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Knowledge and Beliefs Regarding Contraception among Married Women in Gwagwalada, Abuja, Nigeria

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Authors' contributions

This work was carried out in collaboration between both authors. Authors AOW and MJA designed the study. Author AOW performed the statistical analysis, wrote the first draft of the manuscript, and managed the literature searches. Author MJA reviewed the manuscript at all stages. Both authors read and approved the final manuscript.

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ABSTRACT

Inadequate knowledge and misconceptions on contraception has sustained the low prevalence of contraceptive use in Nigeria over the years.

Aim: This study aims to assess the knowledge and beliefs regarding contraception among married women in Gwagwalada, Abuja, FCT.

Methodology: This was a descriptive survey that employed a cross sectional study design, and was carried out in Gwagwalada community, FCT, Abuja, Nigeria, between July– August 2017. A semi-structured questionnaire was administered to 290 married women, aged 15–49 years, sampled by multi-stage sampling technique.

Results: Most of the participants were aged 25 - 29 years, with a mean age of 31.3 years (SD; 7.3 years). Although 93% of the participants were aware of contraception, 46% of them had poor knowledge of its methods, side effects, and use. Age (p = 0.03), family setting (p < 0.000),

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education (p < 0.000), and religion (p = 0.007), were seen to be significantly associated to the level of knowledge. The participants were mostly aware of and willing to use male condoms, contraceptive injections, and implants. Eighty percent of the participants harbored misconceptions on effects of contraceptive use, with 23% believing it could lead to maternal death. Women that sought information through outreach programs from health care workers had fewer misconceptions than other participants, (p = 0.01). Fifty-nine percent of the participants were favorably disposed to contraceptive use, and reported their spouse to be the most important consideration when deciding on contraception.

Conclusion: Awareness does not always translate to good knowledge of contraception. There is need for broader pervasive outreaches to spread awareness, and promote health education interventions. These would increase understanding of contraception, and correct misconceptions. Furthermore, more intervention programs with adequate male involvement should be implemented to increase contraceptive uptake.

Keywords: Knowledge; beliefs; contraceptive use; misconceptions; Nigeria.

1. INTRODUCTION

The rapid population growth in Nigeria is one of the major inhibitions to its development. Notwithstanding the evolution of health programs and policies over the past thirty years, the country is set to be the third largest nation in the world by midcentury, with an estimated current population at over 190, 000, 000 [1]. This was the rationale for formulation of the revised Nigeria's 2004 Policy on Population for Sustainable Development, aimed at reducing fertility (4 children per woman), in essence reducing maternal and infant mortality, and fostering socio-economic growth [1,2]. There has been limited progress of these policies due to limited resources, poor coordination among leading agencies and service/health care providers, as well as lack of adoption of the policies by the population due to insufficient knowledge and misguided beliefs on fertility control through contraception [1,3].

Despite the advent of better technology and medical advancement, the maternal, infant and child mortality rate in Nigeria, 576/100, 000 live births, 69/1000 live births and 64/1000 live births respectively, remain very high. Thus, the nation still falls far in 2 of the 8 United Nations' Millennium Development Goals of reducing child mortality, and improving maternal health [1,4]. This is augmented by the high Total Fertility Rate (TFR), which slightly reduced from 5.7 in 2003, to 5.5 in 2013, emphasizing the critical need for increased contraception practices [5].

The prevalence of contraceptive use in Nigeria is 15%, as opposed to the global prevalence of 64%, and the Sub-Saharan Africa's prevalence

of 23% [5.6.7]. This corroborates the finding that the total fertility rate of a country is inversely proportional to the prevalence of contraceptive use, as well as low prevalence of contraceptive use correlating with high maternal and infant mortality rates [8,9]. Adoption of better contraception practices is therefore very vital to improve reproductive and sexual health, and reduce the mortality and morbidity rates. To enhance the use of contraception, awareness and adequate knowledge on its concept, methods, and its effects are essential. Although awareness on contraception seems high globally and in Nigeria, there are still misconstructions and misbeliefs on what contraceptives are, how they are used, their advantages, as well as their side effects. This gears negative dispositions to its use [10].

This research aims to assess the knowledge and beliefs regarding contraception among married women in Gwagwalada, Federal Capital Territory (FCT), to assess their awareness and level of knowledge, sources of information contraception, misconceptions on its effects, as well as their disposition towards contraception, specific contraceptive methods. contraceptive use, with an intent of better understanding their view on contraception, and proposing strategies to further disseminate adequate information to improve contraceptive practices.

