

Knowledge, Attitude and Practice of Contraceptive Use among Women of Reproductive Age in Port Harcourt, Nigeria

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Abstract

Background: Low contraceptive use among all other factors have been implicated in rapid population growth seen in low and lower middle-income countries (LLMICs). This can be attributed to poor knowledge and attitude of the populace towards use of modern contraceptives. **Aim:** To determine the knowledge, attitude and practice of contraception among pregnant women attending ANC at the University of Port Harcourt Teaching Hospital (UPTH) in Port Harcourt, Rivers State, Nigeria from July 1 to August 31, 2021. **Methods:** This quantitative study was designed as a descriptive cross-sectional study that recruited 529 women. They were administered with a semi-structured questionnaire which was used to collect their data and responses. The data was analysed using Statistical Product and Service Solutions (SPSS) version 25. **Results:** According to the findings, 57.3% and 47.1% of the women had poor knowledge and negative attitude towards contraception respectively. About a tenth of the women (9.8%) utilised contraceptives of which 44.2% and 42.3% used the natural method and male condoms respectively. The study also revealed the major reason behind the low use as desire for more children (36.3%). **Conclusion:** The study showed that the women had poor knowledge and negative attitude towards contraceptives and this translated to poor contraceptive use. Hence, awareness campaigns should be intensified by health workers towards enlightening the populace on the different types, uses and benefits of modern contraceptives.

Keywords

Attitude, Contraceptive, Knowledge, Practice, Reproductive Age

1. Introduction

Over the years, many Low and Lower-Middle-Income Countries (LLMICs) have

been experiencing rapid population increase owing to high fertility, high birth rates, and low contraceptive use [1] [2]. Hence, the need to implement efficient family planning (FP) services in these nations [1] [2], as the World Health Organization (WHO) encourages the continuous access of both girls and young women to preferred contraceptive methods [3]. They added that this is critical for preventing unintended and adolescent pregnancies, as well as lowering the risk of unsafe abortion and maternal mortality [3]. Despite this and all other benefits accrued to the use of modern contraceptives (MCs), its use in underdeveloped countries, particularly those in Sub-Saharan Africa (SSA) region, remains below 25% [4]. This is also true in Nigeria, as the report of the 2018 Nigeria Demographic and Health Survey (NDHS) showed that only 12% of women of reproductive age utilise MCs [5]. Also, only 20% of the same group of women in Rivers State, the research area, utilise MCs [5]. This can be said to be a reflection of the knowledge and attitude of the women. According to Shehu, *et al.* [6], awareness or knowledge plays a key role in the adoption of new ideas towards solving human problems, especially as they relate to health seeking behaviour. Kalua [7] also revealed that attitude is shaped by the level of knowledge one has, as human actions are supposed to be based on proper knowledge, without which it may not be taken or taken wrongly. This explains that clear knowledge is essential for the development of positive attitude and thus increases in use or practice. Hence, this study sought to unravel the knowledge level, attitude and practice of contraceptive use among pregnant women. This understanding plays some major roles in the development of strategies necessary for the improvement of the practice of contraception.

2. Methods

2.1. Study Design and Setting

This study was conducted as a facility-based descriptive cross-sectional study which was carried out in the Department of Obstetrics and Gynaecology of the University of Port Harcourt Teaching Hospital (UPTH), Port Harcourt.

2.2. Study Population and Sample Size Determination

The study sample included 529 antenatal clinic attendees who were recruited using the systematic sampling method. The required minimum sample size calculated using the Cochran formula ($n = pq * Z^2 / d^2$); with confidence interval set as 95%, degree of accuracy set at 0.05, and percentage of married women with unmet need for family planning (19%) [5], was 236.5. Considering a non-response rate of 10% (23.65), it gave a sample size of ≈ 260 . A minimum sample size of 520 was arrived at after applying the design effect of 2. However, 529 women were eventually recruited to participate in the study.

2.3. Sampling Method

The respondents for the study were selected using systematic sampling method.

According to the clinic records of 2020, about 50 clients were seen daily. This implied that about 250 clients were seen in a week and 1000 in a month. Hence, the sampling interval (K) was obtained by applying the formula;

$$K = N/n;$$

where N is the average number of clients seen by the clinic in a month and n = the estimated sample size of the study. That is; $1000/520 = 1.9 (\approx 2)$.

The first participant was selected by simple random sampling from among the first two participants on each clinic day. Subsequently, every second patient presenting to the clinic that day and who consented to take part in the study was recruited for the study. Antenatal clinics are run on each working day of the week (Monday to Friday) in UPTH.

