package for social science (SPSS).

On the other hand, the reliability of a measure indicates the extent to which it is without bias and hence ensures consistent across time and across various items in the instrument (Nachmias & Nachmias, 1996). Reliability is a measure of the degree to which a research instrument yields consistent result or data after repeated trials (Kombo, 2006). To estimate the reliability of the instrument, a pilot study involving 30 undergraduate pre-service biology teachers (i.e 100 level) was taken. Cronbach alpha would be established from the responses using statistical package for social science (SPSS).

3.8 Procedure for Data Collection

The researcher administered the questionnaires to the respondents in their respective study year. Each respondent in the selected was given a questionnaire to complete and return immediately after responding. This was done to ensure that all questionnaires are returned to prevent loss.

3.9 Method of Data Analysis

The data collected was analyzed using descriptive statistics (mean and standard deviation) to answer the research question. The formulated hypotheses were tested using independent t-test at 0.05 significant levels.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

The study investigated the Perception of Reproductive Health and contraceptives use among undergraduate pre-service Biology Teachers' in Minna Niger State. This chapter deals with data analysis and presentation of results based on the stated research questions and formulated hypotheses as highlighted in chapter one. The chapter also deals with summary of findings and discussion of results.

4.2 Presentation of Results

The findings from the data for the study were presented under the following.

1. Demographic data
2. Research questions
3. Testing hypotheses

4.2.1 Demographic Data

Distribution of Sample Size based on Age

The distribution of demographic data of the respondents in this population based on age and the analysis is presented in Table 4.1

Table 4.1 Respondent age distribution

Age group	Frequency	Percent
18 – 25years	97	53.9
26 – 30years	77	42.8
31years and above	6	3.3
Total	180	100

Table 4.1 shows that the distribution of the sample size based on age. Ninety seven (97) of the respondent represent 53.9% of the total sample size are 18-25 years of age. Respondents with 26-30 years of age were seventy seven (77) representing 42.8% of the total sample size and 31years and above years of age were six (6) representing 3.3% of the total population.

