Appraisal Of The Utilization Of Contraceptive Devices Among Women Aged 18 – 45yrs In Some Selected Hospitals In Abuja Municipal Area Council Of Federalcapital Territory Abuja

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Abstract: Contraceptives are devices employed to prevent pregnancy. Birth control, also known as contraception and fertility control is a method or device used to prevent pregnancy. The use of birth control and proper Planning is called family planning. The objectives of study were to determine the types of contraceptive device employed by women aged 18-45 years, educational levels, occupations, and the influence of religion towards contraceptive devices. Ouestionnaires were served as the instrument for data collection. The target population employed for this study was five hundred and ninety seven (597) women that visit the selected hospitals. A sample of size one hundred and thirty two (132) respondents was chosen using simple random sampling technique. The beauty of simple random sampling is that every person selected has equal probability or chance of being selected. The simple random sampling employed here is the selection of women without replacement. This study employs descriptive survey research design. In the present study 95% Confidence interval was chosen as $\Box = 0.05$, probability(P) = 1.96, i.e. (1- \Box) 100%. Findings of the study revealed that contraceptive rate was 78%. Injectable and hormonal implants were the most practiced while the least practiced was surgical (sterilization) method. The study's finding revealed that 47% of the respondents have never used any contraceptive device. The findings also revealed that irregular bleeding, increase in body weight and delay in return to fertility tends to be the reason for non-contraceptive use. Most of the women employing contraceptive use are Christians, followed by Muslims. The study concluded that various form of contraceptive devices were employed mostly by married women. It was recommended that religious organizations should be encouraged to teach and educate their members on the importance of contraceptive use/family planning to mothers, fathers, family and society at large. Male and female health providers should be trained on family planning skills.

