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Research Article

Assessing Contraceptive Attitudes of Nigerian Women: A Cross-Sectional Online Study

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Abstract

BACKGROUND

Contraception has been considered an essential component of any country's reproductive health. This is because it not only assists couples and individuals in determining the number of children they want to have, but it also assists them in spacing their children. Despite these benefits, contraceptive use is low in Nigeria.

OBJECTIVES: To assess attitudes towards contraceptives among women in Nigeria and practices of contraception among women in Nigeria.

MATERIAL AND METHODS: This is a description cross sectional online study conducted with 144 respondents using convenience sampling technique. Date was collected via Qualtrics and analyse via SPSS.

RESULTS: The statistical analysis reveal that most of the participant have positive attitude towards contraception a mean attitude score of (x) of 88.37. The most used contraception among Nigerian women is condom 69.4%.

Conclusion: Nigerian women exhibit a positive attitude towards contraception. However, despite the positive attitude, the usage is low. It is crucial for the government and relevant agencies to prioritise public health measures by addressing the underlying factors and removing obstacles to access. This includes ensuring the convenient availability of contraception and incorporating health insurance into comprehensive healthcare packages.

Keywords: Contraceptive attitudes, Nigerian women, Online survey, Cross-sectional study, Reproductive health, Women's health, public health, Family planning, Contraceptive Attitude Scale.

INTRODUCTION

The provision of contraceptive information and services is widely recognised as a crucial component of promoting the well-being and human rights of individuals. This is primarily due to its effectiveness in mitigating the occurrence of unintended pregnancies, minimising the demand for unsafe abortion procedures, curbing the transmission of human immunodeficiency virus from mothers to infants, and enabling individuals to plan the timing of their pregnancies (Sensoy et al., 2018; World Health Organisation, 2019).

Unplanned pregnancies are substantial obstacles to worldwide public health, as evidenced by the approximate annual occurrence of 210 million pregnancies, of which 80 million are unintended and 46 million culminate in induced abortions (Monjok et al., 2010). Developing nations shoulder a significant weight, constituting 76 million unplanned pregnancies out of the total of 182 million pregnancies occurring annually (Sanni et al., 2022). Furthermore, it is shown that a significant proportion of unplanned pregnancies, namely 66%, is observed among individuals who do not use any kind of contraception (Amina & Regmi, 2014).

According to the World Health Organisation (WHO, 2023), there is an annual occurrence of 21 million pregnancies among adolescent girls aged 15–19 in low- and middle-income countries. It is estimated that approximately 50% of these

pregnancies are unintended, resulting in an estimated 12 million births. Furthermore, it has been found that 55% of these unintended pregnancies lead to unsafe abortions (WHO, 2023).

Nigeria, currently ranked as the seventh most populous nation globally, presently possesses an approximate population of 183 million individuals. According to projections by the United Nations in 2013, this figure is anticipated to increase to 285 million by the year 2050. According to the results of the National Population Commission and International Classification of Functioning, 2014 health survey, Nigeria's population increased significantly from 1999 to 2013. Specifically, the estimated population increased from 88.5 million in 1999 to 167 million in 2013. During this time, Nigeria exhibited a fertility rate ranging from approximately 5.5 to 7, along with the highest contraceptive prevalence of 13-23%. The estimated rate of unplanned pregnancies among women aged 15–49 in Nigeria in 2012 was 59 per 1,000. The study additionally provided an estimation of approximately 1.25 million induced abortions that were documented during the corresponding year (Bankole et al., 2015). In Nigeria, induced abortion is prohibited by law, except in cases where the pregnancy poses a significant risk to the mother's life or if the foetus has severe diseases or deformities that make it unable to survive outside the womb (Bankole et al., 2015).

Unplanned births in Nigeria are linked to significant public health issues, mostly resulting from the covert nature of induced abortions prompted by stringent legislation (Bankole et al., 2015). These circumstances contribute to an estimated yearly count of 760,000 induced abortions, representing a significant proportion of maternal fatalities ranging from 20% to 40% (Abiodun & Balogun, 2009). According to research, the appropriate use of contraception might help countries like Nigeria decrease population growth before it becomes uncontrollable (Asekun-Olarinmoye et al., 2013). Contraception use has also been associated with a reduction in maternal morbidity and death by reducing the number of ill-timed pregnancies and/or deliveries. According to Sensoy et al., (2018), the globe has more than 20 million unsafe abortions each year, resulting in around 47,000 maternal deaths.