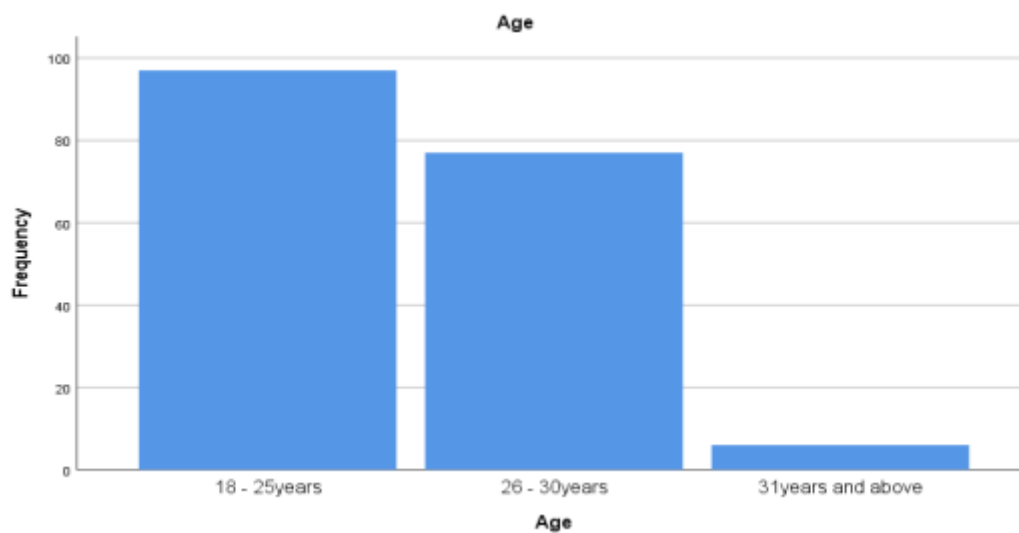


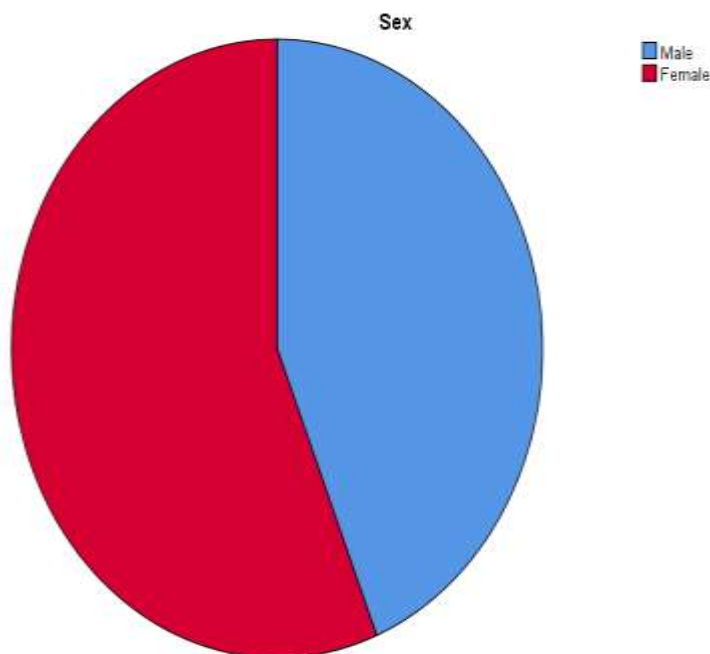
Figure 4.1 The graphical representation of age distribution

Table 4.2 Distribution of Sample Size by Gender

Gender	Frequency	Percent
Male	79	43.9
Female	101	56.1
Total	180	100

Source: Field survey 2021

Table 4.2 shows the distribution of sample size based on gender. One hundred and one (101) respondents representing 56.1% of the total respondents were female. Similarly seventy nine (79) of the total populations representing 43.9% of the Respondents were males. The finding is illustrated using a pie chart as presented in figure 4.2



**Figure 4.2 Graphical representation of sample size by Gender
Distribution of Respondents by Marital Status**

Table 4.3 shows the distribution of the sample size based on marital status. one hundred and Fifty five (155) respondents representing 86.1% of the total respondent are single respondents that are married were twenty four (24) representing 13.3% of the total and respondents that is divorced is one 1 representing 0.6% of the total.

Table 4.3 Distribution of Respondents by Marital Status

	Frequency	Percent
Single	155	86.1
Married	24	13.3
Divorced	1	0.6
Total	180	100

Source: Field survey 2021

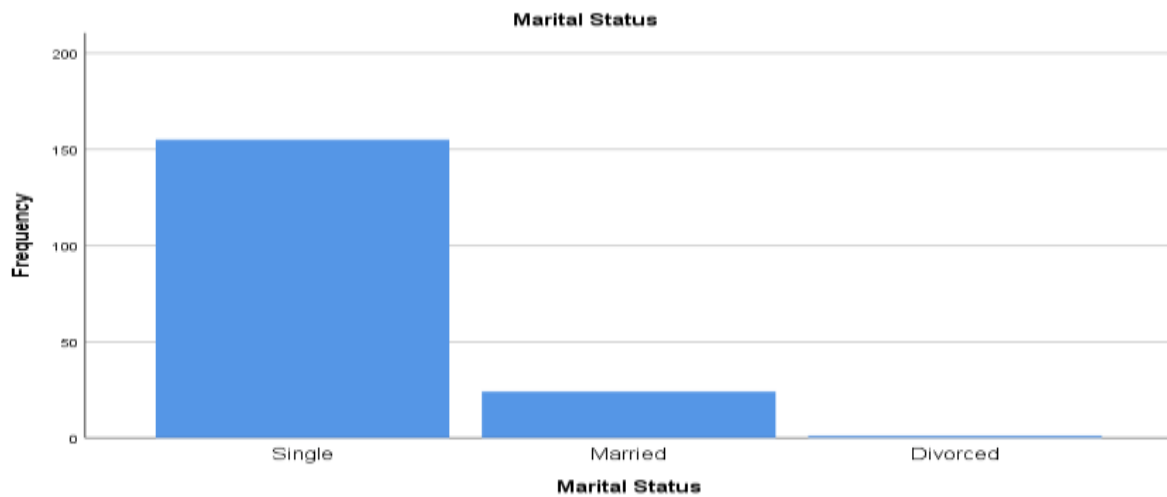


Figure 4.3 Graphical Representations of Respondents by Marital Status

4.3 Analysis of Research Questions

To answer the research questions that guided this study, data was collected and the findings were presented based on the stated research questions in chapter one;

Research Question one: What is the perception of undergraduate pre-service Biology teachers' on Reproductive health? To answer this research question, mean and standard deviation and the analysis is presented in Table 4.4