Keywords: Birth, Contraceptives, Pregnancy, Women

Date of Submission: 15-02-2018

Date of acceptance: 03-02-2018

I. Introduction

Contraceptives are devices or drugs serving to prevent pregnancy. Birth control, also known as contraception and fertility control, is a method or device used to prevent pregnancy (World Health Organization (WHO), (1994). Contraception/Family planning first started by an American nurse called Margaret Sanger, in 1912. Planning, provision, and use of birth control are called family planning. Family planning is a strategy of when to have children; the use of birth control, and other techniques to implement such plans. Other techniques commonly used include management, sexuality education; preventionof sexually transmitted infections, preconception counseling, and infertility management (United Nation Population Fund (UNFPA), 2005). Reproductive health for a woman includes her ability to arrangespace, delay or limit children, as well as her experience with infertility, child loss or planned or unplanned childlessness. Birth control methods have been used since the beginning of human civilization, but effective and relatively safe methods only became available in the 20th century. Some cultures frown at access to birth control because they consider it to be morally, religiously or politically detestable (United Nation Population Fund (UNFPA), 2011). Bringing to the barest minimum the death of mothers in the process of giving birth by 2/3 was a global target for all nations worldwide (United States Aid Agency for International Development (USAID, 2006). However, the decline has not been encouraging in many countries. Globally it is estimated that about 293,000 women died in 2013 arising frompregnancy-related conditions (Kassembaum et al., 2014). Almost all maternal deaths (99%) occur in developing countries, more than half of which occur in sub-Saharan Africa (WHO, 2014)World Health Organization (2014), defined family planning as a way of thinking and living that is adopted purposely upon the basis of knowledge, attitude and responsible decision by individuals and couples in order to promote the health and welfare of the family members, and thus contribute effectively to the social development of a country. Family planning is involves a variety of methods or practices that may not be synonymous to birth control. It is most usually applied to a couple who desireto control the number of children they want tohave and/or to control the spacing of their pregnancy. It may encompass sterilization, as well as abortion. Family planning services are defined as "educational, comprehensive medical or social activities which enable individuals, to determine freely the number and spacing of their children and to select the means by which this may be achieved(Utoo et al., 2010). Human right dictates when or whether to have children hence a personal decision that he or sheshould enjoy. The current total fertility rate in Nigeria is 5.8% down from 6.5% recorded in 2010. Such high fertility rate is similar to those of other African countries but contrast with the 1.2% in most developed countries. The result has been an increasing population in Africa and otherdeveloping Countries. While 25% of the world's populations live in developed countries, the remaining (75%) of the world's population lives in developing countries and account for 85% of all births worldwide, 95% of all infants and childhood deaths, and 99% of all maternal deaths. Thus the ability to regulate fertility has a significant impact on infant, child and maternal mortality and morbidity. Nigeria is viewed to be the most populated nation in Africa with an estimated population of one hundred and sixty million (160,000.000) representing twenty percent (20%) of the total population of African (out of which approximately 53.9 million are women). The fertility rate of Nigeria women is an issue of concern. In 1992, it was estimated that each Nigerian woman would have an average of six children during her life time (Utoo et al., 2010). The combination of restrictive abortion laws and the lack of safe abortion services continue to make unsafe abortions. This can be minimized by maximizing contraceptive services. Ironically, whereas in the united state of America, those at risk of getting pregnant are using some method of contraception, only 17-26% of young Nigeria women do so. Thus, there is a large unmet need for contraception in Nigeria. Through contraception, individuals, their families and societies are more likely to enjoy the benefits of what result from procreation (Briggs, 2010). The United States Census Bureau (USCB), (2012), estimated that the world population growth became more rapid with the advent of compulsory vaccination and improvement in medicine and sanitation. As living conditions andheath care improved in the 19th century, the world population increasedunabated. It became imperative due to this to educate and advance the use of contraceptives to avoid further population explosion. Nnamani & Etesike, (2012) stated that population is a source of national power, which prevailed in many high places and had paved the way for a more rational idea by the governments and that national power (not to mention individual welfare) may be achieved relatively withless population. This prompted the birth of Planned Parenthood Federation of Nigeria (PPFN) was established some years ago with a view to further educate the masses on how to plan their family to avoid the crisis associated with population growth. In view of the grave consequence of population growth and its devastating implications on family life, the need for population control becomes obvious. In developing countries, unintended pregnancy is a major health challenge in women of child bearing age. It has been documented that of the 210 million pregnancies that occurred yearly worldwide, about 80 million of (38%) are unintended and 46 million (22%) end in abortion. Approximately 200 million women in developing countries have postponed theirdeliberatelytheir next pregnancy and may stop having children completely. Many of them embrace traditional as opposed to modern method of contraception. Some may not indulge in less effective method of family planning or not at all. Reasons advanced for non-use of contraceptives may either be militating factors or access to use of contraceptives, cultural factors, religion, opposition to use by partners of family members, and fear of health risks and side effects of contraceptives.. About 8% of maternal mortality globally may be due in part to unplanned pregnancy. This is the third major direct cause of the mortality. Other factors may be severe haemorrhage and infection. It was estimated that of the 182 million pregnancies observed annually, about 36% are unintended and 20% end in abortion. (WHO, 2014; The National Academic Press, 2011; Alan Guttmacher Institute, Media Centre News Release, 2014as cited in Damot et al., 2014). However, some factors prompted a study into the present research. Although, these factors are not limited to those stated here but may offer an understanding into some other problems of family planning acceptance by various communities in Nigeria and African in General. A report by World Health Organization (WHO), (2013), narrated tat 94% of telobal population resides in countries with policies that even favour birth control and despite these policies, a significant proportion of women of child bearing age do not embrace sufficient method of fertility control. It was admitted that psychological and cultural angle of the sexual health problems within immigrant women was connected to social norms, personal and/or community's disposition to family structure, sexuality and gender. These norms and postures affect women's opinion and may interfere with sexual and reproductive lives. In addition, it was noted that sexual health may be influenced by communication dilemma in health care centres(Tihahun, 2013). The objectives of this study seek to determine the type of contraceptives employed by women, the educational level of women and the occupation of women aged 18-45 years using contraceptive devices in the selected hospitals. A research of this nature is very significance in the sense that it will benefit men and women in effective utilization of contraceptives (family planning) in other to prevent unplanned pregnancy which could lead to abortion, infertility and death. Effective utilization of contraceptive will decrease the number of maternal and infant morbidity and mortality. The study will also serve as a source of information to heath care institutions elsewhere and specifically, government of Abuja Municipal Area Council (AMAC) FCT- Abuja. The FCT at large will also benefit from this study as it serves as a reference point for future researchers who would use it as a source of reference in their studies. Obviously, the scope of this study is limited to women attending Maitama District Hospital, Nyanya and Karshi General, in Abuja Municipal Area Council (AMAC), FCTA-Abuja.