2. MATERIALS AND METHODS

The study area was Gwagwalada Area Council, one of the six area councils in the FCT, Abuja [11]. FCT lies within latitude 7° 25' N and 9° 20° North of the Equator and longitude 5° 45'and 7°

39', as the capital of Nigeria, and has a land area of about 8,000 square kilometers. It is bounded by Kaduna State to the north, Niger State to the west, Plateau State to the east and southeast, and Kogi State to the southwest [12]. The FCT is a populated conglomerate of the multifarious ethnic groups and religions present in the diverse country of Nigeria.

The population of Gwagwalada Area Council, as projected from the 2006 census by National Population Commission (NPC), is 419,609 [11]. It consists of 10 wards, some of which have predominant rural settings, while others are predominantly urban. The rural wards consist mainly of farmers and traders, who commute mainly by foot, while the urban wards, situated in the metropolis of Gwagwalada, consist mainly of urban settlements. The majority of the latter settings have white-collar jobs and access to infrastructures, with vehicles and motorcycles being the major means of transportation.

For the purpose of sampling for this study, the ten wards were stratified into rural and urban groups, from whence two urban wards, Gwagwalada Central and Quarters Ward, as well as two rural wards, Paiko Ward and Dobi Ward, were randomly selected giving an estimated population of 199,410 people. Of these, married women aged 15 – 49 years, who consented to participate in the survey, were recruited.

This is a descriptive cross-sectional study, which employed a quantitative technique. A semistructured interviewer administered questionnaire, adapted from the Demographic and Health Survey questionnaires on family planning [13] was employed to collect information on socio-demographics of the respondents, and their knowledge and beliefs regarding contraception. The questionnaire was pre-tested on married female staff at the University of Abuja Teaching Hospital, in Gwagwalada, FCT, prior to use between July to August 2017.

A minimum sample size of 196 participants was calculated using Leslie Kish formula for cross sectional studies [14], and was increased to 290 participants to cover for non-response, and increase representativeness. The sample was selected using multistage sampling technique (Fig. 1).

In the first stage, the 10 wards in Gwagwalada Area Council were stratified based on rural and urban settings. Secondly, two wards were selected from each stratum by simple random sampling technique through balloting. Thirdly, in each ward, households were sampled consecutively starting from the palace of the village head and moving in an anticlockwise direction until the required number of women was recruited. Finally, one woman was selected from each household. A participant was selected by

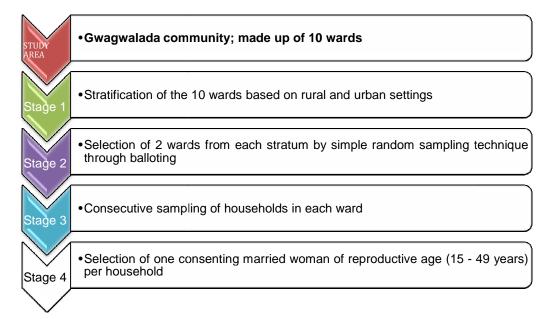


Fig. 1. Flow diagram representing the multistage sampling technique

balloting in a household with more than one eligible woman.

Data was sorted manually, checked for errors, and cleaned. Analysis was done using Statistical Package for Social Sciences (SPSS version 23.0) software. The data was presented using prose, tables, and graphs. For continuous variables, measures of central tendency and dispersion were calculated and presented. For categorical variables, appropriate cross tabulations and statistical tests were carried out, with a *p*-value set at 0.05 to ascertain significance.

The contraception knowledge score of the participants was calculated using 8 elements of knowledge contraception from of questionnaire. These included awareness on the concept of contraception; contraceptive methods heard and seen; routes of administration of contraceptives: presence, types management of side effects; misconceptions on effects of contraceptive use. Each knowledge element was scored 1 for correct answers. 0 for wrong answers. The total for each participant was calculated, after which the average total knowledge score of the population was determined at 13. The cut off for good knowledge were participants with knowledge scores up to or above the average of the population (13), while those with less than the average of the population were considered poor knowledge.