Previous research has found that Nigeria has low contraceptive uptake as well as significant unmet needs (Ifeanyi et al., 2022; Akpoti et al., 2023). According to Ifeanyi et al., (2022), the prevalence rate of contraceptives was 22.9% among childbearing women in Enugu Nigeria. Similarly, Akpoti et al., (2023) reported 38.8% among childbearing women in North central Nigeria unmet needs for contraception use should be defined in this sense as women who want to extend their birth intervals or terminate their fertility but are not taking any contraception. According to the 2018 National Demographic and Household Survey, the prevalence rate of contraceptive use among married women under the age of 50 was 17%. Only 12% used contemporary contraceptive techniques. However, sexually active unmarried women had a greater overall prevalence (37%).

Rationale for the study

Numerous studies have been conducted to evaluate the level of contraceptive awareness in Nigeria; however, the majority of these studies were confined to certain geographical regions. Utoo et al., (2010), conducted their investigation exclusively inside the confines of Jos, Central Nigeria. The study conducted by Alhassan, (2023) investigated the utilisation of contraceptive methods among women residing in the Dekina Local Government Area of Kogi State. Odusina et al., (2012) research on Socio-economic status, contraceptive knowledge and use among rural women in Ikeji Arakeji, Osun State. Umoh & Abah, (2011) researched contraception awareness and practice among antenatal attendees in Uyo.

Latunji & Akinyemi (2018) asserts that the acquisition of awareness or knowledge is a crucial factor in the acceptance and implementation of novel concepts aimed at addressing human issues, particularly in the context of health-seeking behaviour. According to Fabrigar et al., (2006) attitude formation is influenced by an individual's level of knowledge. This is because human acts are expected to be grounded in accurate knowledge, and without it, actions may be disregarded or misinterpreted. According to Kasso & Alegbeleye, (2023), the acquisition of accurate knowledge is crucial for fostering a good attitude and thus facilitating increased utilisation or application.

Addressing negative attitudes and misconceptions surrounding the use of contraception is significant (Dehlendorf et al., 2014). They are among the most important barriers to the use of contraceptives because people will use contraceptives, recommend them to other people or support those using contraceptives when they have a good/positive attitude to contraceptives, and will do the opposite if they have a poor/negative attitude. The impact of individuals' knowledge, attitudes, and perceptions of sexual and reproductive health on their utilisation of contraception implies that interventions centred around enhancing knowledge, attitudes, and practices have the potential to decrease the occurrence of unplanned births (Heisler & Van Eron, 2012).

In addition to the aforementioned constraints, it is noteworthy that numerous prior investigations conducted in Nigeria have neglected to employ validated scale, such as the contraceptive attitude scale, for the assessment of contraceptive attitudes. While it is a prevalent practice to examine the general views towards contraceptives, previous

research has not yet examined the collective attitudes towards both general contraceptive use and specific types of contraception within the same survey. The adoption of a comprehensive approach to investigating attitudes towards contraception has the potential to yield novel contributions within this field.

Therefore, this study seeks to conduct a cross-sectional online study to assess the contraceptive attitudes of women in Nigeria. The outcome of this research would help public health practitioners in the development of strategies necessary for the improvement of the practice of contraception.

Aim and Objectives

The study was conducted to fill the research gap mentioned above, with the aim of investigating the attitude towards contraceptives among women in Nigeria. This aim was tied to two research objectives, as follows:

1. To assess attitudes towards contraceptives among women in Nigeria.
2. To assess practices of contraception among women in Nigeria.

Research Questions

The study was guided by two research questions based on the aforementioned aim and objectives:

1. What are the attitudes towards contraceptives among women in Nigeria?
2. What are the practices of contraception among women in Nigeria?

METHODOLOGY

Research Approach

This study makes use of quantitative research methodologies, which are characterised by the collection and analysis of numerical data or quantifiable data.

Research design

This study used a cross-sectional online survey approach, which involves collecting data at a specific point in time.

Sample and sampling procedure

The study employed the convenience sample technique to recruit participants for this study. This is a non-probability sampling technique where participants are included in the sample based on their availability and accessibility.