II. Materials and Methods

This study employs descriptive survey research design. The authors seek the view of the people using appropriate instrument. Participants were sampled using simple random sampling technique. In this method the sample drawn represents the population of the study. The area of the study was Abuia Municipal Area Council (AMAC) of FCT, specifically, some selected hospitals; Maitama District Hospital, Nyanya and Karshi General Hospital which are under Health and Human Service Secretariat. Maitama, Nyanya and Karshi are District under Abuja Municipal Area Council, located on the eastern wing of the Federal Capital Territory. The target population or the size of the population employed for this study is 597. So the Target aggregate of all possible observation here is 597 of women between the ages of 18-45 years. The sampling technique employed for this study is simple random sampling technique according to collet, (2003). A simple random sample was employed here because every possible sample has the same probability or chance of being selected. In this instance confidence interval becomes veritable or important. Although according to Freridis, (2008), when determining the entire unit in a population, the true value is known; thus there is no need for confidence intervals. The purpose of the confidence interval employed in the present study is to show how sure the researcher was that a selected interval is within the confine of the true value in the population. In the present study 95% confidence interval was chosen i.e. □ = 0.05and probability(P)=1.96, i.e. (1-□) 100%. The simple random sampling employed here is the selection of women without replacement. The method of sampling is unbiased and representative of the population. The relation below was employed, $n = 1.92^2(1 - \Lambda)/d^2$, where n = sample sizeand was 132The method of sample employed here is unbiased and representative of the population. Where 'n' = sample size drawn by simple random sampling.

 $\bar{\Lambda}$ = Population of women using contraceptive devices.

 d^2 =proportion of relative precision and in this study, 20% precision was employed to arrive at the sample size above.

The present random sampling employed has four criteria;

- The authors had defined the set of distinct samples which the procedure was capable of selecting.
- Each possible sample has assigned to it a known probability of selection
- The authors selected one of the samples by a random process in which each sample receives its appropriate probability of being selected.
- The method for compiling the estimate led to a sample estimate for a specific sample.

Questionnaire was employed for this study. The questions were structured according to research questions. The questionnaire was divided into five (5) sections. Section A contains the personal data of the respondents. Section B, C, D and E were based according to research questions and relevant questions related to the main research questions. The instrument employed for this study was subjected to both face and content validation. By validation here the author's meant the tendency of an instrument to measure what it purports to measure. Reliability in statistics and psychometrics is the overall consistency of a measure. A measure is said to have reliability if it produces same result under consistent condition (Neil, 2009). Hence in this present study test-retest reliability was employed. This assesses the degree to which test scores are consistent from one test administration to the next. Measurement is assembled from a single rater that uses similar methods or instrument and the same testing requirements. It was found that a stable characteristic of the individuals or the attribute that was measured here contributes to consistency. Reliability coefficient is the ratio of true score variance to the total variance of test scores or equivalently, one (1) minus the ratio of variation of the error score and the variation of the observation. Jt = $\delta^2 T/\delta^2 x$ or Jt= $1-\delta^2 E/\delta x^2$. Since there is no alternative way to observe and calculate the true score, so a method was used to estimate the reliability of a test. A suitable method in this present study includes test-retest reliability.

