

Prevalence Pattern and Determinants of Modern Contraceptive Use Among Female Health Workers at a Tertiary Health Facility in South East Nigeria

Innocent Anayochukwu Ugwu*, Boniface Uwaezuoke Odugu and Calistus Obiora Nevo

*Department of Obstetrics & Gynaecology, College of Medicine, Enugu State University of Science and Technology (ESUT) & ESUT Teaching Hospital, Parklane, Enugu, Nigeria.

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ABSTRACT

Background: The use of modern contraceptive methods by women of reproductive age group is very important as this has the potential to improve child and maternal health outcome. The front-line workers in delivering and advocating for modern contraception are the health care workers. The aim of the study was to determine the prevalence, pattern and the factors that determine the choice of modern contraception among female health care workers in Nigeria

Materials and Methods: This was a cross-sectional study involving two hundred and seventeen female health care workers. A pretested, self-administered questionnaire was used to collect information on relevant variables including “ever” and “current” use of modern contraceptive methods. The descriptive statistics were reported in frequencies and percentages. Chi square testing was used to show significant association between variables. Logistic regression was also done to determine significant predictors.

Result: The overall prevalence of contraceptive “ever use” was 85.5% while that of “current use” was 50.0%. Factors that were significantly associated with use include: [Ever use, age (P=0.004), marital status (P=0.000), no. of children (P=0.002) ; Current use age (P= 0.022), marital status, (P= 0.009) and number of children (P=0.001)] Logistic regression analysis indicated that age greater than 35 years was a significant predictor of ever use (O.R= 2.91. CI - 1.10-7.66) while having 3 or more children was the most important predictor of current use (O.R = 3.63, 95% CI = 1.16-11.74).

Conclusion: Modern contraceptive utilization among the female health care workers in this study was higher than Nigerian estimates for women in the general population. Though the personal choices of the health workers may not directly affect patients care, their perspectives and experiences can improve and inform the provision of reproductive health care and services.

Keywords: Modern contraceptives, Healthcare workers, Determinants, Utilization.

INTRODUCTION

Contraception prevents pregnancy through the inhibition of ovulation, fertilization as well as implantation [1]. Modern contraceptive methods include the oral contraceptive pills, female and male condoms, intrauterine contraceptive device (IUCD), female and male sterilization (bilateral tubal ligation and vasectomy), vaginal barriers, injectables, patches, and emergency contraception methods [2]. The utilization of modern contraceptive methods by women of reproductive age group is a vital part of reproductive health because this has the very potential to improve child and maternal health outcomes, promote gender equality and reduce poverty [3,4,5]. Despite the benefits, and increased awareness and use of modern contraception, the unmet need for family planning remained high in low and middle-income countries [6,7]. Worldwide, the number of women estimated to have unmet need for modern methods of contraception is about 270

million and this figure is however disproportionately higher for women who are in low-income nations [8]. In the sub-Saharan Africa, about 1 in 4 women have an unmet need for modern family planning [8] In Nigeria, there is only a small improvement in the utilization of modern contraception as

Corresponding author: Innocent Anayochukwu Ugwu, Department of Obstetrics & Gynaecology, College of Medicine, Enugu State University of Science and Technology (ESUT) & ESUT Teaching Hospital, Parklane, Enugu, Nigeria, Tel: +2348034749789, E-mail: innocent.ugwu@esut.edu.ng

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shown by the consecutive demographic and health surveys [9,10].

The front-liners responsible for providing family planning services are the health workers. Their responsibility includes giving clients accurate and thorough information about family planning and by so doing assist them make informed decisions about the choice of family planning method they desire [11]. Nevertheless, personal biases can hinder health workers ability to amply assess the needs of clients and as such create barriers to client's choice [12]. Health workers that provide family planning counselling include physicians from different specialties (Obstetrics and gynaecology, family medicine, paediatrics, emergency medicine, nursing services, physician assistance, community health workers, pharmacy, among others [13]. These health workers are drawn from diverse educational backgrounds resulting in different comfort and competence levels in provision of contraceptive services. Studies have shown that there is health workers bias regarding specific modern contraceptives and their utilization in some populations. The contraceptive counselling practices of health workers may be affected by their understanding of the medical eligibility for some certain group, perception of the pregnancy risk, prior medical training and the setting of the workplace [14,15,16]. Health workers ethnic and racial biases may impact their discussions with women desirous of contraception [17,18]. Evidence of bias based on parity, age of client and marital status among other parameters has been documented; the commonest of the health worker bias reported was that against providing various types of methods of contraception to the youth [12]. While many family planning seekers desire a valuable contribution and ideas from their health care providers and would want a comprehensive and detailed information regarding their choices of contraception, many clients still desire their autonomy in choosing their method of contraception [11]