Table 4.4: Mean and Standard Deviation of undergraduate pre-service Biology teachers' on reproductive health

S/NO		N	Mean	Std. Deviation	Decision
1	Sexual abstinence helps to maintain reproductive health	180	3.21	0.98	Agree
2	Reproductive health care is to find information about sexuality education	180	3.31	0.76	Agree
3	Unprotected sexual intercourse is dangerous to reproductive health	180	3.32	0.94	Agree
4	The reproductive health help me to find out about Sexually Transmitted Infections	180	3.44	0.77	Agree
5	Reproductive health help acquire adequate knowledge about contraceptives	180	3.33	0.72	Agree
6	Reproductive health help me to avoid masturbation	180	2.89	0.99	Agree
7	Reproductive health help me in the choice of compatible with regards to genotype	180	3.34	0.79	Agree
8	Reproductive health help me to avoid illicit sex	180	3.07	0.92	Agree
Grand Mean			3.24		

Source: Field survey 2021

Table 4.4 shows the results of perception of undergraduate pre-service Biology teachers' on reproductive health. The average mean of 2.5 was used as the benchmark for agreed perception and the mean below 2.5 is the negative perception. Consequently, all the 8 items shows the mean

between 2.89 and 3.44, indicating that undergraduate pre-service Biology teachers' have positive perception on reproductive health. It is important to highlight that more respondent in the population agreed that reproductive health service is essential in maintaining healthy life. Respondents have high positive perception that reproductive health helps them to find out about sexually transmitted infections with the highest mean of 3.44, they also agree to the perception that reproductive health helps them in the choice of compatible partner with regard to genotype with mean of 3.34. The grand mean of 3.24 indicates that the respondents have high perception on reproductive health.

Research Question Two: what is the perception of undergraduate pre-service Biology teachers' on the usage of contraceptives? To answer this research question, mean and standard deviation and the analysis is presented in table 4.5

Table 4.5 Mean and Standard Deviation of undergraduate pre-service Biology teachers' on usage of contraceptives

S/NO		N	Mean	Std. Deviation	Decision
1	Contraceptives are only for adult married persons	180	2.67	1.128	Agree
2	Contraceptives use is against our culture	180	2.32	1.016	Disagree
3	Adolescents who use contraceptives are immoral people	180	2.55	1.012	Agree
4	Contraceptives use to lead to infertility	180	2.86	0.895	Agree
5	The process of acquiring contraceptives is often embarrassing	180	2.81	0.904	Agree
6	Advertisement and information about contraceptives are immoral	180	2.08	0.994	Disagree
7	Contraceptives have significant side effects	180	3.01	0.839	Agree
8	Religion prohibit the use of contraceptives	180	2.72	1.004	Agree
	Grand Mean		2.63		

Table 4.5 shows the result of perception on undergraduate pre-service Biology teachers' on the usage of contraceptives. The average mean of 2.5 was used as the benchmark for agreed self-efficacy and the mean below 2.5 is considered a disagreed self-efficacy. The analysis indicated that the respondents have fair knowledge and opinion on the usage of contraceptives. They agreed on items such as contraceptives are only for adult married persons, adolescents who use contraceptives are immoral persons, contraceptive use could lead to infertility, the process of acquiring contraceptives is often embarrassing, contraceptives have significant side effects and religion prohibits the use of contraceptives with the mean rating between 2.55 and 3.01 respectively while the disagreed with items that contraceptive use is against our culture and advertisement and information about contraceptive use is immoral. This implies that they had fair perception towards contraceptive usage among undergraduate students.

Research Question Three: what is the level of utilization of contraceptives among undergraduate pre-service Biology teachers'? To answer the research question, mean and standard deviation and analysis is presented in table 4.6

Table 4.6 Mean and Standard Deviation on the level of utilization of contraceptives among undergraduate pre-service Biology teachers'

S/NO		N	Mean	Std. Deviation	Decision
1	Condom	180	3.48	0.894	Agree
2	Traditional method	180	2.50	0.938	Agree
3	Oral pill	180	3.10	0.934	Agree
4	Intra-uterine Device (IUD)	180	2.50	0.960	Agree
5	Withdrawal	180	2.93	1.036	Agree
6	Abstinence	180	2.38	0.940	Disagree
7	Implants (Loop or copper T)	180	2.37	0.980	Disagree
8	Injection	180	2.66	1.005	Agree
9	Emergency pill	180	3.06	0.916	Agree
10	Spermicide	180	2.44	0.993	Disagree

Grand Mean	2.74
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Table 4.6 shows the result of the level of utilization of contraceptives among undergraduate pre-service Biology teachers'. The average mean of 2.5 was used as benchmark for agreed self-efficacy and the mean below 2.5 is the disagreed self-efficacy.