For the purpose of this study, traditional contraception was defined as the use of traditional calendar method (rhythm method/ periodic abstinence) and withdrawal method, while modern contraception was defined as the use of lactational amenorrhea method, male and female condoms, oral contraceptive pills (OCPs), emergency contraceptive pills (ECPs). contraceptive implants and injections, caps/ diaphragms, intrauterine devices (IUDs). spermicides, male and female sterilization. Misconceptions on contraception were evaluated by participants answering 'true' or 'false' to some incorrect beliefs regarding effects contraceptive use like death, illness of the subsequent child, danger to health, and infertility.

Ethical approval was obtained from Health Research Ethics Committee of University of Abuja Teaching Hospital, Gwagwalada, FCT. Informed consent was duly sought and obtained from the participants after the methods and objectives of the research were explained to

them and they were given assurance of the voluntary nature of participation, implicit confidentiality of the information volunteered, and option to discontinue participation at any stage of the process.

3. RESULTS

A total of 287 completely filled questionnaires out of 290 administered were analyzed, eliciting a response rate of 98.9%. Eighty-seven (30%) of the participants were aged 25 - 29 years. The mean age of the participants was 31.3 years (SD; 7.3 years). Two hundred and one (70%) of the women were in monogamous marriages, and the average number of living children per woman was 3.64. One hundred and fifty one (53%) participants resided in urban settlements, while 136 (47%) resided in rural settlements. Sixty-five (23%) participants attained higher education, 82 (29%) completed senior secondary school, and 46 (16%) participants never went to school. Seventy (24%) participants were from Gbagyi (Gwari) tribe, and 47 (16%) of them were Hausa/Fulani. There were 152 (53%) Muslims and 135 (47%) Christians. Of the Christians, 54 (19%) were Pentecostals and 39 (14%) were Catholics (Table 1).

Two hundred and sixty-six (93%) participants reported awareness on contraceptive methods. Twenty-one (7%) participants had no knowledge of any means to delay or prevent pregnancy. One hundred and fifty-five (54%) participants had good knowledge on contraceptive methods and their side effects, while 132 (46%) participants had poor knowledge. Two hundred and forty-eight (86%) participants had heard of a modern contraceptive previously, and 196 (68%) had seen a modern contraceptive, as seen in Table 2.

One hundred and one (35%) participants were aware of traditional contraceptive methods; withdrawal method 81 (28%) and traditional calendar (rhythm) method, 67 (23%). Of the modern methods, 188 (66%) participants were 152 aware of male condoms; (53%). contraceptive injections: 129 (45%),contraceptive implants; 121 (42%), oral contraceptive pills; as well as, 9 (3%), spermicides; and 14 (5%), sterilization (male / female). Fifty-six (20%) participants had seen/experienced female condoms; 44 (15%), emergency contraceptive pills; 19 intrauterine devices; 10 (4%), male and female sterilization; 8 (3%), cervical caps or diaphragms (Table 2).

Table 1. Distribution of socio-demographic characteristics of the participants

Characteristics	Frequency (%) n = 287
Age (years)	
15 – 24	45 (16)
25 – 34	144 (50)
35 – 44	83 (29)
<u>></u> 45	15 (5)
Type of marriage	
Monogamy	201 (70)
Polygyny	86 (30)
Setting of residence	
Urban	151 (53)
Rural	136 (47)
Level of education	
None	46 (16)
Primary / Non-formal	62 (21)
Secondary	114 (40)
Post secondary	65 (23)
Ethnicity	
Igbo	36 (13)
Yoruba	40 (14)
Hausa-Fulani	47(16)
Igala	35 (12)
Gbagyi (Gwari)	70 (24)
Others	59 (21)
Religion	
Islam	152 (53)
Catholic	39 (14)
Anglican	12 (4)
Pentecostal	54 (19)
Other denominations	30 (10)

One hundred and fifty-one (53%) participants knew contraceptives could be administered through injections, 141 (49%) oral routes, 70 (24%) implants, and 40 (14%) barrier methods, as seen in Table 3. One hundred and fifty-nine (55%) participants were aware contraceptives have side effects. Specifically, 100 (35%) reported heavy menstruation, 96 (33%), prolonged menstruation, 66 (23%), weight gain, 20 (7%), inter-menstrual spotting, 13 (5%), cramps stomach as side effects contraceptives. In the management of side effects, 80 (28%) participants suggested to report to health care workers, 39 (14%) suggested to discontinue use of the current contraceptive method, 21 (7%) suggested to never use contraception again (Table 3).