In Germany, about 37.2% of the female obstetricians and gynaecologist reported use of combined oral contraceptives personally [19]. In Spain, a study compared contraceptive use among female health workers and other females in the general population and it was noted that condoms were the preferred method in both groups due to fear of side effects. However, the female health care workers chose long-acting methods that are reversible compared to oral contraceptive pills preferred by the females in the general population [20]

A study done in Ghana among health workers and medical student in clinical classes on the attitude and practice of contraception showed that greater than half of the respondents (62.4%) used a type of contraceptive while only 18% were using it as the time of the study and barrier methods and condom were preferable [21]. In Nigeria a cross-sectional study that sought to know the attitude of health care workers regarding the provision of contraception to adolescents showed that many of the health care workers (57.7%) had an

unfavourable attitude towards offering contraception to adolescents [22].

The front-line workers in delivering and advocating for modern contraception are the health care workers and there is the possibility that clients may ask for the health workers experiences if they had used or are using a particular method [23]

The front-line workers in delivering and advocating for modern contraception are the health care workers and there is the possibility that clients may ask for the health workers' experiences if they had used or are using a particular method. Are the health care workers living by example by utilizing modern contraceptives and what are the factors that influence their use? It is therefore very pertinent to understand the feelings of health workers about the various methods of contraception and how their views may affect their interactions with the clients and finally their client's chosen method. We therefore sought to determine the prevalence, pattern and the factors that determine the choice of modern contraction among female health care workers in tertiary centre in south east Nigeria.

MATERIALS AND METHOD

Study design/Setting:

This was a cross-sectional study. This study was conducted between March to September 2024 at the various clinics of Enugu State University of Science & Technology (ESUT) Teaching Hospital, Parklane. The hospital, located in Enugu which is one of the states in the south Eastern part of Nigeria. It is a state-owned teaching hospital located at the city centre with different cadres and specialties of health workers working in it. The hospital receives referral from the surrounding areas like the south east, south-south and the north central regions of the country and thus has a high inflow of patients and clients. This hospital is a public hospital that offers free maternal care. It has a family planning unit that provides a wide range of modern contraceptive methods. These methods include: injectables, implants, intrauterine contraceptive (IUCD), combined oral contraception, condoms (male and female), emergency contraceptive pills and sterilization (tubal ligation) methods. It has a population of over 700 female healthcare workers

Sampling Population: This study was conducted among professional female health care workers at the Enugu State University of Science & Technology (ESUT) Teaching Hospital, Parklane. Professional health care workers were those who underwent formal training in a professional health course with a minimum professional certification.

Sample size/Sampling approach

The sample size of 217 participants was obtained by using Fisher's formula for cross sectional studies [24] and at 5% error limit. Using a modern contraceptive prevalence rate of 15% [9]. First the entire health services department at the

hospital was identified and the number of all female health care workers in each department was obtained (which includes the Obstetrics and gynaecology as well as the family planning unit, general outpatient, surgery, paediatrics, internal medicine, emergency departments). Consecutive sampling technique was used in selecting qualified participants.

Inclusion and Exclusion Criteria

Only the female professional health workers were included. Non-professional female health care workers like the cleaners, drivers, record keepers, security guards as well as male healthcare workers were excluded.

Ethical Considerations

Ethical approval was obtained from the Ethical Review Committee of the Enugu State University of Science and Technology Teaching Hospital, Parklane with ethical clearance certificate no. ESUTHP/C-MAC/RA/034/Vol.4/25. Written consent was obtained from the respondents prior to participation. Participation was voluntary and written informed consent was obtained. Participants were very free to withdraw from the study at any point in time during the study. Respect for persons, beneficence and justice were ensured. The data was also securely stored to ensure confidentiality of information.