2.4. Study Instrument

The study made use of a semi-structured interviewer-administered questionnaire adapted from the Nigeria Demographic and Health Survey 2018 (NDHS 2018) questionnaire [5], which was then made suitable for the scope of this study and tested. The questionnaire had sections on: Sociodemographic characteristics, Contraceptive knowledge, Attitude towards use of contraceptives, Practice or Use of contraceptives, including the pattern of use.

2.5. Statistical Analysis

The data analysis was performed using Microsoft Excel 2019 and IBM Statistical Product and Service Solutions (SPSS) version 25.0 (Chicago, IL, USA). Microsoft Excel was used for data cleaning, editing, sorting, and coding before importing it into SPSS software for analysis. Categorical variables like sociodemographic characteristics, knowledge, attitude, and practice of contraception were summarised as frequency counts and percentages. The knowledge of the respondents on contraceptives was assessed using the questions in the knowledge section of the questionnaire. Each correct answer was assigned a score of 1 and the percentage correct score was computed for each respondent and graded as follows: Poor knowledge (0% - 49%), Fair knowledge (50% - 79%), and Good knowledge (80% - 100%). The attitude of the respondents towards contraceptive use was also scored using the questions in the attitude section of the questionnaire. Each correct answer was scored 1 mark and the percentage correct score computed for each respondent. The respondents were then grouped into: Negative attitude (0% - 59%) and Positive attitude (60% - 100%).

3. Results

3.1. Socio-Demographic Characteristics of Study Participants

Table 1 shows the analysis of the socio demographic characteristics of the respondents. According to the result, over half of the respondents, 310 (58.6%), were aged between 21 to 30 years while the mean age was 30.18 ± 4.64 . Almost

all, 500 (94.5%) and 520 (98.3%), of the respondents were married and Christians respectively, over three-quarter, 413 (78.1%) had completed tertiary education, while 254 (48.0%) were self-employed, and 458 (86.6%) resided in urban locations.

Table 1. Social demographic characteristics of the respondents.

| Variable | Frequency (n = 529) | Percent |
|--------------------------|---------------------|---------|
| Age group | | |
| ≤20 | 3 | 0.6 |
| 21 - 30 | 310 | 58.6 |
| 31 - 40 | 209 | 39.5 |
| >40 | 7 | 1.3 |
| Mean ± SD | 30.18 ± 4.64 | |
| Marital status | | |
| Married | 500 | 94.5 |
| Single | 26 | 4.9 |
| Cohabiting | 3 | 0.6 |
| Religion | | |
| Christian | 520 | 98.3 |
| Islam | 9 | 1.7 |
| Education | | |
| No formal education | 6 | 1.1 |
| Primary | 4 | 0.8 |
| Senior secondary | 106 | 20.0 |
| Tertiary | 413 | 78.1 |
| Employment status | | |
| Employed | 131 | 23.1 |
| Working part time | 19 | 3.6 |
| Self employed | 254 | 48.0 |
| Unemployed | 123 | 23.3 |
| Others | 10 | 1.9 |
| Residential area | | |
| Rural | 71 | 13.4 |
| Urban | 458 | 86.6 |

3.2. Knowledge of Contraceptives

Analysis of knowledge of the respondents on contraceptives is presented in **Table 2**. The result shows that 450 (85.1%) of the respondents had heard about contraceptives, while the main source of information about contraceptives reported by many of the respondents, 195 (43.3%), was in the hospital. Majority of the respondents, 417 (78.8%) identified that contraceptives are used to prevent unwanted pregnancies, while pills (66.9%) and male condoms (46.9%) were identified as the most known methods of contraceptives respectively. Also, majority of the women 300 (56.7%) identified irregular menses as the major side effect of using contraceptives.

The analysis and grading of the responses generated by the respondents with regards to their knowledge of contraceptives as presented in **Figure 1** shows that over half of the women, 303 (57.3%) had poor knowledge while 192 (36.3%) and 34 (6.4%) had fair and good knowledge respectively.

3.3. Attitude towards the Use of Contraceptives

The attitude of the respondents towards the use of contraceptives is presented in **Table 3**. The result shows that majority of the respondents, 349 (66.0%), approved of the use of contraceptives, while 310 (58.6%) and 370 (69.9%) felt that contraceptives are safe and “good” respectively. Some of the respondents, 97 (18.3%) reported that the use of contraceptives reduces sexual pleasure, while 171 (32.3) believed that it is only for females. Some of the respondents, 154 (29.1%) also reported that contraceptives promote promiscuity, while over half of them, 352 (66.7%), said that they will recommend the use of contraceptives to other women.

