

Original Research Article

Contraceptive Use an evolving challenge; Perception and Misconception among women of reproductive age at University of Nigeria Nsukka, Nigeria.

ABSTRACT

Introduction: Contraceptive is a component of family planning which enables individuals to achieve a desired number of pregnancies by controlling the spacing and timing of conception. This improves the general wellbeing of women and children.

Objective: This study aimed to determine the use, perception and misconception of contraceptives among women of reproductive age at University of Nigeria Nsukka.

Methodology: Descriptive cross sectional study using pretested, interviewer administered questionnaire was employed. Simple random sampling technique was used to select a representative sample of 350 women aged 15-49 years. Statistical package for social sciences (SPSS) version 23.0 was used for Data analysis. Chi square test and Binary logistic regression were used. The level of significance was $p < 0.05$.

Result: Majority of the participants (94.1%) had some knowledge on contraceptives. The prevalence of contraceptive use was 35.5%. Overall positive perception on contraceptives was 83.3% although 22.6% believed that contraceptives are for women alone. Overall misconception was 69.3%. About 43.3% believed that contraceptives are harmful to the womb, 46.9% agreed that contraceptives can render one infertile. Male condom at 16.3% followed by pill at 15.4%

were most commonly used form of contraceptives while Pharmacy shops were commonest source at 65.5%. Religion was identified as predictor of misconceptions of contraceptives.

Conclusion: There was good knowledge but poor use of contraceptives in the population. Effect of myths and negative perceptions surrounding the use of contraceptives was observed, hence, the need for contraceptive education and enlightenment programs in this community.

Keywords: Contraceptive, Use, Perception, Misconception, Women, University

INTRODUCTION

Women sexual and reproductive health is related to multiple human rights, including right to life, right to freedom, right to health, right to be free from torture, right to privacy, right to education and the prohibition of discrimination.¹ According to the United Nations Human Rights Commission, women are entitled to reproductive health care services, goods and facilities that are available in adequate numbers, accessible physically and economically, accessible without discrimination and of good quality.¹ The socio-economic importance of contraceptives arises from the fact that uncontrolled population growth will inevitably lead to overpopulation and its attendant negative consequences.

Of the estimated 208 million pregnancies that occur yearly worldwide, approximately 41% are unplanned and 22% are terminated.² According to the 2015 world contraceptive pattern, 64% of married women use contraceptives, 216 million have an unmet need for modern contraceptive method, 9 out of 10 contraceptive users rely on modern method, and only 60% of demand for family planning in Africa is satisfied.³ The United Nations in a 2013 report explain that globally, contraceptive prevalence is 63%, with nine out of ten woman of reproductive age in a union who

uses a contraceptives, relies on a modern contraceptive.⁴ The same report states that sub-Saharan Africa has a prevalence of 25%, and that the most common methods worldwide are female sterilization (26%), IUDs (14%) and the emergency contraceptive (the pill at 9%).⁴

The Nigeria Demographic Health Survey in 2018 reported that 17% of currently married women use a method of family planning [12% use modern method and 5% traditional method].⁷ The most popular methods are implants, injectables, and withdrawal (each used by 3%), followed by male condoms (used by 2%).⁵ The contraceptive prevalence rate (CPR) among married women varies with age, rising from 3% among women age 15-19 to a peak of 23% among women age 35-39 before declining to 13% among women age 45-49.⁵

In developing nations, the use of contraceptives is not openly discussed among young unmarried women due to strong cultural and religious beliefs.⁶ As such, many unmarried females who get unintended pregnancies seek abortions services for fear of societal judgment. In a study carried out in North western Nigeria for instance, 57.8% of the respondents believe that use of contraceptives conflicts with their moral, cultural and religious beliefs.⁷ The use of contraceptives is believed by some people to promote promiscuity. For example, a study carried out in Northwest Nigeria, 18.75% of the respondents opined that contraceptives encourage promiscuity⁷ while 32.5% of respondents in a different study in Delta state believed same.⁸ Furthermore, the perception that contraception could lead to infertility later in life is one of the reasons that Nigerian women have always cited for not accepting effective contraception.⁹

Myths and misconceptions about family planning are barriers to modern contraceptive use. Some of these are exaggerated or erroneous reports about side effects, misconceptions about short- or long-term health problems and negative stereotypes about persons who practice family planning.^{10,11} In a study conducted in Mali, many women feared that the pill and the injectable could cause permanent infertility.¹² A qualitative study in Kenya demonstrated that many women had misconceptions about the side effects of modern contraceptives (e.g., that they cause infertility or can harm a woman's uterus), but few had experienced or knew someone who had experienced an actual side effect (e.g., weight gain).¹³ In a similar study in one respondent reported that the pill "can accumulate into a life-threatening mass in the stomach, can cause blood to flow out of the nose and mouth, and can cause delivery of children with two heads and no skin".¹⁴ Findings from Nigeria demonstrate that fear of side effects and concerns about long-term infertility are major reasons for not using modern contraceptives.¹⁵⁻¹⁷ Similar results were found in Mexico, where women who had never practiced contraception reported that they had chosen not to use the pill for safety reasons.¹⁸ Cultural and Religious factors have notoriously been implicated in poor use of contraceptives.⁷ Various research have found that utilization of contraceptives was higher among Christians than those practicing Islam.^{19,20}