Data collection and Management

A pretested, self-administered questionnaire was used for collection of data. The questionnaire was structured with a mix of close and open-ended questions and was specially designed and prepared to compile information relating to the objectives of the study. The questionnaires were pretested using 10% of the sample size in the department and the required corrections were made before the main study. Four research assistants (females) were employed and trained in data collection. Participants were given explanations about the nature of the study after which a written informed consent was obtained prior to participation. Participants were recruited using the convenient consecutive technique till the sample size was achieved. Information on demographic characteristics, reproductive and sexual history as well as modern contraceptives were obtained from the participants.

Data Analysis

The questionnaires were cleaned and checked for completeness, coded and entered in the Statistical Package for Social Sciences version 25 and analysis done. The independent variables include the Socio-demographic characteristics such as age, religion, level of education, marital status, place of residence, number of children etc. The dependent variable was the use of modern contraceptives. The demographic variables and descriptive statistics were reported in frequencies and percentages (Uni-variate analysis). Associations between the dependent variable (modern contraceptive use) and the socio demographic

characteristic were also analysed to determine significant association using chi square testing. In order to determine the significant predictors of modern contraceptive use, a multivariate analysis (logistic regression) was also done. The level of significance of all associations was set at 0.05%.

Result

Descriptive Statistics

Two hundred and seventeen women were studied. (**Table 1**) shows the frequency distribution of respondents' characteristics. The age group 30-34 years had the highest number of women (29.9%) while the group 20- 24 years had the lowest (3.7%). They were mostly married women (76.3%). Among married respondents, the majority of them (93.2%) were in monogamous union. The respondents were mainly nurses (45.5%). Others include the doctors, pharmacists, physiotherapists etc.

Obstetrics Characteristics of Participants

About a third of the women (31.8%) had 2 children, while 6.5% had none (**Table 2**). The ideal family size reported most was five (41.8%), while those who wanted a family size of 3 and below were few (2,8%). Concerning when the participant wanted to have another child, more than half (55.3%) did not know when but about 15% of the women were ready to have more children within one year.

Prevalence and method choice

The overall prevalence of contraceptive use (ever use) was 85.5% while that of current contraceptive use was 50.0%. The age group 35 - 39 years had the highest use of contraception with 'ever use' and 'current use' of 70% and 65% respectively. Contraceptive use continued to increase till age 40 years and above when it showed a decline (**Figure 1**). The most common contraceptive method used by the women was intrauterine device (31.9%).

Bivariate analysis

Relationship between ever use of contraceptive and women's characteristics

Table 5 shows the relationship between ever use of contraceptives and respondents' characteristics. Significant results were found for age ($p=0.004$), marital status ($p<0.001$), number of children ($p=0.002$). Specifically contraceptive use increased with age with 38.5% of those aged less than 30 years compared with 59.7% of those 30-34 years, 75% of the 35–39-year age group and 64.9% of those 40 years and above (**Figure 5**). Women who had ever married or in marital unions at time of interview reported higher contraceptive use (64.6%) compared to those who never married (34.9%). The proportion of respondents who ever used contraceptives also increased with the number of children. For those with less than two children, 47.5% had used a contraceptive compared to 65.6% of those with two children and 81% of those with 3 or more children. There

were no significant relationships for ethnicity, religion and years of marriage even though use increased with years of marriage.

Table 1. Sociodemographic characteristics

Variable	Frequency	Percentage
Age		
20-24	8	3.7
50	23.4	
30-34	64	29.9
35-39	34	15.9
40-45	37	17.3
>45	21	9.8
Marital status		
Single	49	22.8
Married	164	76.3
Separated	1	0.5
Widowed	1	0.5
Setting		
Monogamous	150	93.2
Polygamous	11	6.8
Ethnicity		
Igbo	182	85.8
Others	30	14.1
Religion		
Christian	199	92.6
Others	16	7.4
Occupation		
Doctor	39	18.4
Nurses	96	45.5
Pharmacist	5	2.4
Lab Scientist	14	6.6
Physiotherapist	10	4.7
Health Administrators	37	17.5
Others	10	4.7