Eighty-nine (62%) participants between the ages of 25 - 34 years had good knowledge regarding contraception, while 28 (62%) participants between the ages 15 - 24 years had poor knowledge on contraception as seen in Table 4. Furthermore monogamous 123 (61%); Igbo 25 (69%); Anglican 10 (83%) participants, as well as those who attained secondary 63 (55%), and post-secondary, 50 (77%), had good knowledge as compared to other respondents. Age (p = 0.03), family setting (p < 0.000), education (p < 0.000), and religion (p < 0.000)= 0.007), were seen to be significantly associated to the level of knowledge of the participants (Table 4).

Table 2. Awareness of specific contraceptive methods

	Heard		Seen		
Method	Frequency (%) n = 287		Frequen	cy (%) n = 287	
	Yes	No	Yes	No	
*Any modern	248 (86)	39 (14)	196 (68)	91 (32)	
Lactational amenorrhea	63 (22)	224 (78)	50 (17)	237 (83)	
Male condom	188 (66)	99 (34)	147 (51)	140 (49)	
Female condom	87 (30)	200 (70)	56 (20)	231 (80)	
Oral contraceptive pills	121 (42)	166 (58)	65 (23)	222 (77)	
Emergency contraceptive pills	58 (20)	229 (80)	44 (15)	243 (85)	
Contraceptive implants	129 (45)	158 (55)	59 (21)	228 (79)	
Contraceptive injections	152 (53)	135 (47)	78 (27)	209 (73)	
Cervical caps/diaphragms	13 (5)	274 (95)	8 (3)	279 (97)	
Intrauterine device	44 (15)	243 (85)	19 (6)	269 (94)	
Spermicide	9 (3)	278 (97)	4 (1)	283 (99)	
Male and female sterilization	14 (5)	273 (95)	10 (4)	277 (96)	
*Any traditional	101(35)	186 (65)	52 (18)	235 (82)	
Withdrawal method	81 (28)	206 (72)	43 (15)	244 (85)	
Traditional calendar method	67 (23)	220 (77)	39 (14)	248 (86)	

*Composite for more than one method

Table 3. Knowledge of respondents about contraception

Variable	Frequency (%) *n=287
Aware of contraception	266 (93)
Routes of administration	
Oral	141 (49)
Injections	151 (53)
Implanting in skin	70 (24)
Internal devices	34 (12)
Barriers methods	40 (14)
Aware of presence of side effects	159 (55)
- Causes prolonged menstruation	96 (33)
- Causes heavy menstruation	100 (35)
- Causes irregular menstruation	48 (17)
- Causes inter-menstrual spotting	20 (7)
- Causes weight gain	66 (23)
- Causes stomach cramps	13 (5)
- Causes breast tenderness	5 (2)
Aware of side effect management	
- Discontinue current method	39 (14)
- Report to HCW	80 (28)
- Switch method	6 (2)
- Never use again	21 (7)
Misconceptions on adverse effects of contraception	231 (80)
- Causes infertility	121 (42)
- Causes a danger to health	115 (40)
- Causes death	66 (23)
- Causes reduced sexual pleasure	92 (32)
- Causes the subsequent child to be ill	69 (24)
- Is a population reduction conspiracy	183 (64)

^{* =} Multiple response

Two hundred and thirty-one (80%) participants had misconceptions on effects of contraceptive use. One hundred and eighty-three (64%) participants believed it was a population reduction strategy by the government; 115 (40%) believed it was a danger to health; 121 (42%) believed it could cause infertility; 69 (24%) believed it could make the subsequent child ill; while 66 (23%) believed it could lead to death (Fig. 2).

All (5) participants aged between 15 – 19 years and 13 (87%) aged 45 - 49 years, had misconceptions on contraception. Thirty-eight (83%) participants with no education, while 48(74%) participants with post-secondary education, had misconception on the adverse effects of contraceptive use. Sixty-three (90%) Gbagyi participants, 31 (86%) Igbos, and 21 (60%) Igalas, were misinformed on effects of contraception. 34 (87%) Catholic participants, while 123 (81%) Muslims had misconceptions on contraception. As seen in Table 5, of the 266 participants that were aware of contraception, 33% of those that acquired their information from outreach programs by health care workers had no misconceptions on effects of contraceptive use, as opposed to 8% from media.