Research has proven that effective contraceptive uptake prevents an estimated 2.7 million infant deaths and the loss of 60 million of healthy life in a year.^{21, 22} Promotion of family planning could reduce poverty, hunger, avert 32% of all maternal deaths and nearly 10% of childhood deaths.²² This study explores the use, perception and misconception of contraceptives among women of reproductive age in a University community. This would serve to provide information to policy makers on what areas to develop programmes and policies especially in a society that

women still feel restricted to access contraceptive methods due to social cultural barriers. It would also guide non-governmental organizations in developing objectives, activities and outcomes of projects aimed at improving contraceptive use.

MATERIALS AND METHOD

Study Area

The study was carried out at University of Nigeria Nsukka, a federal university located in Nsukka Local Government Area of Enugu state, Southeast Nigeria. There are a number of Federal parastatal in the Nsukka campus such as Centre for Basic Space Research, a Federal Medical Centre and the Energy Research Centre. Also present in the community are, 6 different banks, a secondary school, a primary school, two main churches (a Catholic church and an Interdenominational church) and a mosque. The University of Nigeria Nsukka has a population of over 42,000 undergraduate students. The predominant ethnic group is Igbo. Majority of the dwellers are students, civil servants, bankers and traders. The community has a predominant population of Christians who are mostly monogamous. The community under study is a highly organized area with spaces clearly mapped out for residential houses, businesses, student hostels, recreation and academic purposes.

Study Design, Instrument and Data Collection

This was a descriptive cross-sectional study using a pretested, semi-structured, self-administered questionnaire. Data was collected by researcher and three trained research assistants.

Study Population

These consisted of women of reproductive (ages 15 to 45 years) in University of Nigeria Nsukka including; academic staff, non academic staff, students and others living in the community who gave consent.

Sample size determination and sampling

The sample size was determined using single population proportion formula [$n = Z^2 pq/d^2$] taking 28.1% contraceptive prevalence rate among women of reproductive age in south east Nigeria,⁵ marginal error of 5%, confidence level of 95% and a non-response rate of 10%. A total of 350 women were studied. The university was divided into four units to ensure that all areas were approximately equally represented. The sample tool was likewise divided into four, that is, 87 tools for each unit and the remaining 2 tools were randomly assigned to two different units. Participants were now enlisted house to house, office to office and class to class (depending on the nature of the unit) until the desired number of sample size was obtained.

Data Management

Data analysis was done using IBM Statistical package for social sciences (SPSS) version 23.0. The data were summarized using frequencies, proportions and percentages. Pearson Chi square test was used to establish association of socio-demographic characteristics with knowledge, perception and misconceptions on contraceptive use. Statistical significant variable (religion) was further analyzed using binary logistic regression. Level of significance was at $p < 0.05$.

Ethical Considerations

Ethical clearance was obtained from the Health Research and Ethics Committee of University of Nigeria Teaching Hospital (UNTH). Permission was obtained from authority of the institution to embark on the study. Informed consent was obtained verbally from all those interviewed after the purpose of the study was explained to the participants. Information obtained from

participants were kept confidential. Participant's freedom to withdraw from the study at any point in time in spite of the consent was also respected.

RESULTS

Table 1 shows that the mean age group of the respondents was 25 ± 8.2 with 161(47.2%) of them aged between 19-24 years. Among the respondents, 249(73%) were single, 243(71.3%) had received a tertiary education, 331(97.1%) were Christians and 236(69.2%) were students. Women with zero parity constituted 251(73.6%) of the respondents while those with no monthly income made up 178(52.2%) of the respondents.

Table 2 shows that 321 (94.1%) of the respondents had good knowledge of contraceptives. Also 204 (59.8%) of the respondents reported that there is a difference between contraception and family planning. The highest source of information on contraceptives was from school 147 (44.8%) while family was the least source of knowledge about contraceptives 26 (7.9%). About, 234 (69.4%) believed that contraceptives are for married women while 130 (38.6%) believed it to be for single women. It equally shows that Pill 245(72.9%), male condom 196(58.3%), female condom 131(39%), withdrawal method 127(37.8) and implant 110(32.7%) were the most common forms of contraceptives known by the respondents. Pharmacy was identified as the foremost source of contraceptives 222(65.5%).