Table 2. Obstetrics characteristics of Participants

Variable	Frequency	Percentage
Number of children		
0	10	6.5
1	31	20.1
2	49	31.8
3	35	22.7
4 and above	29	18.7
Ideal family size		
3 and below	4	2.8
4	32	21.9
5	61	41.8
6	41	28.1
7 and above	8	5.5
When to have another child		
Completed size	43	20
1 yr	32	14.9
1-2yrs	17	7.9
3-4yrs	4	1.9
Not sure	119	55.3

Table 3. Contraceptive Method Choice

Contraceptive use	Frequency	Percentage
Condom	32	26.9
Oral Contraceptive Pills (OCP)	16	13.4
IUCD	38	31.9
Injectables	8	6.7
Implants	2	1.7
Natural family planning	16	13.4
Emergency contraception	1	0.8
BTL/sterilization	5	4.2
Coitus interruptus	1	0.8

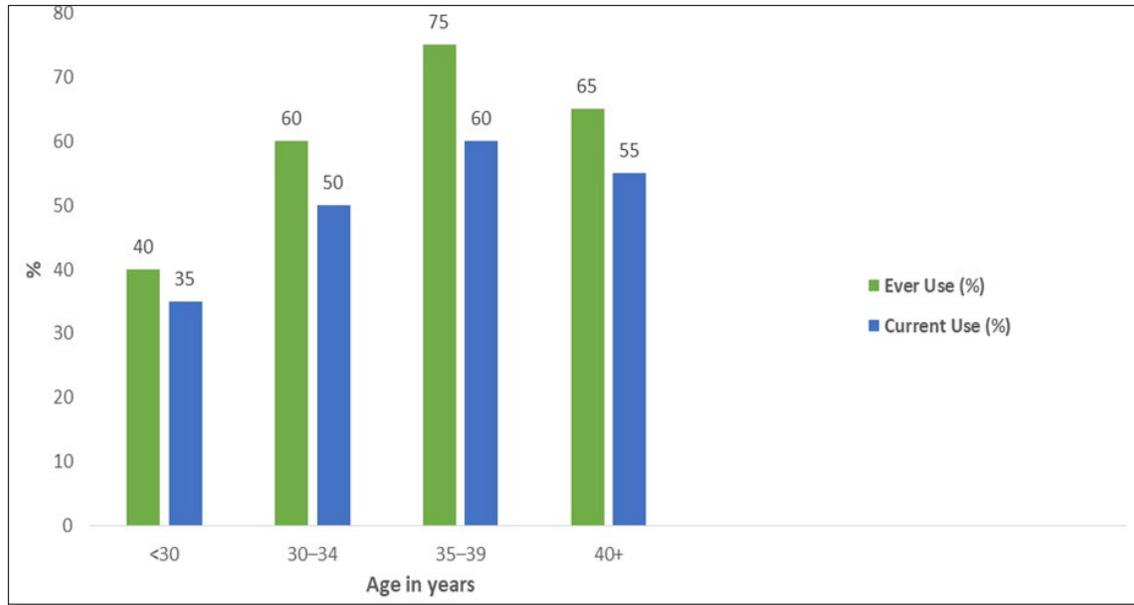


Figure 1. Distribution of “ever” and “current” Contraception use by age group

Table 4. Relationship Between Ever Use of Contraceptive and Respondent Characteristics I

Variable	Category	Yes (%)	No (%)	Total	Chi Square	P-Value
Age (Years)	<30	20 (38.5%)	32 (61.5%)	52	13.15	0.004
	30-34	37 (59.7%)	25 (40.3%)	62		
	35-39	24 (75.0%)	8 (25.0%)	32		
	>40	37 (64.9%)	20 (35.1%)	57		
Marital Status	Ever married	104 (64.6%)	57 (35.4%)	161	12.33	0.000
	Never married	15 (34.9%)	28 (65.1%)	43		
Ethnicity	Igbo	103 (59.9%)	69 (40.1%)	172	0.682	0.409
	Others	15 (51.7%)	14 (48.3%)	29		
Religion	Christianity	107 (56.9%)	81 (43.1%)	188	1.13	0.289
	Others	10 (71.4%)	4 (28.6%)	14		
Years of Marriage	<5 years	25 (56.8%)	19 (43.2%)	44	3.15	0.207
	5-14 years	40 (65.6%)	21 (34.4%)	61		
	15 and above	35 (74.5%)	12 (25.5%)	47		
Number of Children	<2	19 (47.5%)	21 (52.5%)	40	12.51	0.002
	2	31 (66.0%)	16 (34.0%)	47		
	3 and above	51 (81.0%)	12 (19.0%)	63		