Figure 2 shows the level of attitude of the respondents towards the use of contraceptives. The result indicates that 249 (47.1%) of the respondents had a negative attitude while 280 (52.9%) had a positive attitude towards contraceptive use.

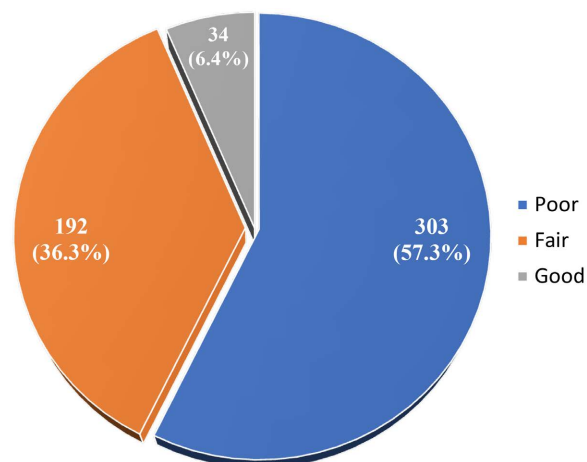


Figure 1. Level of Knowledge towards contraceptives.

Table 2. Knowledge of contraceptives among the respondents.

| Variable | Frequency (n = 529) | Percent |
|--|---------------------|---------|
| Heard of contraceptives | 450 | 85.1 |
| Source of information (n = 450) | | |
| Electronic media | 20 | 4.4 |
| Print media | 2 | 0.4 |
| Internet | 40 | 8.9 |
| Family and Friends | 180 | 40.0 |
| Hospital/healthcare workers | 195 | 43.3 |
| Others | 13 | 2.9 |
| Uses of contraceptives* | | |
| Prevent unwanted pregnancy | 417 | 78.8 |
| Allow child spacing | 196 | 37.1 |
| Prevent STI | 74 | 14.0 |
| Methods of contraception* | | |
| Traditional | 34 | 6.4 |
| Bilateral tubal ligation | 44 | 8.3 |
| Natural | 151 | 28.5 |
| Female condom | 196 | 37.1 |
| Diaphragm | 62 | 11.7 |
| Injectable | 151 | 28.5 |
| IUD | 93 | 17.6 |
| Male condom | 248 | 46.9 |
| Implants | 202 | 38.2 |
| Vasectomy | 72 | 13.6 |
| Pills | 354 | 66.9 |
| Side effects of contraceptives | | |
| Weight gain | 185 | 35.0 |
| Weight loss | 68 | 12.9 |
| Amenorrhea | 49 | 9.3 |
| Heavy menses | 196 | 37.1 |
| Irregular menses | 300 | 56.7 |
| Secondary infertility | 100 | 18.9 |
| Encourages promiscuity | 36 | 6.8 |

*Multiple responses.

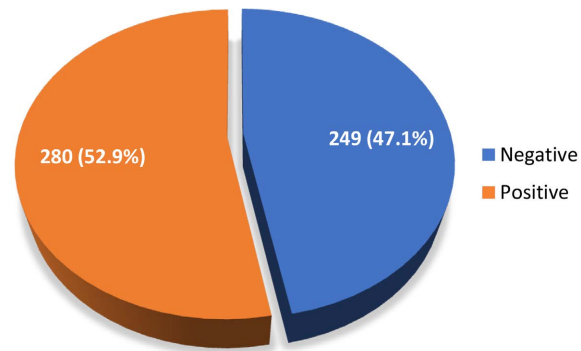


Figure 2. Level of Attitude of respondents towards contraceptive use.

Table 3. Attitude of the respondents towards contraceptive use.

| Variable | Frequency (n = 529) | Percent |
|---------------------------------------|---------------------|---------|
| Approve use of contraceptives | 349 | 66.0 |
| Contraceptives are safe | 310 | 58.6 |
| Contraceptives are good | 370 | 69.9 |
| Contraceptives reduce sexual pleasure | 97 | 18.3 |
| Contraceptives are only for females | 171 | 32.3 |
| Contraceptives increase promiscuity | 154 | 29.1 |
| Recommend contraceptives | 353 | 66.7 |

3.4. Practice or Use of Contraceptives

The prevalence of the use of contraceptives among the respondents as shown in **Figure 3** revealed that only 52 (9.8%) of the respondents used contraceptives.