Of the participants that acquired information on contraceptive methods from relatives and friends, 57% and 53% respectively, had poor knowledge on contraceptive use and effects, while 66% and 62% from outreaches and health facilities respectively, had good knowledge (Table 6).

One hundred and seventy (59%) participants were willing to use contraceptive methods at the time of the survey. Of these participants, 150 (52%) were willing to use modern contraceptive methods. Of the participants willing to use contraceptives, 90 (53%), 55 (32%), 40 (24%), and 26 (15%), were willing to use contraceptive injections. contraceptive implants, condoms, and traditional calendar method respectively (Fig. 3). Of the 266 participants that were aware of contraceptive methods, 167 (63%) reported their spouse as the most important consideration when choosing a contraceptive method, while 29 (11%), 25 (9%), 15 (5%), and 3

(1%), reported efficacy, cost, religion, and comfort respectively. One hundred and eighty-two (68%) participants reported that their spouse should pay for contraceptives, while 24 (9%), 30 (11%), 27 (10%) reported themselves, both spouses, and the government respectively. One hundred and sixty three (57%) participants

indicated their willingness to pay for contraception.

4. DISCUSSION

Over 9 in 10 respondents reported awareness on the concept of contraception. Very few

Table 4. Association between participant's level of knowledge and some select sociodemographic characteristics

Socio-demographic	Le	evel of knowled	lge	Chi square	*df	р
characteristics	Poor	Good	Total	-		value
	frequency	frequency	n=287			
	n=132 (%)	n=155 (%)				
Age (years)						
15 – 24	28 (62)	17 (38)	45 (100)			
25 – 34	55 (38)	89 (62)	144(100)	9.010	3	**.03
35 – 44	41 (49)	42 (51)	83 (100)			
≥ 45	8 (53)	7 (47)	15 (100)			
Family setting	, ,	, ,				
Monogamous	78 (39)	123 (61)	201 (100)	13.949	1	**.000
Polygamous	54 (63)	32 (37)	86 (100)			
Level of education	, ,	. ,				
None	29 (63)	17 (37)	46 (100)			
Primary	37 (60)	25 (40)	62 (100)	23.872	3	**.000
Secondary	51 (45)	63 (55)	114 (100)			
Post secondary	15 (23)	50 (77)	65 (100)			
Ethnicity	, ,	, ,	` ,			
Igbo	11 (31)	25 (69)	36 (100)			
Yoruba	17 (43)	23 (57)	40 (100)			
Hausa-Fulani	27 (57)	20 (43)	47 (100)	8.055	5	.15
Igala	14 (40)	21 (60)	35 (100)			
Gbagyi	37 (53)	33 (47)	70 (100)			
Others	26 (44)	33(56)	59 (100)			
Religion	, ,	` ,	` ,			
Islam	84 (55)	68 (45)	152 (100)			
Catholic	12 (31)	27 (69)	39 (100)			
Anglican	2 (17)	10 (83)	12 (100)	14.086	4	**.007
Pentecostal	22 (41)	32 (59)	54 (100)			
Other	12 (40)	18 (60)	30 (100)			

*Degree of freedom; **Significant association

Table 5. Distribution of participants' presence of misconceptions on effects of contraception by source of information

Source of information	Prese	nce of miscond	eption	Chi	df	p value
	No frequency n=56 (%)	Yes frequency n=210 (%)	Total n=266	square		
Relative	4 (33)	8 (67)	12 (100)			
Media	2 (8)	24 (92)	26 (100)			
Friend	6 (21)	22 (79)	28 (100)	13.106	4	*.01
Outreach programs	28 (32)	60 (68)	88 (100)			
Health facility	16 (14)	96 (86)	112 (100)			

*Significant association

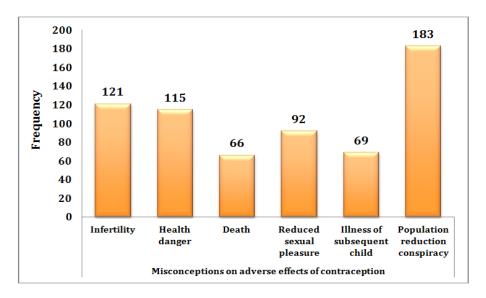


Fig. 2. Frequency distribution of participants by misconceptions about contraception

Table 6. Distribution of participants' knowledge of contraceptives by source of information

Source of information	Level of	Total n=276	
	Poor frequency (%)	Good frequency (%)	_
Relative	8 (57)	6 (43)	14
Media	8 (32)	17 (68)	25
Friend	16 (53)	14 (47)	30
Outreach programs	31 (34)	61 (66)	92
Health facility	44 (38)	71 (62)	115

participants reported no knowledge of contraceptive methods, which is in line with other studies, as one done in Ikeji Arakeji, Osun state [15], that reported all 245 participants having heard of contraceptives, as well as another survey done in Umuahia, Abia state [16] that reported 73.6%.