Table 3 shows that the prevalence of contraceptives among the respondents was 121(35.5%). The most commonly used contraceptive method was male condom 55(45.5%). Of the 35.5% of respondents that have ever used a form of contraceptive, 49(40.5%) reported having experienced menstrual abnormalities while 63(52.1%) reported no side effects. Also safety was the

commonest reason for choice of contraceptive 86(71.1%). The most prevalent reason for non-use of contraceptive was uneasiness at purchasing it 23(10.5%) followed by partner hates it 22(10.0%)

Table 4 shows that the overall positive perception on contraception was 284(83.3%). Among the respondents, 313(91.8%) reported their Husband/Partner thinks that modern contraceptives were important, 311(91.1%) would discuss with husband/partner on modern contraceptives. 310(90.1%) affirmed that contraceptives benefits men too, 269(78.9%) stated that it is not wrong to use contraceptives and 282(82.7%) reported that the benefits of modern contraceptives outweighed its draw-backs. Table also shows that 236(69.3%) of the respondents reported misconceptions on contraceptive use. Of the respondents, 34(9.9%) reported that contraceptive is not essential for family planning, 172(50.5%) that contraceptives encourage promiscuity, 224(65.6%) agreed that contraceptives cause cancer and 181(47.0%) that contraceptives can make one infertile.

Table 5 shows that there was no significant association between any of the socio-demographic factors and the use of contraceptive among respondents (all $p > 0.05$).

Table 6 shows that there was no significant association between any of the socio-demographic factors and the perception of contraception among the respondents (all $p > 0.05$).

Table 7 shows that only religion had a significant association between socio-demographic factors and misconceptions of contraceptive ($p = 0.006$).

Table 8 shows that Christians were about 12% times likely to have misconceptions on contraceptive use than other religion [AOR 0.119; 95%CI: 0.025-0.573].

DISCUSSION

The knowledge on contraceptives to a great extent determines its use. Having knowledge about fertility control is an important stage towards attaining access to and using an appropriate contraceptive method timely and in an effective manner.²³ There was a high knowledge of contraceptives among the respondents (94.7%). This is in line with findings in a similar studies in Ondo and Ekiti states, Nigeria where 100% knowledge was reported²⁴ and in Enugu, Nigeria which reported 91.1%.²⁵ Also, another study carried out in Enugu documented 81.7%.²⁶ The commonest source of knowledge was school while the least was family. This contrasts similar studies that observed commonest source as family/friends^{8,25} and health facility.²⁷ These findings from current study may be as a result of location of the study which is a tertiary institution with series of courses, seminars, trainings and programmes. In course of these, contraceptive may be a topic of discussion. The high level of knowledge is encouraging. If sustained and translated into uptake will greatly impact positively on mortality status of women of reproductive age and boost economic status of the nation at large.

The most widely known form of contraceptive among the respondents was pill followed by male condom. A similar study in Tanzania as well as other several studies have also identified pill and male condom as the predominant known form of contraceptives.^{22, 24, 25,28} Pharmacy shops were the highest source of contraceptives. This can equally be explained by location of the study and

the educational level of the respondents. In a study conducted in Delta state Nigeria, pharmacy was also identified as the most common source of contraceptives.²²

Despite the high level of knowledge of contraceptives in the University community, the proportion that uses contraceptives was low (35.5%). This implies that high and good knowledge of contraceptive does not mirror the use. This gap could be partly due to the fact that the prevailing religion in University is Christianity. The influence of culture and religion on contraceptive usage was crystal clear in this population of women. This has been reported by several other previous studies.²⁹⁻³¹ According to 2018 NDHS, the prevalence of contraceptive use in Enugu state was 30.9%.⁷ A similar study conducted in Kano reported a prevalence rate of 31.5%.³² The NDHS further revealed that contraceptive use is more prevalent among sexually active unmarried women (37.0%) than married women (16.6%).⁷

Globally, it has been shown that women generally prefer injectables.³³ However, this study reported Male condom and Pill as the most widely used contraceptives at 45.5% and 43.0% respectively. Emergency contraceptive and withdrawal had the similar rate of use at 20.7%. Tubal ligation, vasectomy, foam and spermicide had the lowest use rate. Studies conducted in Tanzania and Ukraine reported pill and condom (97.9%) each as the most widely used form of contraceptives among the respondents.^{28,34}

The most reported side effect experienced was menstrual abnormalities which are common side effect of contraceptive pill and emergency contraceptive. Weight gain, headache as well as Irritation [side effect observed in some users of male and female condom] were reported. Above

all, a high proportion of the respondents reported no side effects. Contraceptives when used as prescribed are safe and have limited side effects if any. However, these vary according to type of contraceptive and individual involved. There is need for adequate screening, counseling and guided choice by trained providers tailored to meet individual needs as some are contra-indicated in particular conditions. Reasons for choice of contraceptive method varied among the respondents. Safety was the most predominant choice followed by reliability and ease of use.

Uneasiness at purchasing a form of contraceptive was the most common reason for non-use of contraceptives among the respondents. This could be as a result of shyness and fear of judgment by the provider. Partner's dislike of contraceptives was also reported as a key reason for non-use of contraceptive. In a society that is male dominated, this is a common observation. Not wanting a birth control and fear of side effects were other reason for not using it. Cost and provider's attitude were the least reported reason for non-use. A focus group discussion may help probe further and uncover the reason for this.