Where Jt = Reliability Coefficient

 δ^2/J = True Score variance

 $\delta^2/x = \text{Total variance}$

 δ^2/E = Variance of error score

 δ^2/x = variance of observe score

In test-retest reliability, the researcher evaluates the level to which test scores are consistent from one test administration to the rest. it involves the following:

- Administering the same test to the same group after two (2) weeks.
- Correlating the first set of scores with the second.

The correlation between scores on the first test as the scores on the retest was used to estimate the reliability of the test using Pearson product-moment correlation Coefficient.

The result of reliability Coefficient above was compared to that using split-half method; here, the test was administered to a group of women.

- The test was split into half
- A correlation was done between scores on the other half of the test

The correlation between these two split halves was used in determining the reliability of the test. This halved reliability estimate is then stepped up to the full test length using spearman-Brown prediction formula by relation

Pt = NPt/1 + (N-1) Pt

Where N is the number of tests

Pt = reliability of the current test

The idea of bringing this was to predict the reliability of the test after changing the test length. This method was published by Spearman Brown, (1910), and was modified to suit the present study. For the avoidance of doubt, this method was a modified version of Spearman Brown, (1910). Results obtained were analyzed using percentages. The relation, $\% = y/x \times 100$. Holds true for this present x = subjects, y = sample size. Chart frequency tables were equally applied in the data Analysis.

III. Results

The result of this study seeks to address the various research questions presented earlier. The research questions bothers on the type of contraceptives employed by the women, the educational level of women using contraceptive, the various occupations of women employing contraceptive and the distribution of women in various religions that employed contraceptive devices attending the selected hospitals. The result showed that injectables accounts for the most prevalent contraceptive devices employed by women, followed by implants and by Intrauterine Contraceptive Device (IUD) (Copper T) and least with condoms and traditional. There was no surgical contraceptive device employed.

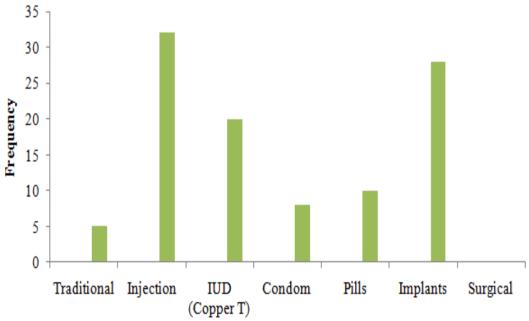


Fig 1:Distribution of Women aged 18 – 45 Years According to Various Types of Contraceptive Devices

However, irregular bleeding accounts for the most important reason why women do not use contraceptives, followed by increase in body weight and least with fear of delay/ inability and permanent cessation of conception.

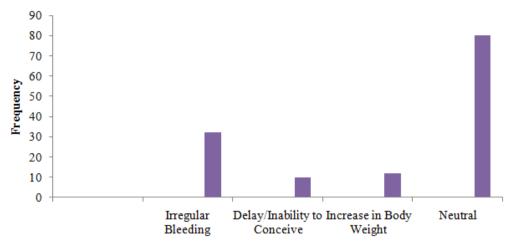


Fig 2:Distribution of Women aged 18 – 45 Years according to Non-Use of Contraceptives

Apparently, most of the women employing contraceptive devices in this study have higher educational qualification and least with non-formal education.

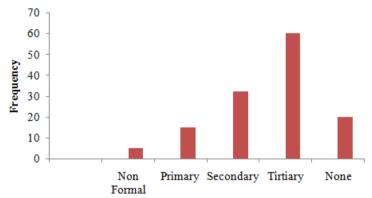


Fig 3: Distribution of Women aged 18 – 45 Years according to Educational Qualification

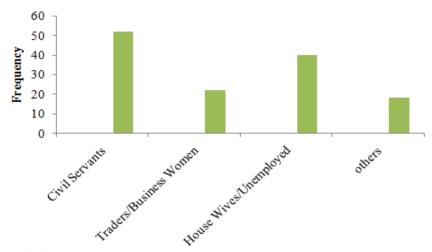


Fig 4: Distribution of Women aged 18 – 45 years According to occupation

Civil servants using contraceptive devices are the major respondents in this study followed by house wives. The least of the respondents fell under other occupations e.g. trading, business etc.