There is also a significant association between ever use and number of male children ($p=0.013$), female children ($p=0.023$) and occupation ($p=0.006$) (Table 6) The proportion increased with increased number of male and female children. Concerning occupational groups, 52.3% of doctors, pharmacists, dentists and physiotherapists had used

contraceptive compared to 57.4% of nurses or laboratory scientists, 53.1% of non-clinical staff and all of the other professions. Women's choice of ideal family size, type of marriage and husband's education were not significantly related.

Table 5. Relationship Between Ever Use of Contraceptive and Respondent Characteristics II

Variable	Category	Yes (%)	No (%)	Total	Chi Square	P-Value
Male Children	None	23 (51.1%)	22 (48.9%)	45	8.69	0.013
	1	41 (74.5%)	14 (25.5%)	55		
	2 and above	39 (76.5%)	12 (23.5%)	51		
Female Children	None	18 (50.0%)	18 (50.0%)	36	7.51	0.023
	1	46 (71.9%)	18 (28.1%)	64		
	2 and above	39 (76.5%)	12 (23.5%)	51		
Ideal Family Size	<5	18 (51.4%)	17 (48.6%)	35	4.67	0.097
	5	39 (65.0%)	21 (35.0%)	60		
	6 and above	35 (74.5%)	12 (25.5%)	47		
Family Type	Monogamous	94 (64.4%)	52 (35.6%)	146	1.378	0.240
	Polygamous	9 (81.8%)	2 (18.2%)	11		
Husband Education Status	Secondary	10 (76.9%)	3 (23.1%)	13	0.979	0.322
	Tertiary	91 (63.2%)	53 (36.8%)	144		
Occupation	Doctor/Pharmacist/Dentist/Physiotherapist	23 (52.3%)	21 (47.7%)	44	12.512	0.006
	Nurse/lab	62 (57.4%)	46 (42.6%)	108		
	Administrator (Non-Clinical Staff)	17 (53.1%)	15 (46.9%)	32		
	Others	16 (100.0%)	0 (0.0%)	16		

Relationship between current contraceptive use and women's characteristics

Concerning current use, significant relationships were found for marital status ($p=0.009$), number of children ($p=0.001$) and male children ($p=0.044$). Women who ever married reported higher contraceptive usage (54.7%) compared to those who never married (26.9%). The proportion currently

using contraceptives increased with the number of children, 30.6% for women with less than two children, 64.1% for those with two children and 70.4% for those with three or more children. Over a third of those with no male child compared to 58.8% of those with one child and 67.4% of those with two or more children were current contraceptive users. Other variables were not significant.

Table 6. Relationship Between Current Contraceptive Use and Respondent Characteristics I

Variable	Category	Yes (%)	No (%)	Total	Chi Square	P-Value
Age (Years)	<30	13 (34.2%)	25 (65.8%)	38	5.79	0.022
	30–34	25 (50.0%)	25 (50.0%)	50		
	35–39	15 (60.0%)	10 (40.0%)	25		
	>40	28 (53.1%)	21 (42.9%)	49		
Marital Status	Ever married	75 (54.7%)	62 (45.3%)	137	6.77	0.009
	Never married	7 (26.9%)	19 (73.1%)	26		
Ethnicity	Igbo	72 (51.4%)	68 (48.6%)	140	0.106	0.745
	Others	10 (47.6%)	11 (52.4%)	21		
Religion	Christianity	77 (50.7%)	75 (49.3%)	152	0.111	0.739
	others	5 (45.5%)	6 (54.5%)	11		
Years of Marriage	<5 years	19 (48.7%)	20 (51.3%)	39	1.541	0.463
	5–14 years	29 (56.9%)	22 (43.1%)	51		
	15 and above	25 (62.5%)	15 (37.5%)	40		
Number of Children	<2	11 (30.6%)	25 (69.4%)	36	15.038	0.001
	2	25 (64.1%)	14 (35.9%)	39		
	3 and above	38 (70.4%)	16 (29.6%)	54		