Data type and study settings

To collect information from Nigerian women for the purpose of this investigation, the researcher utilised an online questionnaire. As a result, this is primary data.

Data collection instrument and procedure

Data collection was done using an online survey comprising basic descriptive demographic questions such as age, gender, marital status, education, religion, state, residential location, number of children, and the Contraceptive Attitude Scale developed by Kelly, (2010). The Contraceptive Attitude Scale (CAS) measures attitudes towards the use of contraceptives in general and consists of 32 items/questions, 17 positively worded and 15 negatively worded. Participants will indicate their agreement or disagreement with CAS items by scoring them on a 5-point rating scale ranging from 1 (strongly disagree) to 5 (strongly agree). Negatively worded items will be reverse scored before adding up the scores to compute the total score. The total score will range from 32 to 160, with higher scores indicating more positive attitudes towards contraception. According to Kelly, (2010), the contraceptive attitude scale has good internal consistency, with a Cronbach alpha coefficient reported of 0.88. In the current study, the Cronbach alpha coefficient was 0.90. The online questionnaire was created using the Qualtrics platform, an online survey tool. The survey link was distributed to women in Nigeria aged 18 years and older through social media. To ensure the high standard and efficacy of the research undertaking, a preliminary inquiry, generally known as a pilot study, was done before the online survey was published and made available to the whole sample using 5 participants. The main aims of this pilot study were to evaluate the suitability of the research instruments, assess the feasibility of conducting a comprehensive study, refine and evaluate the protocols intended for the larger-scale study, establish and validate the sampling and recruitment strategies, collect initial data, and obtain crucial information regarding effect sizes (Malmqvist et al., 2019).

After completing the survey, individuals were asked to provide feedback on the ease of completion, clarity, and relevancy of the survey items. Additionally, participants were asked to provide suggestions on how to enhance the survey before commencing the actual data collection procedure. The provided feedback was subsequently utilised to enhance the survey, involving measures such as rectifying unclear instructions and confusing language. The feedback subsequently enhanced the survey, resulting in a design that facilitates the gathering of accurate, credible, and dependable data.

Data analysis
The data collected via the Qualtrics Survey was transferred to SPSS for analysis

Ethical Considerations
The Sheffield Hallam University (SHU) Research Ethics Committee of the College of Social Sciences and Art approved this study.

RESULT
Attitudes towards contraceptives

Table 2: Descriptive Statistics to show attitude of the respondents towards contraceptive

TOTAL SCORE	N	Mean	ST. Deviation	Minimum	Maximum	Range
	144	93.2	7.8	47	109	62

Positive attitude and Negative attitude
From table 2 above descriptive statistics were performed to understand the attitude of the respondent towards contraceptives, (n=144). The analysis revealed a mean attitude score of 93.2 ±7.8 out of 160 possible points, the minimum score observed was 47.and maximum score of 109, range 59-104= 62. According to (Kelly, 2010), Lower scores indicate more negative attitudes toward contraception. This indicates that, on average, respondents expressed a positive attitude 93.2 ±7.8 towards contraceptives use. Based on the result of this study, the attitude score was categorised based on the mean so that those who got less than the mean was considered having negative attitude while others were considered to have positive attitude.

Practices of Contraception
Table 4: Distribution of Current Contraception Use

Variable	Frequency (n)	Percentage (%)
Are you currently using any form of contraception?		
Yes	**90**	**62.5**
No	**54**	**37.5**

Table 4 above shows the distribution of most currently used contraception among Nigerian women. Among the 144 participants, 90 (62.5%) indicated they are currently using contraception, while 54 (37.5%) stated they are not using any form of contraception. This indicates that a favourable percentage of Nigerian women use one form of contraception or another.