A little over half of the participants had good knowledge on contraception, just like a survey carried out in rural Osun with over 75% of the participants having good knowledge on contraception [17]. This is low considering the high rise of enlightenment programs on contraceptive methods and practices.

Majority of the participants had heard and/or seen a modern method of contraceptive, with a few of them having heard and seen traditional methods as well, which contradicts another study done in rural Osun in Nigeria that reported high awareness (86%) on traditional methods; abstinence [17]. The participants were most conversant with male condoms, followed by injectable, implants, and oral contraceptive pills similar to studies previously done [17,18,19]. The

high awareness on male condoms is most likely due to the widespread advertisements and campaigns, low cost, and accessibility, as well as its dual function as protection against sexually diseases transmitted and contraception. Interestingly, the participants were also very knowledgeable about contraceptive implants, contrary to other studies that reported very poor knowledge on them [17,19]. Very few participants acquainted with caps/diaphragms, spermicides and sterilization, and surprisingly, lactational amenorrhea, as represented in a similar study [20]. This could be due to the limited nature of this method, as the woman would have to be breastfeeding at the time. Nevertheless, more emphasis should be placed on less popular contraceptive methods, like lactational amenorrhea (breastfeeding method), given it is cheap, natural, easy to practice, and will overcome religious and cultural hindrances, therefore once better acquainted with how it can be effectively applied, and if conducive, women will be more likely to adopt them, considering a major reason for non-use is the invasive and unnatural nature of most modern contraceptive types [20, 21].

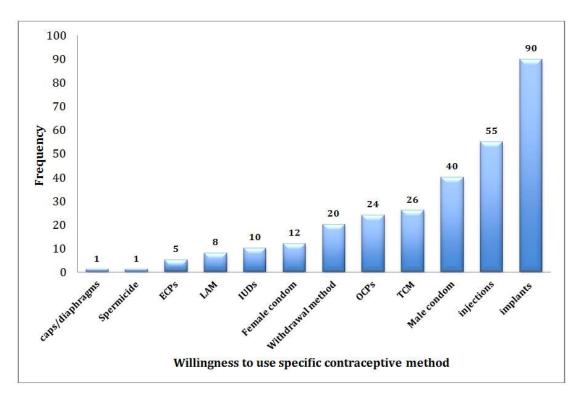


Fig. 3. Willingness to use specific type of contraceptives

One out of every 2 participants knew about the side effects of contraceptive use, with bleeding diathesis reported mostly, specifically heavy and prolonged menstruation; weight gain, and frequent cramps. This is similar to a cumulative study done in southwestern Nigeria that reported 76.1% of the participants having adequate knowledge on side effects, [22], as well as another study in Kano reporting weight gain and menstrual disturbances to be the major side effects known [20]. More participants suggested reporting to a health facility in the advent of side than discontinuing the effects. current contraceptive method, or never contraception again. The significant association of education, religion, and ethnicity of the participants with the level of knowledge on contraception is reported in previous studies done in other settings [23,24]. This further enhances the importance of education in increasing adequate knowledge on contraceptive use and its effects, which will positively affect contraceptive practices. As seen in other studies in Nigeria [24], the predominant low level of knowledge in the Muslim participants as compared to their Christian counterparts further promotes the need for widespread awareness and enlightenment programs in the Muslim population.

Four out of every 5 participants had a misconception of the effects of contraception; with majority of them believing it is part of a population reduction plan from the government, could lead to infertility, make the subsequent child ill, and even cause death of the user. This highlights the need for further education and awareness programs, to correct misunderstandings, and in essence, realign their disposition towards contraceptive use. Similarly, another study in Nigeria revealed misconceptions like irreversibility of modern contraception in terms of fertility protrusion of the abdomen over time due to accumulation of bad blood, and attributed these to being the major reason for non-use [21]. Of all the women that partook in the survey, majority of the younger ones, participants with no education, as well as the Gbagyi and Igbo respondents, had misconceptions on the effects of contraception, as seen in Table 4. This corroborated another study in a different setting that found significant association between the literacy of women and their beliefs on contraception, and the translation to practice [23]. More Catholic respondents were seen to have misconstrued beliefs on contraception than the Muslims, which contradicts a study done in Osun state [17].