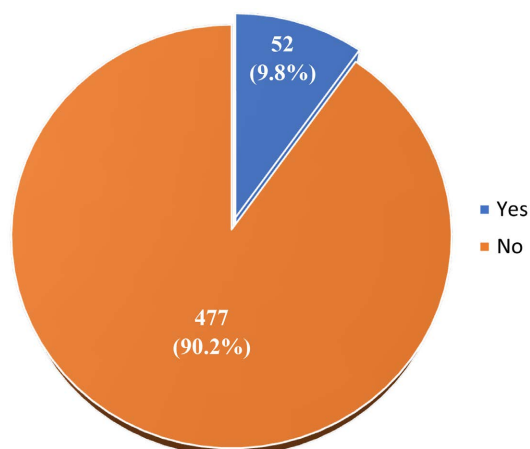


Figure 3. Prevalence of use of contraceptives among the respondents.

3.5. Pattern of Contraceptive Use

Table 4 shows the pattern of use of contraceptives among the respondents.

Those who stated that they do not use contraceptives identified the major reason behind their non-use as desire for more children (36.3%) while 176 (36.9%) had no reason. Among those that used contraceptives, 23 (44.2%) and 22 (42.3%) reported that they used the natural method and male condoms respectively. Also, 22 (42.3%) stated that the decision to make use of the contraceptives was done by their partners, while 20 (38.5%) had been on contraceptives for 1 to 5 years. They also reported that they obtained their contraceptives mainly from pharmacies (51.9%) while 29 (55.8%) and 28 (53.8%) had been told of an alternative method and possible side effects of the contraceptive method they were using.

Table 4. Pattern of use of contraceptives among the respondents.

| Variable | Frequency (n = 529) | Percent |
|--|---------------------|---------|
| Reason for non-usage (n = 477) | | |
| Cultural problems | 1 | 0.2 |
| Religious prohibitions | 8 | 1.7 |
| Interference with body normal process | 40 | 8.4 |
| Partner/husband's disapproval | 45 | 9.4 |
| Health concerns | 65 | 13.6 |
| Fear of side effects | 78 | 16.4 |
| Desire for more children | 173 | 36.3 |
| No reason | 176 | 36.9 |
| Methods of contraception (n = 52) | | |
| Traditional | 1 | 1.9 |
| Bilateral tubal ligation | 1 | 1.9 |
| Diaphragm | 1 | 1.9 |
| Injectable | 1 | 1.9 |
| IUD | 2 | 3.8 |
| Vasectomy | 2 | 3.8 |
| Female condom | 6 | 11.5 |
| Implants | 11 | 21.2 |
| Pills | 11 | 21.2 |
| Male condom | 22 | 42.3 |
| Natural | 23 | 44.2 |
| Who makes decision (n = 52) | | |
| Myself | 16 | 30.8 |
| Partner | 22 | 42.3 |
| Both | 14 | 26.9 |

Continued

| Duration of contraceptive use (n = 52) | | |
|--|----|------|
| <1 year | 16 | 30.8 |
| 1 - 5 years | 20 | 38.5 |
| 6 - 10 years | 14 | 26.9 |
| >10 years | 2 | 3.8 |
| Obtain contraceptive (n = 52) | | |
| Family planning clinic | 14 | 26.9 |
| Healthcare centre | 11 | 21.2 |
| Pharmacy | 27 | 51.9 |
| Told of alternative method | | |
| Yes | 29 | 55.8 |
| No | 23 | 44.2 |
| Told about side effects | | |
| Yes | 28 | 53.8 |
| No | 24 | 46.2 |

4. Discussion

4.1. Knowledge of Contraception

According to Wang and Cao [8] there is evidence that equitable contraceptive service supply can assist women accomplish their reproductive aspirations and have a substantial influence on lowering abortion and unplanned pregnancy rates in general. However, lack of knowledge of the existence and benefits of these services can hamper the expected goal [8]. Findings from this study reveal that 57.3% of the women had poor knowledge of contraceptive use. Most of them only knew two modern contraceptive methods and different local or traditional methods used for contraception, which they stated were mainly for preventing unwanted pregnancy, child spacing or prevention of sexually transmitted infections (STIs). This is similar to the finding of Yakubu [9] which reported that 60.8% of women visiting ANC at Specialist Hospital Sokoto State had little awareness of contraceptives, whereas the majority of respondents (99.3%) knew about pills as a contraceptive technique. In contrast, Alenoghena *et al.* [10] and Oluwasina [11] found that 91.1% and 90% of their respondents, respectively, had good knowledge of contraception, with mass media, the internet, and personal interactions with health workers being the most common sources of contraception information. This is also contrary to the findings in other studies across the country [12] [13] [14] [15]. Also, Olugbenga-Bello *et al.* [1] in a similar study carried out in Ogbomoso, among women of reproductive age showed that all the respondents were aware of contraception, while male condom and health care workers (HCWs) were identified as the most known method and most common source of information about contraception respectively. Also, reports from other

similar studies in the country showed that doctors or nurses or other HCWs were the most common source of information about contraception for women [12] [16] [17].