All the respondents in this study have at least one concern about contraceptive use. Nonetheless, there was an overall high positive perception and minimal misconceptions on contraceptives among this population. Note worthy is the perception regards discussing modern contraceptives with partners and partners positive thoughts on contraceptives. However, there were negative perceptions such as opinion that it is not for the poor, that they were for females alone and that it is wrong to use contraceptives. This opinion could have been formed out of religious and cultural beliefs. Over a half of the respondents did not agree with the popular opinion that contraceptives are harmful to the womb and about two third of respondents agreed that contraceptives do not

cause infertility. There is need for enlightenment and education to reinforce the benefits of contraceptives while correcting the negative perceptions and misconceptions.

The myths and misconceptions surrounding contraceptives especially in developing countries are as old as time. Religion and culture have been shown to influence negatively the usage of contraceptives. No religious organization encourage the use of modern contraception, rather they preach abstinence or at most the 'calendar method' of family planning.³⁵ In addition, discussions on sex and contraception with young persons are still considered inappropriate in Nigeria, even among health workers.³⁶ Such opinions should be addressed by using appropriate behavioral change communication. Myths abound in Nigeria about modern contraceptives and this is not restricted only to the rural areas. Even among the educated and enlightened females there are still lots of concern about issues of reproductive health. The need for more organized education on contraceptives cannot be overemphasized.

Religion was found to be the only predictor for misconception about contraceptives. This may be explained by religious indoctrinations and beliefs. Numerous other studies however, have however found associations between socio-demographics and contraceptive use.³⁸⁻⁴¹ A study in Osun state Nigeria reported that one of the most significant socio-demographic determinants to the use of contraceptives was religion.³⁷

CONCLUSION

The knowledge of contraceptives was high but its use low. There was an overall positive perception and minimal misconception of contraceptives among the respondents. Some negative

perceptions and misconceptions were observed. There is need for proper structured education or enlightenment regarding sex and contraceptive use in order to bridge the gap between the knowledge and the use of contraceptives in this community and in Nigeria as a whole.

REFERENCES

1. United Nations Human Rights: Office of the High Commissioner: Sexual and Reproductive Health and Rights. Available at <https://www.ohchr.org/EN/Issues/Women/WRGS/Pages/HealthRights.aspx>. Accessed on 05/05/2019
2. WHO Safe Abortion. Technical and Policy Guidance for Health Systems. 2nd edition. Geneva: Switzerland: World Health Organization, 2012:19
3. World Contraceptive Pattern. 2015. Available at <http://www.un.org/en/development/desa/population/publications/pdf/family/Infocart>. accessed on 15/05/2019.
4. United Nations. (2013). World Contraceptive Pattern. New York, NY. Available on <https://www.un.org/en/development/desa/population/publications/family/contraceptive-wallchart-2013.asp>. Accessed on 15/05/2019
5. Nigeria Demographic and Health Survey; Key Indicators 2018:17-22
6. Nsubuga H, Sekandi JN, Sempeera H, Makumbi FE. Contraceptive use, knowledge, attitude, perceptions and sexual behavior among female University students in Uganda: a cross-sectional survey. *BMC Women's Health*. 2015;16(6):41-47. DOI 10.1186/s12905-016-0286-6.
7. Adewole AA, Oladapo AL, Akinyemi OO, Poopola OA, Latunji OO, Iyanda O. Awareness and opinions regarding contraception by women of reproductive age in North-West Nigeria. *The Pan African Medical Journal - ISSN 1937-8688*: 2018;30(65). doi:10.11604/pamj.2018.30.65.12975 .Available at <https://www.panafrican-med-journal.com/content/article/30/65/full/#sec10>.
8. Eniojukan J, Ofulue , Okinedo P. Knowledge, Perception and Practice of Contraception among Staff and Students in a University Community in Delta State, Nigeria. *UK Journal of Pharmaceutical and Biosciences*. 2016; 4(1); 71-81.

9. Jemmott JB, Jemmott LS, Fong JT, Morales KH. Effectiveness of an HIV/STD Risk-Reduction Intervention for Adolescents When implemented by Community-Based Organisations: A Cluster-Randomized Controlled Trial. *Am J Public Health*. 2010; 100(4): 730- 736
10. Creel LC, Sass JV, Yinger NV. Client-centered quality: clients' perspectives and barriers to receiving care, *New Perspectives on Quality of Care*, Washington, DC: Population Council and Population Reference Bureau, 2002:2.
11. Ali MM, Cleland JG, Shah IH. *Causes and Consequences of Contraceptive Discontinuation: Evidence from 60 Demographic and Health Surveys*, Geneva: World Health Organization, 2012:8.
12. Castle S. Factors influencing young Malians' reluctance to use hormonal contraceptives, *Studies in Family Planning*, 2003, 34(3):186–199.
13. Ochako R et al. Barriers to modern contraceptive methods uptake among young women in Kenya: a qualitative study, *BMC Public Health*, 2015, 15(1):118.
14. Rutenberg N, Watkins SC. The buzz outside the clinics: conversations and contraception in Nyanza Province, Kenya, *Studies in Family Planning*, 1997, 28(4):290–307.
15. Orji EO, Onwudiegwu U. Prevalence and determinants of contraceptive practice in a defined Nigerian population, *Journal of Obstetrics & Gynaecology*, 2002, 22(5):540–543.
16. Otoide VO, Oronsaye F, Okonofua FE. Why Nigerian adolescents seek abortion rather than contraception: evidence from focus-group discussions, *International Family Planning Perspectives*, 2001, 27(2):77–81.
17. Ankomah A, Anyanti J, Oladosu M. Myths, misinformation, and communication about family planning and contraceptive use in Nigeria, *Open Access Journal of Contraception*, 2011, 2(1):95–105.
18. Grubb GS. Women's perceptions of the safety of the pill: a survey in eight developing countries. Report of the perceptions of the pill survey group, *Journal of Biosocial Science*, 1987, 19(3):313–321.
19. Adewole AA, Oladapo AL, Akinyemi OO, Poopola OA, Latunji OO, Iyanda O. Awareness and opinions regarding contraception by women of reproductive age in North-West Nigeria. *The Pan African Medical Journal* - ISSN 1937-8688:

2018;30(65). doi:10.11604/pamj.2018.30.65.12975 .Available at <https://www.panafrican-med-journal.com/content/article/30/65/full/#sec10>

20. Gyimah SO, Adjei JK, Takyi BK. Religion, contraception and method choice of Married women in Ghana. *J Relig Health*. 2012;51 (4):1359–1374.
21. Monjok E, Smesny A, Ekabua JE, Essien EJ. Contraceptive practices in Nigeria: Literature review and recommendation for future policy decisions. *Open Access Journal of Contraception*. 2010;(1):9-22.
22. Apanga PA, Adam MA. Factors influencing the uptake of family planning services in the Talensi District, Ghana. *Pan Afr Med J*. 2015;20(10): 21-26
23. Nsubuga H, Sekandi JN, Makumbi FE. Contraceptive use, knowledge, attitude, perceptions and sexual behaviour among female University students in Uganda: across-sectional survey. *BMC Women's Health*. 2016; 16(6):224-229
24. United Republic of Tanzania (2010). Tanzania Demographic and Health Survey (TDHS), National Bureau of Statistics, Dares Salaam, Tanzania, 1-451.
25. Ajayi AI, Adeniyi OV, Akpan W. Use of traditional and modern contraceptives among childbearing women: findings from a mixed methods study in two southwestern Nigerian states. *BMC Public Health*. 2018; 18:604. Available on <https://doi.org/10.1186/s12889-018-5522-6>
26. Aniwada EC, Oduogwu AJ, Odoh LC, Odonokuma OE, Ofoegbu FK. Knowledge, Perception and Misconceptions on Family Planning among Women Living in an Urban Slum in Enugu, Enugu State, Nigeria. *Asian Journal of Medicine and Health*. 2017;3(2): 1-10
27. Onwuzurike BK, Uzochukwu BSC. Knowledge attitude and practice of family planning amongst women in a high density low income urban of Enugu Nigeria. *African Journal of Reproductive Health*. 2001;5(2):83-89.
28. Etokidem AJ, Ndifon W, Etowa J, Asuquo EF. Family Planning Practices of Rural Community Dwellers in Cross River State, Nigeria. *Nigerian Journal of Clinical Practice*. 2017; 20(6):707-715.
29. Mosha PA, Mgimwa CA, Msuya SM. Assessment of Knowledge and Perception Towards Modern Contraceptives Use Among Women of Reproductive Age in Mtwivila,

Tanzania. *Science Journal of Public Health*. 2017;5(4):335-340. doi: 10.11648/j.sjph.20170504.19

30. Oguntona T, Adedeji OO, Odusanya OO. The Knowledge Attitude and Practice of Contraceptives by Undergraduates in Lagos Nigeria. *Journal of Biology, Agriculture and Healthcare* .2013; 3(12), 61-68.
31. Asekun-Olarinmoye EO, Adebimpe WO, Bamidele JO, Odu OO, Asekun-Olarinmoye IO, Ojofeitimi EO. Barriers to use of modern contraceptives among women in an inner city area of Osogbo metropolis, Osun State, Nigeria. *International Journal of Women's Health*. 2013; 5, 647–655
32. Obi AI, Labiran A. Contraception Usage: Knowledge, Attitude and Associated Factors among Women of Reproductive Age Attending a Health Facility in Benin City, Nigeria. *British Journal of Medicine & Medical Research*. 2015; 9(7): 1-13.
33. Yakasai IA, Yusuf AM. Contraceptive choices amongst women in Kano, Nigeria: A five (5) year review. *Journal of Medicine in the Tropics*. 2013; 15:113-116.
34. Bertrand JT, Seirber E, Escudero G. Contraceptive dynamics in Guatemala. 1978- 1998. *International Family Planning Perspectives*. 2001; 27, 112-118
35. Podolsky V, Gemzell-Danielsson K, Marions L. Contraceptive experience and perception, a survey among Ukrainian women. *BMC Women's Health*. 2018;18(159) <https://doi.org/10.1186/s12905-018-0651-8>.
36. Otoide VO, Oronsaye F, Okonofua FE. Why Nigerian adolescents seek abortion rather than contraception: Evidence from focus-group discussions. *International Family Planning Perspective*. 2001;27(2):77–81.
37. Olugbenga AI, Bello OL, Abodunrin Adeomi AA. Contraceptive Practices Among Women in Rural Communities in South- Western Nigeria. *Global Journal of Medical Research*. 2011; 11(2).
38. Lakwe Y, Reda AA, Tamene H, Susan B, Kebede D. Geographical Variation and Factors Influencing Modern Contraceptive use among Married Women in Ethiopia: Evidence from a National Population Based Survey; *Reproductive Health* 2013; 10(52) DOI:10.1186/1742-4755-10-52
39. Oheneba SY. Determinants of Current Contraceptive Use among Ghanaian Women at the Highest Risk of Pregnancy. *Journal of Biosocial Science*. 1992;24(4): 463-475