Over two thirds of the participants acquired their information on contraception from health facilities and outreach programs, with a few from media, relatives and friends, which corroborates other studies done in Nigeria that reported most of its participant's source of information to be from health personnel and medical officers [17,20]. However, this is contradicting other studies that indicate media; especially electronic media, friends, and relatives to be the main sources of information about contraceptives [18,16,19,12, 25,26]. Also, another study in southwestern Nigeria reported that four-fifth of their participants did not remember their source of information, while private pharmacies on entry (8.9%) and government/NGO outreaches (1%) reported as known sources [22]. The participants that acquired information from outreach programs of health care workers had fewer misconceptions on its effects as opposed to those with information from friends and media, while those that sought information from relatives and friends had a poorer knowledge, as seen in Tables 5 and 6. This emphasizes the importance of enhanced coverage of the outreach programs from health facilities, especially to the grassroots level, in further educating and enlightening women on contraception. Furthermore, electronic and print media need to do much more in the spread of accurate awareness and knowledge in this area.

About two thirds of the participants were favorably disposed to contraceptive use, and were willing to use contraception, as portrayed in other studies in Nigeria, where 62.7%, 76%, 79.6%, 88.6% of the participants reported positive attitude to contraception [16,17,20,23]. Most of those willing to use contraceptives in this survey would prefer using modern contraceptive methods, with contraceptive injections and implants being the most disposed towards, followed by male condoms, and traditional calendar method, as seen in Fig. 3. The preference for injections and implants could be attributed to the clandestine nature of these methods, which would evade any prohibition in situations where the spouses do not support contraceptive use.

Three in every 5 women that were willing to use contraception indicated their spouse being the most important consideration prior to deciding on contraception, with efficacy, religion, cost, and comfort reported less. This emphasizes the pivotal role of male involvement in contraception, further buttressing the need for a paradigm shift,

as suggested by a study in northeastern Nigeria, advocating for men to be targeted and included in family planning programs and contraception interventions [27]. Majority of the willing participants suggested that their spouse should pay for contraception, with most of them disposed to paying if they have the means, and their spouse's refuse, suggesting that a barrier to contraceptive use is its cost, and the financial independence of the woman, therefore if the government and health facilities collaborate and subsidize these methods, more women are likely to use them.

5. CONCLUSION

In conclusion, although the awareness on the general concept of contraception was high, the presence of women that are oblivious to it strongly proposes the need for further pervasive awareness outreaches. Furthermore, the level of awareness does not translate to the quality of information known, with 46% of the participants having poor knowledge health care outreach programs being the main source information. This suggests the need for health care workers, to further enhance education, and ensure understanding of contraception. For this purpose, it is essential to train and retrain more health personnel, allocate continuous and flexible fundina. and implement research-based decisions on awareness and intervention programs based on community and region contexts. Also, a male involvement approach, rather than just women should be adapted, to ensure the enforcement of contraceptive practices, considering the critical role spouses play in the decision making on contraception.

CONSENT

As per international standard or university standard, patient's written consent has been collected and preserved by the authors.