This revealed that the respondents agreed to the utilization of contraceptives such as oral pill, withdrawal method, injection, traditional method intra-uterine (IUD) and condom (which is the most used among the rest contraceptives with the mean of 3.48). Spermicide, abstinence and implants have mean ranging between 2.50 and 3.48 respectively and they are the least utilized.

4.4 Analysis of Null Hypotheses

H₀₁: there is no significant difference in mean response between undergraduate Biology pre-service teachers' perception on reproductive health based on gender. To test this hypothesis independent t-test is used and the analysis is presented in table 4.7

Table 4.7: t-test result of male and female pre-service Biology teachers' perception on reproductive health

Group	N	Mean	S.D	D.F	t- value	P-Value	Remark
Male	79	25.68	4.431	178	0.520	0.604	Not Significant
Female	101	26.00	3.736				

Source: Field survey 2021

The table 4.7 reveals that there is no significant difference in the mean response between undergraduate pre-service Biology teachers' perception of reproductive health base on gender $t(178)=0.520, p=0.60(p>0.05)$ this implies that there is no significant difference that exists between male and female undergraduate pre-service Biology teachers' perception on reproductive health. Therefore we fail to reject the null hypothesis.

Ho2: there significant difference between the mean responses of undergraduate pre-service Biology teachers’ perception of reproductive health based on age. To test this hypothesis, ANOVA test is used and the analysis is presented in table 4.8.

Table 4.8 Summary of ANOVA result of pre-service Biology teachers’ perception on reproductive health based on age

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15.251	2	7.626	.463	.630
Within Groups	2916.277	177	16.476		
Total	2931.528	179			

Source: Field survey 2021

The Table 4.8 reveals that there is a significant differences between the mean respond of undergraduate pre-service Biology teachers’ on reproductive health base on age This implies that there is significant difference in the in the mean respond of undergraduate pre-service Biology teachers’ based on age. Therefore we reject the null hypothesis and conclude that age perception influence undergraduate pre-service Biology teachers’ on reproductive health.

Ho3: there is no significant difference between the mean perception of male and female undergraduate per-service Biology teachers’ on usage contraceptives. To test hypothesis independent t-test is use and analysis is presented in table 4.9.

Table 4.9 t-test result of male and female pre-service Biology teachers' perception on usage of contraceptives

Group	N	Mean	S.D	D.F	t- value	P-Value	Remark
Male	79	27.86	5.274	178	0.976	0.330	Not Significant
Female	101	27.04	5.846				

Source: Field survey 2021

The table reveals that there is no significant difference between the mean perception of male and female undergraduate pre-service Biology teachers' usage of contraceptive. $t(178)=0.98, p=0.33(p>0.05)$. This implies that there is no significant difference that exist between the mean perception of male and female undergraduate pre-service Biology teachers' usage of contraceptives. Therefore, we fail to reject the null hypothesis

4.5 Summary of findings

The data obtain for this study was analyzed and it yielded the following findings:

1. The finding of research question one shows the respondents in this population has positive perception on reproductive health.
2. Research question two yielded a finding that shows that the respondent have a fair perception on the usage of contraceptives
3. Research question 3 shows that the respondents utilized contraceptive with condom been the highest utilized contraceptives in this population.
4. The finding further indicated that the perception of male and female respondents on reproductive health did not differ significantly.

5. Age has significantly difference on the perception of undergraduate pre-service Biology teachers' on reproductive health.

6. It also indicated gender has no significant difference on the perception of undergraduate Biology teachers' on the usage of contraceptives.

4.6 Discussion of Findings

The findings revealed that respondents have positive perception on reproductive health that sexual abstinence helps to maintain reproductive health, reproductive health care is to find information about sexuality education, unprotected sexual intercourse is dangerous to reproductive health, the reproductive health help me find Out about sexually transmitted infection (STD), reproductive health help acquire adequate knowledge about contraceptives, reproductive health help me to avoid masturbation, reproductive health helps me in the choice of compatible with regards to genotype and reproductive health helps me avoid illicit sex. The findings is in line with the findings of Olubanke and Onasote (2017), and NPC (National Populaion Commission, 2014) reported that Nigerian have high level of awareness of reproductive health such as injectable and oral pills.