40. Moshia PA, Mгимwa CA, Msuya SM. Assessment of Knowledge and Perception Towards Modern Contraceptives Use Among Women of Reproductive Age in Mtwivila, Tanzania. Science Journal of Public Health. 2017;5(4):335-340. doi: 10.11648/j.sjph.20170504.19
41. Ofonime E. Johnson. Determinants of Modern Contraceptive Uptake among Nigerian Women: Evidence from the National Demographic and Health Survey: African Journal of Reproductive Health September 2017; 21 (3): 95

Table 1: Socio-demographic Characteristics of the Respondents

Variables	Frequency(n =341)	%
Age Group		
<18	48	14.1
19-24	161	47.2
25-35	86	25.2
>35	46	13.5
Mean (SD)	25.32	8.21
Level of Education		
Primary& below	6	1.8
Secondary	17	5.0
Tertiary	243	71.3
Higher	75	22.0
Marital Status		
Single	249	73.0
Married	87	25.5
Others	5	1.5
Religion		
Christianity	331	97.1
Others	10	2.9
Tribe		
Igbo	307	90.0
Others	34	10.0
Parity Status		
None	251	73.6
1-2	36	10.6
3-4	35	10.3
>5	19	5.6
Monthly Income		
No Income	178	52.2
Below 20,000	40	11.7

20,000 - 50,000	51	15.0
Above 50,000	72	21.1
Place of Residence		
On Campus	196	57.5
Town	145	42.5
Occupation		
House Wife/Business	23	6.8
Teaching Staff	29	8.5
Non-teaching Staff	53	15.5
Students	236	69.2

Table 2: Knowledge of Contraceptive Methods and Sources among Respondents

Variables	Yes (%)	No (%)
	Freq (%)	Freq (%)
Knowledge of Contraceptives	321(94.1)	20(5.9)
Any difference between Contraception and Family Planning	204(59.8)	137(40.2)
Source of Knowledge about Contraceptives		
Family	26(7.9)	315(92.1)
Friend	95(29.0)	246(71.0)
School	147(44.8)	194(55.2)
Mass media	88(26.9)	253(73.1)
Health personnel	55(16.8)	286(83.2)
Who should use contraceptives		
Married men	103(30.6)	238(69.4)
Married women	234(69.4)	107(30.6)
Single men	60(17.8)	281(82.2)
Single women	130(38.6)	211(61.4)
None	31(9.2)	310(90.8)
Knowledge of Contraceptive Methods		
Pill	245(72.9)	95(27.1)
Injectable	98(29.2)	243(70.8)
Emergency contraceptive	82(24.4)	259(75.6)
Implant	110(32.7)	231(67.3)
Male condom	196(58.3)	145(41.7)
Female condom	131(39.0)	210(61.0)
IUCD	69(20.5)	272(79.5)
Tubal Ligation	50(14.9)	291(85.1)
Vasectomy	79(23.5)	262(76.5)
Diaphragm	62(18.5)	279(81.5)
Foam	25(7.4)	316(92.6)
Spermicide	46(13.7)	295(86.3)

Contraceptive ring	44(13.1)	297(86.9)
Lactational amenorrhoea	23(6.8)	318(93.2)
Withdrawal	127(37.8)	214(62.2)
None	35(10.4)	306(89.6)
Knowledge of Contraceptives Sources		
Government hospital	106(31.3)	235(68.7)
Health Centers	125(36.9)	216(63.1)
Family planning clinic	103(30.4)	238(69.6)
Private hospital	73(21.5)	268(78.5)
Pharmacy	222(65.5)	119(34.5)
Others	9(2.7)	332(97.3)
No idea	35(10.3)	306(89.7)