Table 7. Relationship Between Current Contraceptive Use and Respondent Characteristics II

Variable	Category	Yes (%)	No (%)	Total	Chi Square	P-Value
Male Children	None	13 (39.4%)	20 (60.6%)	33	6.266	0.044
	1	30(58.8%)	21(41.2%)	51		
	2 and above	31(67.4%)	15(32.6%)	46		
Female Children	None	14 (42.4%)	19 (57.6%)	33	4.254	0.119
	1	33 (58.9%)	23 (41.1%)	56		
	2 and above	27 (65.9%)	14 (34.1%)	41		
Ideal Family Size	<5	16 (55.2%)	13 (44.8%)	29	0.076	0.963
	5	26 (53.1%)	23 (46.9%)	49		
	6 and above	24 (55.8%)	19 (44.2%)	43		
Type of Marriage	Monogamous	67 (54.5%)	56 (45.5%)	123	1.365	0.243
	Polygamous	8 (72.7%)	3 (27.3%)	11		
Husband Education	Secondary	9 (81.8%)	2 (18.2%)	11	3.701	0.054
	Tertiary	63 (51.6%)	59 (48.4%)	122		
Occupation	Doctors	19 (52.8%)	17 (47.2%)	36	5.399	0.149
	Nurse/lab	40 (45.5%)	48 (54.5%)	88		
	Admin	12 (52.2%)	11 (47.8%)	23		
	Others	11 (78.6%)	3 (21.4%)	14		

Multi Variate Analysis

Logistic regression analysis was carried out to identify significant variables after adjusting for con-founders. (Table 8) shows the results from the regression analysis. Significant results were gotten for age. Those greater than 35years were

about three times more likely to have used contraceptives (95% CI OR =1.10 -7.65). Other variables such as number of children and number of male and female children were not significant on logistic regression.

Table 8. Logistic Regression Analysis of Contraceptive Ever Use on Women's Characteristics

Variable	Comparison	Odds Ratio	95% Confidence Interval	P Value
Number of children	More than three vs. less than 2	2.11	0.26 – 16.95	0.486
	More than three vs. 2	2.10	0.58 – 7.63	0.260
Male children	More than 2 vs. none	4.85	0.82 – 28.57	0.082
	One vs. more than 2	1.22	0.32 – 4.70	0.775
Female children	More than 2 vs. none	4.22	0.65 – 27.03	0.131
	More than 2 vs. one	1.36	0.36 – 4.70	0.654
Age group	35+ vs. <35	2.91	1.10 – 7.66	0.031
Occupation	Doctors, pharmacists, physiotherapists vs. others	1.02	0.38 – 2.77	0.971

(Table 9) shows the results from the logistic regression analysis on current use. Significant results were obtained for the number of children. Those with three or more children

were about 3.6 times more likely than those with less than 2 children to be current users (95% CI OR =1.16 – 11.24). The husband's education and number of male children were not significant.

Table 9. Logistic Regression Analysis of Current Contraceptive Use on Women's Characteristics

Variable	Comparison	Odds Ratio	95% Confidence Interval	P-Value
Number of Children	More than three vs <2	3.62	1.16 – 11.24	0.026
	More than three vs 2	2.24	0.85 – 5.92	0.102
Male Children	More than 2 vs None	1.42	0.46 – 4.37	0.539
	1 vs More than 2	1.62	0.58 – 4.53	0.363
Husband's Education	Secondary vs Tertiary	1.47	0.36 – 6.01	0.593