Similarly, the findings indicated that usage of contraceptives, contraceptives are only for adult married persons, adolescents who use contraceptives are immoral persons, contraceptives use could lead to infertility, the process of acquiring contraceptives is often embarrassing, contraceptives have significant side effects and religion prohibits the use of contraction but disagreed that contraceptives use is against our culture and advertisement and information about contraceptives use is immoral. The findings is in line with the opinion of Ibekwe and Obuna (2010) who posited that lack of information on sex-related matters, including contraceptives, accounts for the high prevalence of unwanted pregnancies and unsafe abortions in Nigeria.

Similarly in line with findings, reports by Chigbu et al., (2010) and Cleland et al., (2014) have shown that over 60% of women with unplanned pregnancies were not using contraceptives due to lack of awareness, access problems, lack of or deficient knowledge, inadequate information and erroneous beliefs, misunderstandings or misinformation about contraceptives methods and services, and social constraints.

Finally, the findings revealed that the respondents used condom, oral pill, withdrawal method, injection, traditional method and intra-uterine device than other forms of contraceptives. This is similar to the report of Somba.et al, (2013) that the most common contraceptives methods were condoms (56.0 percent), periodic abstinence (17.6%) and withdrawal (16.2%). The periodic abstinence was the commonest contraceptives method used among unmarried students (73.7%), while pills were the method of choice among married participants (66.7%). Similarly, Bankole and Onasote (2016), reported that the common contraceptive among undergraduate students are condom, pills, withdrawal, abstinence and injectable while sterilization, implant and IUD methods of contraceptives were the least.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study, conclusions and recommendations. The chapter further presents the suggestions for further research.

5.2 Summary

This study was conducted with a view to examine the perception of reproductive health and contraceptives use among undergraduate pre-service biology teachers in Minna, Niger State. Specifically, research objectives include;

- i. Determine level perceptions of undergraduate students on reproductive health.
- ii. Determine level perceptions of undergraduate students on the usage of contraceptives.
- iii. Examine the level of utilization of contraceptives among undergraduate students.

In the literature review, conceptual framework that focused on Concept of contraceptives, contraceptives in Nigeria, adolescent knowledge and use of contraceptives, contraceptives use among university undergraduate students, adolescent reproductive health services, methods of contraceptives, effects of pregnancy on university undergraduate students while theoretical framework reviewed Psychoanalytic Theory and previous empirical studies were also reviewed.

The study adopted a descriptive survey design. The sample was stratified to reflect the distribution of undergraduate pre-service biology teachers by the year of study. From this, 180 (one hundred and eighty) biology undergraduate pre-service biology teachers were used for the study sampled from the three categories (2nd, 3rd and 5th years). The study used self-designed

questionnaire. The questionnaire was in two sections. The first section dealt with demographic data of the respondents while the second part elicited information on perception of reproductive health and contraceptives usage among undergraduate pre-service biology teachers in Minna, Niger State. The questionnaire was made up four point Likert scale of Agreed (A), Strongly Agreed (SA), Disagreed (D) and Strongly Disagree (SD) and Highly Utilized (HU), Utilized (U), Not Utilized (NU) and Highly not Utilized (HNU).

Data collected was analyzed using descriptive statistics (mean and standard deviation) to answer the research questions. The formulated hypotheses were tested using independent t-test at 0.05 significant levels.

The data generated from the questionnaires were analyzed and the following findings were revealed:

- i. The respondents are aware and have high perception on reproductive health.
- ii. They had high perception towards contraceptives usage among undergraduate pre-service biology teachers.
- iii. Condom is the most used contraceptives followed by oral pill while intra-uterine device is the least used among undergraduate pre-service biology teachers.

5.3 Conclusion

Based on the findings, it was logical to conclude that there was high level of perception on the usage on reproductive health compare to the perception contraceptives usage among undergraduate pre-service biology teachers of Federal University of Technology, Minna. On the utilization of contraceptives, condom is the most used contraceptives followed by oral pill while intra-uterine device is the least used among undergraduate pre-service biology teachers. But the

disparity between perception and contraceptives utilization among undergraduate pre-service biology teachers is an indication that there is no association between the level of contraceptives awareness and uptake.