Most of the women employing contraceptive use are Christians, followed by Islam.

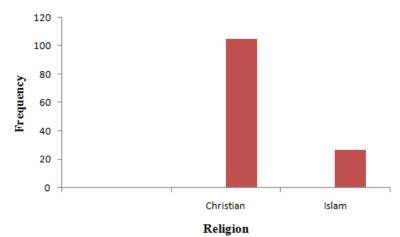


Fig 5:Distribution of Women aged 18 – 45 Years according to Religion

IV. Discussion

The traditional methods of family planning are also as old as mankind. Efforts to get the modern family planning method introduced into the Nigeria began in the 1950s because of the alarming rate of the number of abandoned children and criminal abortion (Adeniyi, 1958). Reproductive health for a woman includes her ability to arrange space, delay or limit children, as well as her experience with infertility, child loss or planned or unplanned childlessness. Birth control methods have been used since the beginning of human civilization but effective and relatively safe methods only became available in the 20thcentury. Some cultures frown at access to birth control because they consider it to be morally, religiously or politically detestable (United Nation Population Fund (UNFPA), 2011). Apparently, the decision of when, whether to have children is a human right that all people must enjoy. In the present study, a number of issues were considered. The result showed that injectables accounts for the most prevalent contraceptive devices employed by women, followed by implants, and by Intrauterine Contraceptive Device (IUD) (Copper T) and least with condoms, and traditional. There was no Surgical Contraceptive device employed. Kaunitz, (2008), stated that injectables contraceptive offers women convenience, safe, and reversible birth control that is effective as sterilization. In line with the present result, it showed that these women found injectables convenient, safe and of reversible nature to warrant its use. Fear of surgical procedure by these women may have prompted its low frequency in the present study. Secondly, it has to be performed by highly trained, specialized personnel and may be costly. There is a difference in the usage of contraceptives between the developed and developing countries. In developed world, the common method of contraceptives is condom and oral contraceptives. In developing countries e.g. Nigeria, the percentage involvement in the use of oral contraceptives is low (United Agency for International Development, 2012). In the present study, the use of condom witnessed a low patronage owing to either lack of knowledge or non acceptance by the spouses. Many women have complained that they find it difficult to enjoy sex with condom as seen from the fig. 1 above. Some believed condom can damage the uterus or even cause death. Discussing the use of condom with their husband may be considered unacceptable and cannot even initiate such discussions. Guttmacher, (2012), reported that there is negative attitude towards the provision of contraceptives to young people and imposed non-evidenced based age restrictions and consent requirement. The provider's opinion about contraception (the belief that contraceptives may cause female infertility), may negatively affect their willingness to distribute contraceptives, particularly to young unmarried women. WHO, 2012 stated that male attitudes towards contraception strongly influence the willingness and ability of women to use contraception. There was a low patronage of traditional method in the present study (4%). This may have arisen either due to the unhygienic method of handling their instrument or fear of adverse effects, complications or death. It is interesting to note here that among the reasons put forward by the women to nonuse of contraceptives, irregular bleeding was the most frequently occurring and least with delay/blockade of conception. According to Gilda and Rubina, (2014), Women who cite reasons related to use of the methods might base their reasoning on their personal experience, on the experiences of women they know, or simply on their perceptions regarding contraception. These women's concerns might be based on misinformation or on a fairly accurate appraisal of side effects and health risks. Irregular bleeding though a serious inconvenience to women may or may not be their personal experience. The reason here may have stemmed from either misinformation or lack of proper appraisal of this health risk. In line with the present study, Gilda and Rubina, (2014), further gave some reasons as to nonuse of contraceptives, e.g. health risks (menstrual disruption, fears of infertility), infrequent sexual activity, or not at all, breast feeding, limited method choice, misinformation, constraints on women decision making abilities, provider biases, women may be less likely motivated to avoid pregnancy than are those who