DISCUSSION

This study aimed to determine the prevalence, pattern and determinants of modern contraceptive use among the female health workers at a tertiary health facility. The overall prevalence of contraceptive use (ever use) was 85.5% while

that of current contraceptive use was 50.0%. This was similar to the findings of studies done among health care workers in Ile Ife [25], Uganda [26]. Malaysia [27] where it was noted the prevalence of modern contraceptives were 75.2%, 75%, and 82% respectively. In this study also, the prevalence of current contraceptive use was 50% and this is comparable to

the finding in Ife where the prevalence was about 57%. However, these findings are significantly higher than the prevalence of modern contraceptives in the general population in Nigeria where the prevalence of modern contraceptive use is 15% [9]. Again, there is a significantly lower prevalence according to a study among rural women in the general population of in south west Nigeria [28]. The higher prevalence noted in these studies among health workers compared to the general population may be due to the better knowledge and access. Health care workers due to their profession are more likely to know the risks and benefits of contraception and may also have a better access to contraceptive resources including counselling, education as well as family planning methods. Health workers' professional insight may enable them to have an in-depth understanding of the importance of contraception in preventing unwanted pregnancy and in reducing infant and maternal mortality. Health care workers may also feel more professionally and personally empowered in making decisions concerning their reproductive health. They may also prioritize contraception as a method to model good healthy behaviour from their community and patients. Female health care workers who utilize contraceptives could serve as influencers and role models promoting education and awareness about family planning and reproductive health among their communities and patients. By utilizing modern contraceptives, the female health care workers are more likely to advocate for programmes and policies that support family planning and reproductive health, potentially influencing leadership and health policy.

In the study, the most commonly used modern method among the female health workers was intrauterine contraceptives with about one third of the participants (31.9%) preferring the method. This finding is similar to that found in Uganda and in Ghana where the barrier method was the preferred method [21,26], however this is in contrast with a study done with female health workers in Spain and in their general population where it was noted that condom was the most preferred method [20]. In Nigeria and among the general population, the commonly used methods among the married women were implants and injectables [9]. Again, cross-sectional studies across the sub-Saharan African nations also noted that implants (26.5%) and injectables (39.4%) were the most commonly preferred modern contraceptives among married women in the general population [29]. A larger population survey among 20 African nations noted a similar finding [30]. The observed difference in method choice among females in the general population and the female health workers may be attributed to the fact that the health professionals have more knowledge than the women in the general population about the side effects of the barrier methods compared to the hormonal method [31], that the barrier methods can be stopped at any time without compromising the hormonal cycle of the their body with resultant instantaneous

resumption of fertility, as well as the ease of use of the barrier methods [20].

Bi-variate analysis showed that factors that determine the use of modern contraceptive methods among female health care workers include age, marital status, and number of children. This resonates with national trends. Studies done in Nigeria similarly showed that marital status and age are crucial determinants of use of modern contraceptive methods [32,33]. This emphasizes the need for a nuanced intervention that targets specific marital cohorts and age groups. Although significant variations occur across nations on how different factors; community, individual and service delivery influence use of modern contraceptive methods. Many of the factors are conformable across nations with the findings in many studies done across Africa [34, 35, 36, and other countries of the world [37,38].

At the multivariate analysis for ever and current use of modern contraceptive significant predictors included age and number of living children respectively. Those greater than 35 years were about three times more likely to have used contraceptives. Again, those with 3 or more children were about 3.6 times more likely than those with less than 2 children to be current users. A study in Ghana which sought to describe the use of highly effective contraceptives by parity also showed that a woman's age as well as the number of living children are among the predictors of modern contraceptive use [39]. It was also noted that the women with one child or no child are not likely or less likely to utilize modern contraception probably because they do see the need for use of contraceptives at that time or due to their desire for more children [40]. In contrast, women with up to four children or more are likely to utilize contraceptives and prevent unwanted or unintended pregnancies having completed their family size.

The limitations of this study include the fact that this was a cross-sectional study which obviates the ability of making causal inferences. The individual staff may have reported what is desired or expected of them instead of the reality and as such lead to "desirability bias", however questions were designed to limit this as much as it was possible. Again, due to a busy work schedule, the staff would have given hasty responses. This was limited by ensuring that each participant was also allowed to choose the appropriate time for their interviews.

CONCLUSION

The prevalence of "ever use" and "current use" of modern contraceptives among the female health care workers in this study is higher than the Nigerian estimate for women in the general population. The commonest method used was intrauterine contraceptive devices. Maternal age and number of living children were the most important determinants of use. Though the personal choices of the health workers may not directly affect patients' care, their perspectives and

experiences can improve and inform the provision of reproductive health care and services.

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