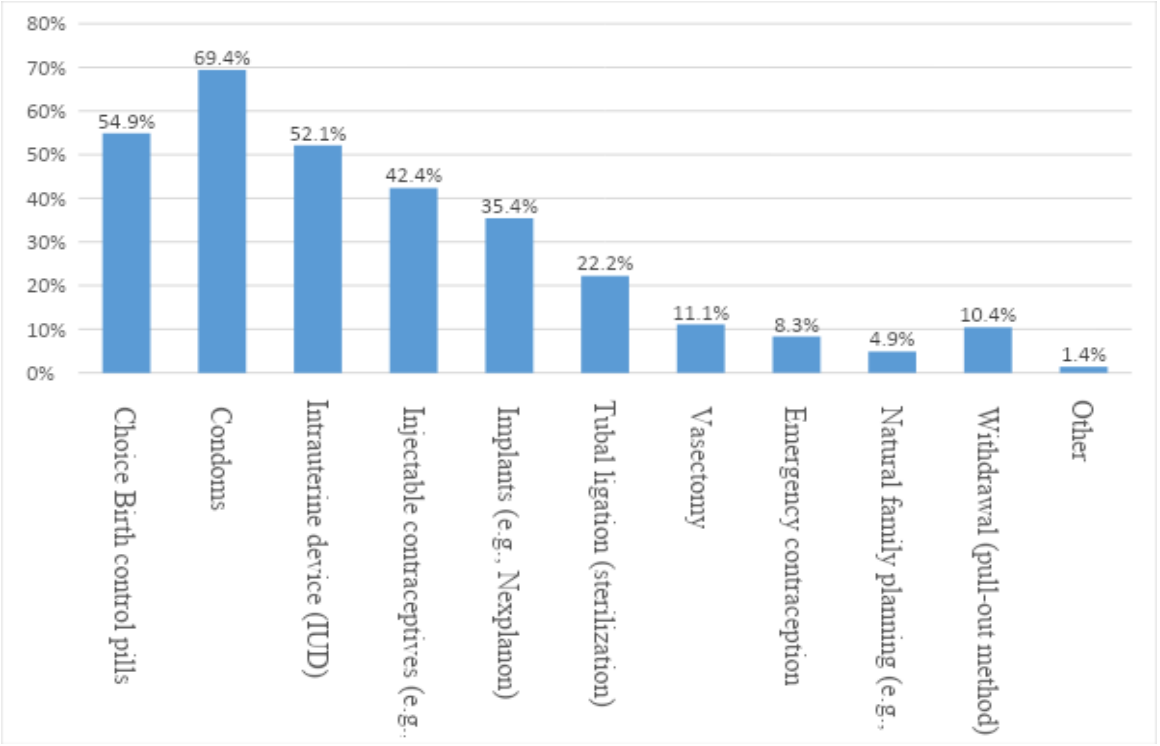

Figure 1: The frequency of most commonly used contraception among Nigerian women.

The frequency of usage of various forms of contraception among Nigerian women. The data reveals that 69.4% of the participants used condoms, 54.9% employed birth control methods, 52.1% opted for intrauterine devices, 42.4% relied on injectable contraceptives, 35.4% used implants, 22.2% underwent tubal ligation, 11.1% underwent vasectomy, 10.4% practised the withdrawal method, 8.3% used emergency contraception, 4.9% employed natural family planning, and 1.4% used other methods, as shown in figure 1 above.

Summary of the Research Process and Main Findings

Data was gathered from a sample of Nigerian women recruited through social media. The participants were sent a link to a closed-ended questionnaire created on the Qualtrics Survey platform via email. The convenience sampling method was used in the participant recruitment process. Out of the 159 responses, only 144 completed the questionnaire, with 15 responses being deleted from the final analysis due to incomplete data. Descriptive statistics were conducted. According to the descriptive data, most of the participants in my study had a good attitude towards contraception, and most of the participants are currently using one form of contraception over another. Condoms are the most used contraception among Nigerian women.