Table 3: Distribution of Contraceptive Use and reasons among Respondents

Variables	Yes Freq (%)	No Freq (%)
Contraceptive use	121(35.5)	220(64.5)
Kind of Contraceptive Used (n = 121)		
Pill	52(43.0)	69(57.0)
Injectable	6(5.0)	115(95.0)
Emergency contraceptive	25(20.7)	96(79.3)
Implant	6(5.0)	115(95.0)
Male condom	55(45.5)	66(54.5)
Female condom	17(14.1)	104(85.9)
IUCD	5(4.1)	116(95.9)
Tubal Ligation	1(0.8)	120(99.2)
Vasectomy	1(0.8)	120(99.2)
Diaphragm	2(1.7)	119(98.3)
Foam	1(0.8)	120(99.2)
Spermicide	1(0.8)	120(99.2)
Contraceptive ring	2(1.7)	119(98.3)
Lactational amenorrhoea	2(1.7)	119(98.3)
Withdrawal	25(20.7)	96(79.3)
Side Effects of Contraceptives (n = 121)		
Headache	14(11.6)	107(88.4)
Menstrual abnormalities	49(40.5)	72(59.4)
Irritation	13(10.7)	108(89.3)
Weight gain	18(14.9)	103(85.1)
None	63(52.1)	58(47.9)
Reason for choice of contraceptive (n = 121)		
Safety	86 (71.1)	35(38.9)
Reliability	36(30.0)	85(70.0)
Accessibility	25(20.7)	96(79.3)
Cost	11(9.1)	110(90.9)
Ease of use	43(35.5)	78(64.5)

Reason for Non-use of Contraceptives (n = 220)		
Fear of side effects	16(7.3)	204(92.7)
It is expensive	1(0.5)	219(99.5)
I don't feel comfortable purchasing it	23(10.5)	197(89.5)
My partner hates it	21(9.6)	199(90.4)
I don't want birth control	22(10.0)	198(90.0)
Provider's attitude	1(0.5)	219(99.5)
In case of Contraceptive Failure	21(9.6)	199(90.4)
Management of Unplanned Pregnancy		
Abortion	7(2.1)	334(97.9)
Baby was given up for adoption	1(0.3)	340(99.7)
Miscarriage	4(1.2)	337(98.8)
Accepted my fate	30(9.1)	311(90.9)

Table 4 Perception and misconceptions on Contraceptives among Respondents

Variables	N = 341	
	Positive (%)	Negative (%)
PERCEPTIONS		
Modern contraceptive services and commodities are inaccessible	260 (76.3)	81 (23.7)
Contraceptive are for females only	264 (77.4)	77 (22.6)
Contraceptives are acceptable in our community	267 (78.2)	74 (21.8)
Contraceptives benefits males too	310 (90.1)	31 (9.1)
Contraceptives is not for the poor	266 (78.0)	75 (22.0)
It is wrong to use contraceptives	269 (78.9)	72 (21.1)
Benefits of modern contraceptives outweigh negative effects	282 (82.7)	59 (17.3)
Would recommend the use of modern contraceptive to a friend	292 (85.6)	49 (14.4)
Would use modern contraceptives in future	292 (85.6)	49 (14.4)
Would discuss with husband/partner on modern contraceptives	311 (91.1)	30 (8.9)
Husband/Partner thinks that modern contraceptives are important	313 (91.8)	28 (8.2)
Overall perception	284 (83.3)	57 (16.7)
MISCONCEPTIONS		
Contraceptives are harmful to the womb	193 (56.6)	148 (43.4)
Contraceptives use will make you increase in weight	246 (72.2)	95 (27.8)
Contraceptives use can cause cancer	224 (65.6)	117 (34.4)
Contraceptives use can make you infertile	181 (53.1)	160 (46.9)
Contraceptives are meant for married people only	212 (62.2)	129 (37.8)
Contraceptives use is against the will of God	236 (69.2)	105 (30.8)
Contraceptives should only be used by women because they become Pregnant	260 (76.3)	81 (23.7)
Contraceptives are essential for family planning	307 (90.1)	34 (9.9)

Contraceptives allow women to pursue their career	279 (81.8)	62 (18.2)
Contraceptives encourages promiscuity	169 (49.5)	172 (50.5)
Contraceptive use is against my cultural norms and values	229 (67.2)	112 (32.8)
Use of contraceptives is irrelevant	299 (87.7)	42 (12.3)
Overall misconception	236 (69.3)	105(30.7)

Table 5 Socio-demographic factors and use of Contraceptives among Respondents

Variables	Use of contraceptive during sex		Bivariate analysis X ² (p-value)
	Yes (%)	No (%)	
Grouped Age			
<18	9 (3.8)	14 (5.9)	2.603 (0.457)
19-24	52 (21.9)	46 (19.4)	
25-35	40 (16.9)	32 (13.5)	
>35	20 (8.4)	24 (3.8)	
Level of Education			
Primary & Below	2 (0.8)	3 (1.3)	0.473 (0.925)
Secondary	6 (2.5)	7 (3.0)	
Tertiary	78 (32.9)	75 (31.6)	
Higher	35 (14.8)	31 (13.1)	
Marital Status			
Single	75 (31.6%)	72 (30.4%)	0.168 (0.920)
Married	43 (18.1%)	42 (17.7%)	
Others	3 (1.3)	2 (0.8%)	
Religion			
Christianity	117 (49.4)	113 (47.7)	0.107 (0.744)
Others	4 (1.7)	3 (1.3)	
Tribe			
Igbo	108 (45.6)	103 (43.5)	0.013 (0.909)
Others	13 (5.5)	13 (5.5)	
Occupation			
House Wife/Business	15 (6.3)	8 (3.4)	2.112 (0.549)
Teaching Staff	14 (5.9)	14 (5.9)	
Non-teaching Staff	25 (10.5)	24 (10.1)	
Student	67 (28.3)	70 (29.5)	