practice contraceptive, inconvenience. Women may not be able to afford services or were to afford the services is far or nonexistent. Women may not be able to afford the services. Apparently, unmarried women were also unwilling to risk the social disapproval with seeking services. However, in the present study, majority of the women that employ modern contraceptives were Christians (80%) and Muslim women represents 20%. In a study to compare the prevalence of modern contraceptive use and associated factors among Muslim and orthodox Christian women of reproductive age group in Bahir Dar city University, GAMBY College of Medical Sciences, Ethiopia, Damot et al., (2014), reported that the prevalence of modern contraceptive use among Muslim women (36.1%) was found to be significantly lower than that in Orthodox Christian (63.9%). This study quite agrees with the present study. The distribution of women interviewed fell within the followings: nonformal (3.8%), primary (11.3%), secondary (24.2%), and tertiary (60%). It is interesting to note here that among the women interviewed, majority of educated ones were Christians (primary, secondary, and tertiary). This is not to say that Muslim women do not go to school but for comparison sake. It is not surprising to see the prevalence of contraceptive use tilted more towards the Christians than the Muslims. Education play a vital role in the use of contraceptives as fear of side effect of modern contraceptives was also another reason mentioned for the non use of modern contraceptives. The reason here may have stemmed from either misinformation or lack of proper appraisal of this health risk which may not be far from educational disposition (Gilda and Rubina, 2014). Apparently, occupation of women is also related to education in the sense that employment is based on educational qualification as seen in the present study with civil servants. Here in this study, women as civil servants accounted for the majority of those that employ contraceptives. This may be due to their own level of awareness due to their educational disposition. This is true that as the level of education of women increases their level of understanding towards the complications of unintended pregnancyalso increases (Damot et al., 2014)

V. Conclusion

The results of this study showed that education, occupation and religious disposition influence use and nonuse of contraceptives by women. From the background, human sexual behaviour has been seen as irresistible and fascinating but yet a pressure of some sort. History has thought us that sex has an innate ability for its procreating power exclusively. During the 20th century, theologians have begun to offer a more positive assessment of sexual intercourse. Love and personal fulfillment has been rising in importance (Agyei&Migadde, 1995). Churches still look favourably upon couples who have children but maintain that respect and sensitivity should be shown to couples who do not feel called to conceive children. On the other hand, the majority of Islamic jurists indicated that family planning is not forbidden. Muslims opinion regarding the further classification of contraception ranges from permissible to disapproval .Some fundamentalist Muslims insist that any form of contraception violates God's intentions historically; coitus interruption has been permitted in the Quran. When contraception justification is provided such as health social or economic indication, coitus interruptions become recommended. Through analogous reasoning authorities permit modem methods of contraception as lawful given that they are temporary, safe, and legal, any device that does not induce abortion and is reversible may be used. Irreversible sterilization methods are not permitted either. However, the results of the present study showed that although, many women embrace contraceptive use, relatively, some oppose to it for fear of the unknown. Education of these women becomes very important (whether traditional or modern) if the many advantages attached to contraceptive use have to be achieved. Although, there is virtually no drug or procedure by man without side effects but the advantages outweighed the disadvantages. We recommend a further study into the circumstances surrounding the use and nonuse of traditional and modern contraceptives.

Acknowledgements

We will like to extend our sincere appreciation to Mallam Isa Adama of Isa printing and press, Kaduna State Polytechnic, for the help in typing some parts of the manuscript. All thanks are due to Dr S. B. Danborno of the Department of Human Anatomy, Ahmadu Bello University, Zaria for the continuous guidance and assistance, both academic and finance.