Discussion

Attitudes Towards Contraception

Positive attitude and Negative attitude

In my study, most of the participants had positive attitudes towards contraception, with a score of 93.2±7.8. This result relatively agrees with the result of Olorunsaiye et al., (2023), who did a descriptive cross-sectional study to assess the contraceptive attitudes of US-born and foreign-born black women living in the USA. The study shows that the participants have positive attitudes towards contraception, with a mean attitude score (121.9 ±20.5 for US-born women and 114.9 ±19.8 for foreign-born women). The difference in mean score may be because the aim of my study is to assess the attitudes of women towards contraception among Nigerian women and could be because my sample size is different from their sample. The sample size in Olorunsaiye et al., (2023) has a total of 657 participants while my study has a sample of 144. Looking into other previous academic research on attitudes towards contraception across different countries, a self-administered questionnaire was used to assess the attitude towards contraception, but not with a validated scale. However, my results are the same as most of the results of other research, which found that their participants have a positive attitude towards contraception. According to Kelly, (2010), positive attitude is within the range of 32 to 160, my result has a mean of 93±7.8, which indicates a positive attitude towards contraception. According to Ajayi et al., (2021), having a positive attitude towards contraception can improve understanding and awareness of contraception. Adegboyega, (2019) asserts that Nigerian women who had positive attitudes towards contraception were more likely to use contraception. A recent study conducted by Amu et al., (2020), demonstrates a strong link between a positive attitude and the use of contraception. The study revealed that approximately 64.8% of women hold a favourable perception of contraception and are inclined to utilise it. Similarly, Okafor et al., (2022), established a correlation between positive attitudes and the use of contraceptives. According to their research, 88.9% of the female participants exhibit a positive attitude towards the use of contraception. However, negative attitudes towards contraception have been linked to unplanned pregnancies (Liu et al., 2023), and also contribute to the spread of sexually transmitted illnesses (Dorji et al., 2022). Many studies have shown that Nigerian women have a negative attitude towards contraception (Amu et al., 2020; Adegboyega, 2019). Amu et al. (2020), investigates the contraceptive knowledge, attitude, and pattern among female students at Osun State College of Education in Ilesa, South-Western Nigeria. Most of the participants have negative attitudes towards contraception uses. 161 (57.3%) of the 281 respondents had a negative view of contraception. Similarly, Adegboyega, (2019), reported that the majority of married women in Ilorin Metropolis have a negative attitude towards contraceptive use, resulting in poor contraceptive usage in Nigeria. People who believe that utilising contraception causes promiscuity would not only be discouraged from using them. They will also discourage others from using them and label or stigmatise those who do (Ezeanolue et al., 2015). A young woman who mistakenly believes that contraceptives can lead to infertility would be reluctant to use them. These views are not favourable for the adoption of contraceptives, which has consistently been low among Nigerian women of reproductive age (Ezeanolue et al., 2015).

Practice of contraception

Another objective was to assess the practice of contraception among women in Nigeria. The findings from this study show that the rate of contraception usage among Nigerian women is high (62.5%). This result contradicts the results of previous researchers (Etokidem et al., 2017; Akamike et al., 2020). In Etokidem et al., (2017), 17.2% of the participants were using one form of contraception or another. Similarly, Akamike et al., (2020) show that 26.2% of the participants used some form of contraception. In my study, the most used contraception among Nigerian women is the condom (69.4%). Even though the Nigerian Demographic and Health Survey reports a low rate of condom use (2.1% among currently married women and 40% among sexually active unmarried women), numerous studies have shown that condoms are the most used contraceptive method in Nigeria (Oluwole et al., 2016; Usman et al., 2016; Crawford et al., 2021: Ezeanolue et al., 2015). This is in support of my study, in a study by Ukegbu et al. (2018), 58.0%, and Ezeanolue

et al., (2015), 100.0% of their participants made condoms their contraceptive method of choice. Also, condoms, being the most chosen method by the acceptors in this study, agreed with what was obtained from the southern zone of Nigeria (Ukoji et al., 2022), and Northwestern Nigeria (Adefalu et al., 2019). According to Ezeanolue et al. (2015), the condom is the sole contraceptive device that effectively fulfils the dual purpose of preventing both unwanted births and sexually transmitted diseases, provided it is worn correctly. However, according to the World Health Organisation, (2021), the non-hormonal copper IUD is the most efficacious means (with a success rate above 99%) of emergency contraception. Its mechanism of action involves impeding the attachment of a fertilised egg to the endometrium, the lining of the uterus. The insertion can be done within a period of 5 days following unprotected sexual intercourse. The copper intrauterine device (IUD) can offer reliable contraception for a duration of 5 to 10 years once it is installed. My result could be because most of my participants are married, educated, and between the ages of 31 and 40.

The findings of my study contrast with those of the Aworinde et al., (2022) study, whichh found that progesterone-only injectables (36.2%), and Akemike et al., (2020), which assert that natural methods (57%), are the most used form of contraception among Nigerian women. The difference between the results of this study and my study could be because of the sample size. The participants in the Aworinde et al., (2020) study was 629, while my own was 144.