It is therefore apparent that contraceptives prevalence among the university student was relatively high and there is need to upscale the usage. This can be achieved through enhancement of the involvement of parents, peers, partners and the university community. Expansion of the distribution channels to improve accessibility and use of various information channels that provide a fundamental link between contraceptives awareness, access and utilization.

5.4 Recommendations

The following recommendations were made based on the findings and conclusion of the study;

- i. More orientation should be provided to re-educate students in tertiary institutions towards appropriate sexual behavior as well as the acquisition of relevant and adequate valid and usable knowledge of reproductive health and contraceptives usage.
- ii. There is need to incorporate the following into the General Studies (GST) Curriculum content of University students: knowledge of human reproduction, prevention of sexually transmitted infections, family planning techniques and their side-effects, understanding of boy-girl relationship.
- iii. Government should put in legislations emphasizing free access to contraceptives health services for adolescents.
- iii. Teachers and parents should do well to give relevant sexuality information or education to adolescents before their engaging in sexual activities.
- iv. Provision of information about contraceptives should also include the possible sources of contraceptives, especially where it could be accessed without embarrassment by the providers

v. Students should be provided with basic knowledge of sexuality and contraceptives before the age they are likely to engage in sexual activities and effective channels of communication should be used to inform and educate youth using health professionals including, the author, trained teachers, and trained peer promoters and media.

5.5 Suggestions for Further Studies

The following areas were suggested for further research;

- i. Further studies can be conducted to find barriers for contraceptives usage among undergraduate students.
- ii. Studies on factors influencing uptake of contraceptives services should be assess.
- iii. The study can be replicated using larger population to validate the findings of this study.
- iv. The methodology adopted for this study was cross-sectional descriptive survey. Therefore similar study can be conducted using longitudinal survey or mixed method which could provide more insight about subject matter.

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Appendix

QUESTIONNAIRE ON THE PERCEPTION OF REPRODUCTIVE HEALTH AND CONTRACEPTIVES USE AMONG UNDERGRADUATE PRE-SERVICE BIOLOGY STUDENTS IN MINNA NIGER STATE

Dear respondent,

I am a student of Federal University of Technology, Minna conducting a research on the project title stated above. The success of my research work depend on the questions below, I therefore appeal for your kind and full co-operation towards the successful completion of my research work.

Information collected will be treated as confidential and utilized for the purpose of the research.

Demographic Data

Age: 18-25 years (), 26-30 years (), 31 years and above ()

Gender Male: () Female ()

Marital Status: Single (), Married (), Divorced (), Window ()

Instructions: Please read the following statements and rate how much you personally agree or disagree with these statements by ticking in appropriate columns

SA= Strongly Agreed, A= Agreed, D = Disagreed, SD= Strongly Disagreed

i. What is the perception of undergraduate students on reproductive health?

S/No	STATEMENT	SA	A	D	SD
1.	Sexual abstinence helps to maintain reproductive health				
2.	Reproductive health care is to find information about sexuality education				
3.	Unprotected sexual intercourse is dangerous to reproductive health				
4.	The reproductive health help me find Out about sexually transmitted infection (STD)				
5.	Reproductive health help acquire adequate knowledge about contraceptives				
6.	Reproductive health help me to avoid masturbation				
7.	Reproductive health helps me in the choice of compatible with regards to genotype.				
8	Reproductive health helps me avoid illicit sex.				

ii. What is the perception of undergraduate students on the usage of contraceptives?

S/No	STATEMENT	SA	A	D	SD
1.	Contraceptives are only for adult married persons				
2.	Contraceptives use is against our culture				
3.	Adolescents who use contraceptives are are immoral persons				
4.	Contraceptives use could lead to infertility				
5.	The process of acquiring contraceptives is often embarrassing				
6.	Advertisement and information about contraceptives use is immoral				
7.	Contraceptives have significant side effects				
8.	Religion prohibits the use of contraceptives				

HU= Highly Utilized, U= Utilized, NU= Not utilized, HNU= Highly not utilized

iii. What is the level of utilization of contraceptives among undergraduate students?

S/No	STATEMENT	HU	U	NU	HNU
1.	Condom				
2.	Traditional method				
3.	Oral pill				
4.	Intra-uterine Device (IUD)				
5.	Withdrawal				
6.	Abstinence				
7.	Implants (Loop or copper T)				
8.	Injection				
9.	Emergency Pill				
10.	Spermicide				