Parity Status			
None	76 (32.1)	74 (31.2)	3.331
1-2	20 (8.4)	16 (6.8)	(0.343)
3-4	20 (8.4)	15 (6.3)	
5 and above	5 (2.1)	11 (4.6)	
Monthly Income			
None	49 (20.7)	53 (22.4)	3.517
Below 20,000	12 (5.1)	12 (5.1)	(0.319)
20,000 - 50,000	19 (8.0)	24 (10.1)	
Above 50,000	41 (17.3)	27 (11.4)	

Table 6: Socio-demographic factors and Perception of Contraception among Respondents

Variables	Perception of Contraception (N=341)		Bivariate analysis X²(p-value)
	Positive (%)	Negative (%)	
Age Group			
<18	39 (11.4)	9 (26)	1.037
19-24	130 (28.1)	31(9.1)	(0.792)
25-35	73(21.4)	13 (3.8)	
>35	36 (10.6)	10 (2.9)	
Level of Education			
Primary & Below	4(1.2)	2 (0.6)	1.486
Secondary	15(4.4)	2(0.6)	(0.686)
Tertiary	197(57.8)	46(13.5)	
Higher	62(18.2)	13(3.8)	
Marital Status			
Single	204(59.8)	45 (13.2)	0.1
Married	70(20.5)	17(5.0)	(0.951)
Others	4(1.2)	1(0.3)	
Religion			
Christianity	271(79.5)	60 (17.6)	0.909
Others	7(2.1)	3(0.9)	(0.341)
Tribe			
Igbo	254(74.5)	53(15.5)	2.999
Others	24(7.0)	10(2.9)	(0.083)
Occupation			
House Wife/Business	19(5.6)	4(1.2)	2.029
Teaching Staff	21(6.2)	8(2.3)	(0.566)
Non-teaching Staff	45(13.2)	8(2.3)	
Student	193(56.6)	43(12.6)	
Parity Status			
None	206(60.4)	45(13.2)	0.210
1-2	29(8.5)	7(2.1)	(0.976)
3-4	28(8.2)	7(2.1)	
5 and above	15(4.4)	4(1.2)	
Monthly Income			
None	142(41.6)	36(10.6)	2.012

Below 20,000	34(10.0)	6(1.8)	(0.570)
20,000 - 50,000	40(11.7)	11(3.2)	
Above 50,000	62(18.2)	10(2.9)	
Place of Residence			
On Campus	160(46.9)	37(10.9)	0.29
Town	118(34.6)	26(7.6)	(0.864)

Table 7: Socio-demographic factors and Misconceptions of Contraceptives among Respondents

Variables	Misconception about Contraceptive		Bivariate analysis
	Yes (%)	No (%)	X ² (p-value)
Age Group			
<18	29(8.5)	19(5.6)	2.850
19-24	112(32.8)	49(14.4)	(0.415)
25-35	64(18.8)	22(6.5)	
>35	32(9.4)	14(4.1)	
Level of Education			
Primary & Below	4(1.2)	2(0.6)	0.322
Secondary	12(3.5)	5(1.5)	(0.956)
Tertiary	167(49.0)	76(22.3)	
Higher	54(15.8)	21(6.2)	
Marital Status			
Single	175(51.3)	74(21.7)	2.136
Married	60(17.6)	27(7.9)	(0.344)
Others	2(0.6)	3(0.9)	
Religion			
Christianity	234(68.6)	97(28.4)	7.584
Others	3(0.9)	7(2.1)	(0.006)
Tribe			
Igbo	216(63.3)	91(26.7)	1.066
Others	21(6.2)	13(3.8)	(0.302)
Occupation			
House Wife/Business	15(4.4)	8(2.3)	1.819
Teaching Staff	23(6.7)	6(1.8)	(0.611)
Non-teaching Staff	38(11.1)	15(4.4)	
Student	161(47.2)	75(22.0)	
Parity Status			
None	177(51.9)	74(21.7)	4.400
1-2	20(5.9)	16(4.7)	(0.221)
3-4	27(7.9)	8(2.3)	
5 and above	13(3.8)	6(1.8)	
Monthly Income			
None	128(37.5)	50 (14.7)	5.740
Below 20,000	26(7.6)	14(4.1)	(0.125)
20,000 - 50,000	29(8.5)	22(6.5)	
Above 50,000	54(15.8)	18(5.3)	
Place of Residence			

On Campus	139(40.8)	58(17.0)	0.246
Town	98(28.7)	46(13.5)	(0.620)

Table 8: Factor influencing Misconception of Contraceptives among Respondents
Multivariate analysis

Variable	AOR	95% C. I. for AOR
Religion		
Christianity	0.119	0.025-0.573
Others		1

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