Conclusion

It has been established in this chapter that Nigerian women have a positive attitude towards the use of contraceptives, condom is the most used contraception among Nigerian women. Accessibility to healthcare, health insurance, partner support, and family size were linked to attitudes towards contraception; however, partner support and health insurance was the only factor that related to the usage of contraception among Nigerian women. In order to shed more light on the attitude on the usage of contraception among Nigerian women, future research should take into consideration examining both men and women. In conclusion, the government of Nigeria ought to take into consideration the establishment of a healthcare system that is geared towards educating and encouraging the use of contraceptives, in addition to a programme that offers healthcare insurance, in order to enable a greater number of women to make use of contraceptives.

Recommendations for Policy and Practice

Following the findings and conclusions of the study, a number of suggestions have been put forward as recommendations. According to the findings of the study, the factors found to be associated with attitude towards contraception were accessibility to healthcare, health insurance, partner support, and family size while partner support and health insurance were factors associated with the use of contraception. As a consequence of this, it has been proposed that the government extend the coverage of healthcare insurance to include services related to contraception. It will be easier for Nigerian women to overcome financial obstacles and have access to a wider variety of contraceptive alternatives if comprehensive contraception coverage is included in healthcare plans. To improve access to contraception services across Nigeria's many different areas, the government ought to give priority to projects that aim to expand their availability. Increasing the number of contraceptive choices that are available in healthcare settings. These policies would facilitate the training of providers in contraceptive counselling to individual and family regarding the different types of family planning available to help in birth control and receiving necessary information regarding contraceptives. Again, it is imperative to have government-enforced insurance coverage for all types of contraceptives to eliminate economic obstacles encountered by women. It is advisable to provide counselling to couples regarding the management of adverse effects caused by contraceptives. This can help alleviate concerns about severe side effects and dispel misconceptions related to the use of modern contraceptives. Enhancing healthcare accessibility in impoverished urban populations and augmenting contraception education and information are imperative for promoting the use of contraceptives.

REFERENCES

1. Abiodun, O. M., & Balogun, O. R. (2009). Sexual activity and contraceptive use among young female students of tertiary educational institutions in Ilorin, Nigeria. Contraception, 79(2), 146-149.
2. Adegboyega, L. O. (2019). Attitude of married women towards contraceptive use in Ilorin Metropolis, Kwara State, Nigeria. African health sciences, 19(2), 1875-1880.
3. Adefalu, A. A., Ladipo, O. A., Akinyemi, O. O., Popoola, O. A., Latunji, O. O., & Iyanda, O. (2019). Qualitative exploration of factors affecting uptake and demand for contraception and other family planning services in north-West Nigeria. African Journal of Reproductive Health, 23(4), 63-73.
4. Ajayi, K. V., Panjwani, S., Wilson, K., & Garney, W. R. (2021). Using the social-ecological model to understand the current perspective of contraceptive use in the United States: a narrative literature review. Women, 1(4), 212-222.
5. Akamike, I. C., Okedo-Alex, I. N., Eze, I. I., Ezeanosike, O. B., & Uneke, C. J. (2020). Why does uptake of family planning services remain sub-optimal among Nigerian women? A systematic review of challenges and implications for policy. Contraception and reproductive medicine, 5(1), 1-11.