This variation in the findings can be attributed to educational level of the respondents as well as their level of exposure to commercials on contraceptives especially male condom on the mass media, its affordability and accessibility. Also, it is very vital to note that knowledge about methods of contraception is one of the basic requirements for effective contraceptive use. Hence, the high level of poor knowledge of contraception discovered in this study can be translated into low contraceptive use which is implicated in increasing rate of unintended pregnancy and transmission of STIs.

4.2. Attitude towards the Use of Contraceptives

The attitude an individual demonstrates towards a particular issue is a reflection of the level or the kind of knowledge they have with regards to the issue. As stated by Kalua [7], information positively promotes attitude creation, that is to say, possession of adequate and right information will create a positive attitude. The findings from this study showed that 52.9% of the respondents had positive attitude towards the use of contraceptives, while 47.1% had negative attitude. This is similar in comparison to the finding of Olugbenga-Bello *et al.* [1] which reported that 40% of their respondents had poor attitude to contraception, and contrary to the report of Oluwasina [11] and Obalase and Joseph [17] which showed that majority of the respondents had good perception about contraception and favourably disposed to contraceptive patronage. Also, Alenoghena *et al.* [10] in a contrary report showed that majority (72.0%) of their respondents had a positive attitude towards the use of various types of contraceptives. This high level of negative attitude towards contraception in this study can be linked to the level of knowledge of the respondents as their poor knowledge ultimately affected their attitude. Again, the disparities that exist with other studies can be said to be a function of the educational level of the study populations as well as their level of awareness of contraception. Furthermore, attitude is bound to drive positive practice, hence the negative attitude observed among the respondents can be said to drive low contraceptive use which will further heighten the occurrence of unintended pregnancies and rate of transmission of STIs.

4.3. Practice and Pattern of Use of Contraceptives

As stated by Afriyie and Tarkang [18] the use of contraceptives among married people, who formed majority of the respondents in this study, has been substantially ignored and viewed unnecessary in many parts of the world in recent times. The examination of the use of modern contraceptive methods among the pregnant women attending the antenatal clinics of UPTH showed that the prevalence of use of contraceptives among the women was 9.8%, while the pattern of use showed that contraceptives were mainly obtained from pharmacies, male condoms and natural methods were the most used methods, and decision was

made by the woman's partner. The prevalence of contraceptive use in this study is lower than that of the 2018 NDHS which reported it as 17% of which 12% was for modern contraceptives and 5% for traditional methods, with the most popular methods identified as implants, injectables and withdrawal methods [5]. In line with other previous studies, this prevalence of contraceptive use is similar to the findings of Wang *et al.* [19] which discovered that its use in SSA was 10% and slightly lower than 14.3% reported by Kaniki [20] in the Democratic Republic of Congo (DRC). Compared to other studies conducted in different parts of Nigeria, the prevalence was seen to be lower than the 57.6% reported by Olamijulo and Olorunfemi [21] in Lagos University Teaching Hospital (LUTH), 50% in Ogbomoso by Olugbenga-Bello *et al.* [1], 60.8% by Oluwasinsa [11] in Oyo, 43.9% in Ondo and Ekiti [22] and 39% by Grindlay *et al.* [23] in Ghana. Ale-noghena *et al.* [10] also reported that the prevalence of contraceptive use among women of reproductive age group attending the outpatient clinics at Irrua Specialist Teaching Hospital was 31% while condom was the most frequently used contraceptive method (60.0%). These differences existing between this current finding and that of previous studies in the use of modern contraception could be attributed to the differential health-related interventions and diversity in policy settings, rules, regulations and ideologies applicable to the different countries [18].

5. Conclusion and Recommendation

According to the findings of this study, respondents had little knowledge of contraceptives. The poor knowledge of the respondents on contraceptives translated to a negative attitude towards contraceptive use. The effect of the poor knowledge of contraceptives also had an effect on the practice as the respondents had low uptake of contraceptives. This indicates that there is a pressing need to raise women's understanding of contraceptives and their advantages, as well as to debunk the rising body of incorrect information regarding their usage, in order to alter their attitudes towards the uptake of contraceptives.

6. Limitations of the Study

This study relied on self-reporting of use and non-use of contraceptives by the respondents, which could have led to possible underestimation of the level of contraceptive use. Also, the knowledge and attitude of men towards contraception were not considered in this study given their great role in decision concerning contraceptive uptake in our environment.

Conflicts of Interest

The authors have no conflict of interest as regards the publication of this manuscript.

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