References

- [1] Adeyinka, A. Various method of family planning and its applications. J. Reproductive Health. 2010; 1: 60-78
- [2] Agyei, W.K and Migadde, M. Demographic and sociocultural factors influencing contraceptive use in Uganda.J.Biol.Sci. 1995; 47-60
- [3] Alan Guttmacher Institute, Media Center News Release.Unplanned Pregnancy Common Worldwide Neither Legal Status of Abortion Nor Health Risk Deters Women fromTerminating Pregnancies.2014;http://www.guttmacher.org/media/nr/abortww_nr.html/
- [4] Brigs and Ojo, A. Textbook for Midwives in tropic.LBS and Co-publisher, Ibadan, Nigeria, 2010; 50-54.
- [5] Collett, D. (2003). Modelling binary data. Chapman & Hall/CRC.
- [6] Damot, W, Alemtsehay, M. Mastewal, N, Molalign, T. Modern Contraceptive Use among orthodox Christian and Muslim womenof reproductive age group in Bahir Dar

- City, North West Ethiopia: comparative cross sectional study. J.Epidemiol, 2014;4: 235-242.
- [7] Gilda, S and Rubina, H. Reasons for contraceptive nonuse among women having Unmet need for contraception in developing countries. 2014;Guttmacher Institute, The Population Council, Inc.
- [8] Kassebaum, N.J, Bertozzi-Villa, A.Coggeshall, M.S, Shackelford, K.A, Steiner, C. Heuton, K.R. (2014).Global regional, and national levels and causes of maternal mortality during 1990-2013: A systematic analysis for the global burden of disease study2013. Lancet.http://www.ncbi.nlm.nih.gov/pubmed/24797575
- [9] Kaunintz, A. The global library of women's medicine. (Eds.). 2008; Jacksonville. Florida.
- [10] Nnamani, M.O and Etesike, C.N. Education, healthy living & national development.Revised edition. 2009; 164-178.
- [11] The National Academies Press.The best intentions: unintended pregnancy and the well-being of children and families (1995)/consequences of unintended pregnancy. 500 fifthstreet, NW, Washington DC. 2001; www.nap.edu/catalog.php?record_id=4903
- [12] The United States Census Bureau (USCB), (2012). Statistical abstract of the United States
- [13] Tilahun T, Coene, G,Luchter S. Family planning knowledge, attitude and practice among married couples in Jumma Zone.J.Hea. 2013; 8(4): 1335
- [14] United State Aid Agency for International Development (USAID). Achieving the Millennium Development Goals (MDGs). 2006; The Contribution of Fulfillingthe unmet need for family planning.
- [15] United Nations population Fund.State of the world population 2011: state and possibilities in a world of 7 billion. UNFPA. 2005; ISBN 978-0-89714-990-7
- [16] United Nations population Fund. The promise of equality: gender equity, reproductive health and the millennium development goals. UNFPA. 2011; ISBN 0-89714-750-2
- [17] United state Agency for International Development (USAID). Contraceptive trends in developing countries. 2006; DHS Comparative reports
- [18] Utoo, B.T.Mutihir, T.J. Utoo, P.M. Knowledge, attitude and practice of family planning methods among women attending antenatal clinic in Jos, North Central Nigeria.Nig. J. Med. 2010; 19(2):214-8.
- [19] World Health Organization (WHO). Contraceptive method: Mix guidelines for policy and service delivery. 1994; 14-47.
- [20] World Health Organization (WHO).Factsheet on maternal mortality: media center. 2014;http://www.who.int/mediacentre/factsheets/fs348/en/

IOSR Journal of Pharmacy and Biological Sciences (IOSR-JPBS) is UGC approved Journal with Sl. No. 5012, Journal no. 49063.

Garba, M.A., "Appraisal Of The Utilization Of Contraceptive Devices Among Women Aged 18 – 45yrs In Some Selected Hospitals In Abuja Municipal Area Council Of Federalcapital Territory Abuja." IOSR Journal of Pharmacy and Biological Sciences (IOSR-JPBS) 13.1 (2018): 36-43.