6. Akpoti, O. O., Kareem, A. J., Kareem, A. O., Ogunromo, A. Y., Owoeye-Lawal, O. T., Ahmed, L. A., ... & Ibekwe, O. C. (2023). Demand for modern contraceptives and use among women of reproductive age in north central Nigeria. International Journal of Community Medicine and Public Health, 10(3), 958.
7. Alhassan, E. O. (2023). Contraceptive Use Among Women of Reproductive Age in Dekina Local Government Secretariat, Kogi State, Nigeria. European Journal of Theoretical and Applied Sciences, 1(5), 399-408.
8. Amina, M. D., & Regmi, K. (2014). A quantitative survey on the knowledge, attitudes and practices on emergency contraceptive pills among adult female students of a tertiary institution in Kaduna, Nigeria. Prim Health Care, 4(1), 1-8.
9. Amu, E. O., Solomon, O. O., & Odu, O. O. (2020). Knowledge, attitude and pattern of contraceptive use among female students of Osun State College of Education, Ilesa, South-Western, Nigeria. Age (years), 15(19), 170.
10. Asekun-Olarinmoye, E. O., Adebimpe, W. O., Adeomi, A. A., & Olugbenga-Bello, A. I. (2013). Emergency contraception: an untapped resource among sexually active college students in Osogbo metropolis, Nigeria. Open Access Journal of Contraception, 13-20.
11. Aworinde, O. O., Adekanle, D. A., Ilori, O., & Adeyemi, A. S. (2022). Pattern of contraceptive choice among clients attending a tertiary health institution in Ogbomoso, Southwestern Nigeria. Sahel Medical Journal, 25(2), 37-40.
12. Balogun, O., Adeniran, A., Fawole, A., Adesina, K., Aboyeji, A., & Adeniran, P. (2016). Effect of male partner's support on spousal modern contraception in a low resource setting. Ethiopian journal of health sciences, 26(5), 439-448.
13. Bankole, A., Adewole, I. F., Hussain, R., Awolude, O., Singh, S., & Akinyemi, J. O. (2015). The incidence of abortion in Nigeria. International perspectives on sexual and reproductive health, 41(4), 170.
14. Crawford, E. E., Atchison, C. J., Ajayi, Y. P., & Doyle, A. M. (2021). Modern contraceptive use among unmarried girls aged 15–19 years in South Western Nigeria: results from a cross-sectional baseline survey for the Adolescent 360 (A360) impact evaluation. Reproductive Health, 18, 1-13.
15. Dehlendorf, C., Park, S. Y., Emeremni, C. A., Comer, D., Vincett, K., & Borrero, S. (2014). Racial/ethnic disparities in contraceptive use: variation by age and women's reproductive experiences. American journal of obstetrics and gynecology, 210(6), 526-e1.
16. Dorji, T., Wangmo, K., Tshering, D., Tashi, U., & Wangdi, K. (2022). Knowledge and attitude on sexually transmitted infections and contraceptive use among university students in Bhutan. Plos one, 17(8), e0272507.
17. Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. American journal of theoretical and applied statistics, 5(1), 1-4.
18. Etokidem, A. J., Ndifon, W., Etowa, J., & Asuquo, E. F. (2017). Family planning practices of rural community dwellers in Cross River State, Nigeria. Nigerian Journal of clinical practice, 20(6), 707-715.
19. Ezeanolue, E. E., Iwelunmor, J., Asaolu, I., Obiefune, M. C., Ezeanolue, C. O., Osuji, A., ... & Ehiri, J. E. (2015). Impact of male partner's awareness and support for contraceptives on female intent to use contraceptives in southeast Nigeria. BMC public health, 15, 1-6.
20. Fabrigar, L. R., Petty, R. E., Smith, S. M., & Crites Jr, S. L. (2006). Understanding knowledge effects on attitude-behavior consistency: the role of relevance, complexity, and amount of knowledge. Journal of personality and social psychology, 90(4), 556.
21. Heisler, K., & Van Eron, D. M. (2012). A descriptive study of undergraduate contraceptive attitudes among students at the University of New Hampshire.
22. Ifeanyi, O. J., Boniface, O. U., & Calistus, N. O. (2022). Prevalence and Barriers to Contraceptive Uptake among Reproductive Age Women in Achi, Enugu State, Southeast, Nigeria. Gynecol Reprod Health. 6 (6): 1-5.
23. Kasso, T., & Alegbeleye, J. O. (2023). Knowledge, Attitude and Practice of Contraceptive Use among Women of Reproductive Age in Port Harcourt, Nigeria. Advances in Reproductive Sciences, 11(4), 93-105.
24. Black, K. J. (2013). Contraceptive attitude scale. In Handbook of Sexuality-Related Measures (pp. 201-210). Routledge.
25. Latunji, O. O., & Akinyemi, O. O. (2018). Factors influencing health-seeking behaviour among civil servants in Ibadan, Nigeria. Annals of Ibadan postgraduate medicine, 16(1), 52-60.
26. Liu, R., Dong, X., Ji, X., Chen, S., Yuan, Q., Tao, Y., ... & Yang, Y. (2023). Associations between sexual and reproductive health knowledge, attitude and practice of partners and the occurrence of unintended pregnancy. Frontiers in Public Health, 10, 1042879.
27. Monjok, E., Smesny, A., Ekabua, J. E., & Essien, E. J. (2010). Contraceptive practices in Nigeria: Literature review and recommendation for future policy decisions. Open access journal of contraception, 9-22.
28. Odusina, E., Ugal, D., & Olaposi, O. (2012). Socio-economic status, contraceptive knowledge and use among rural women in Ikeji Arakeji, Osun State, Nigeria. Afro Asian J Soc Sci, 3, 1-10.
29. Olorunsaiye, C. Z., Brunner Huber, L. R., Degge, H. M., Yada, F. N., & Yusuf, K. K. (2023). Assessing the Contraceptive Attitudes of US-Born and Foreign-Born Black Women Living in the USA: a Descriptive Cross-Sectional Study. Journal of Racial and Ethnic Health Disparities, 1-11.

30. Okafor, K. C., Idoko, L. O., Ochuma, E. U., Effiong, A. I., Omeiza, D. V., & Bassi, A. P. (2022). Qualitative Assessment of Knowledge, Attitude, and Practice of Contraceptives among Women Attending Postnatal Care in a Health Facility in Jos, Plateau State, Nigeria. Open Journal of Obstetrics and Gynecology, 12(8), 706-718.
31. Oluwole, E., Kuyinu, Y., Goodman, O., Odugbemi, B., & Akinyinka, M. (2016). Factors influencing the uptake of modern family planning methods among women of reproductive age in a rural community in Lagos State. International Journal of TROPICAL DISEASE & Health, 11(3), 1-11.
32. Sanni, T. A., Elegbede, O. E., Durowade, K. A., Adewoye, K., Ipinnimo, T. M., Alabi, A. K., ... & Oni Sr, O. B. (2022). Sexual Debut, Sexual Education, Abortion, Awareness and Prevalence of Contraceptive Among Female Undergraduates Students in Public and Private Universities in Ekiti State, Nigeria. Cureus, 14(8).
33. Sensoy, N., Korkut, Y., Akturan, S., Yilmaz, M., Tuz, C., & Tuncel, B. (2018). Factors affecting the attitudes of women toward family planning. Family planning, 13, 33.
34. Ukegbu, A. U., Onyeonoro, U. U., Nwokeukwu, H. I., & Okafor, G. O. C. (2018). Contraceptive method preferences, use and satisfaction among women of reproductive age (15-49 years) in Umuahia, Abia State, Nigeria. J Contracept stud, 3(3), 16.
35. Ukoji, V. U., Anele, P. O., & Imo, C. K. (2022). Assessing the relationship between knowledge and the actual use of contraceptives among childbearing women in South-South Nigeria: evidence from the 2018 Nigeria demographic and health survey. BMC public health, 22(1), 2225.
36. Umoh, A. V., & Abah, M. G. (2011). Contraception awareness and practice among antenatal attendees in Uyo, Nigeria. Pan African Medical Journal, 10.
37. Usman, S. O., Kalejaye, O. O., Isola, I. N., Oluwaniyi, O., Ojogbede, A. K., & Adu, A. S. (2016). Family planning practices among rural community women in Nigeria. J exp Integr med, 6(2), 88-92.
38. Utoo, B. T., Mutihir, T. J., & Utoo, P. M. (2010). Knowledge, attitude and practice of family planning methods among women attending antenatal clinic in Jos, North-central Nigeria. Nigerian Journal of Medicine, 19(2).
39. Yuan, B., Li, J., & Wang, Z. (2019). The development of global women's rights and improvements in reproductive health intervention access of females with different socio-economic status. International journal of environmental research and public health, 16(23), 4783.
40. World Health Organization: WHO. (2019). Contraception. www.who.int. https://www.who.int/health-topics/contraception#tab=tab_1
41. World Health Organization: WHO. (2023, June 2). Adolescent pregnancy. https://www.who.int/news-room/fact-sheets/detail/adolescentpregnancy#:~:text=Scope%20of%20the%20problem,per%201000%20women%20in%202023.
42. World Health Organization: WHO. (2021, November 9). Emergency contraception. https://www.who.int/news-room/fact-sheets/detail/emergency-contraception