ETHICAL APPROVAL

As per international standard or university standard, written approval of Ethics committee has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- National Population Commission (NPC). National Policy On Population For Sustainable Development; 2004.
 - Available: http://www.population.gov.ng/images/National Policy On Population For Sustainable Development[1]_1.pdf
- United Nation, Department of Economic and Social Affairs PD. World Population Prospects, The 2015 Revision; Key findings and advanced tables. New York; 2015.
- Adekunle AO, Otolorin EO. Evaluation of the Nigerian population policy-myth or reality? Afr J Med Med Sci. 2000;29(3-4): 305-10.
- 4. United Nations. Millenium Development Goals. UN Publications; 2013.
 - Available: http://www.un.org/millenniumgoal s/childhealth.shtml
- National Population Commission (NPC) and ICF International Maryland. Nigeria Demographic and Health Survey: 2013.
- 6. United Nation, Department of Economic and Social Affairs PD. Trends in contraceptive use Worldwide 2015. Contraception. 2015;1-70.
 - Available: http://dx.doi.org/10.1016/j.contra ception.2012.08.029
- Haffey J. Reproductive Health in subsaharan Africa.
- 8. Mauldin WP, Sinding SW. Review of existing family planning policies and programs: Lessons learned. United Nations Expert Gr Meet Fam Planning, Heal Fam Well-Being. 1992;81–104.
- Okonofua F. Need to intensify safe motherhood interventions in Africa. Afr J Reprod Heal. 2003;7(3)7-12.
- NC N. Awareness and attitude of family planning among rural women of Nsukka local government area: Implications for social work intervention. TT -. Mediterr J Soc Sci. 2014;5(27):1404–10.
- National Bureau of Statistics. Annual Abstract of Statistics, Federal Republic of Nigeria National Bureau of Statistics; 2012.
- 12. Official Webpage. Federal Capital Territory Administration. 2017;1–4.
- The DHS Program Demographic and Health Surveys. DHS Model Questionnaires. 2014;1–3.

- Available: https://dhsprogram.com/data/dat aset_admin/login_main.cfm
- Kish L. Survey sampling. In: Systematic Biology. 1965;643.
- Odunsina EK, Ugal DB, Olaposi O. Socio-Economic Status, contraceptive knowledge and use among rural women in ikeji arakeji, Osun State, Nigeria. 2012;3(3):1-10
- Imo KC, Okoronkwo E, Ukoji V. Interaction Effect of knowledge and use of contraceptive methods on fertility among umuahia women of south-eastern. J Cult Soc Dev. 2015;5:18–26.
- 17. Olugbenga-bello AI, Abodunrin OL, Adeomi AA. Contraceptive practices among women in rural communities in South-Western Nigeria. Glob J Med Res. 2011;11(2):68–74.
- Duru CB, Iwu AC, Diwe KC, Uwakwe KA, Merenu IA, Emerole CA, et al. Sexual behaviour, contraceptive knowledge and use among female undergraduates in tertiary institutions in Imo State, Nigeria. Am J Med Sci Med. 2015;3(5):61–6.
- Essien EJ, Monjok E, Smesny A, Ekabua EJ. Contraceptive practices in Nigeria: Literature review and recommendation for future policy decisions. Open Access J Contracept. 2010;1:1–14.
- Ibrahim G, Rabiu A, Abubakar I. Knowledge, attitude and practice of contraceptives among grand multiparous women attending antenatal clinic in a specialist hospital, Kano, Nigeria. Niger J Basic Clin Sci. 2015;12(2):90.
 - Available: http://www.njbcs.net/text.asp?20 15/12/2/90/169277
- 21. Ankomah A, Anyanti J, Adebayo S, Giwa A. Barriers to contraceptive use among married young adults in Nigeria: A qualitative study. Int J Trop Dis Heal. 2013;3(33):267–82.

Available: www.sciencedomain.org

- Adeyemo R, Oladipupo A, Omisore AO. Knowledge and practice of contraception among women of reproductive ages in South West, Nigeria. 2012;70–6.
- 23. Mustafa R, Afreen U, Hashmi HA. Contraceptive knowledge, attitude and practice among rural women. J Coll Physicians Surg Pak. 2008;18(9):542–5.
- Babalola S, Kusemiju B, Calhoun L, Corroon M, Ajao B. Factors associated

- with contraceptive ideation among urban men in Nigeria. Int J Gynecol Obstet. 2015;130:E42-6.
- Available: http://dx.doi.org/10.1016/j.ijgo.20 15.05.006
- 25. Ogbe CAOAO, Okezie CR. Socioeconomic determinants of contraceptive use among rural women in Ikwuano Local Government Area of Abia State, Nigeria. Popul (English Ed.) 2010;5:74–7.
- 26. Abiodun OM, Balogun OR. Sexual activity and contraceptive use among young

- female students of tertiary educational institutions in Ilorin, Nigeria. Contraception. 2009;79(2):146–9.
- 27. Kana M, Tagurum Y, Hassan Z, Afolanranmi T, Ogbeyi G, Difa J, et al. Prevalence and determinants of contraceptive use in rural Northeastern Nigeria: Results of a mixed qualitative and quantitative assessment. Ann Niger Med. 2016;10(1):3.
 - Available: http://www.anmjournal.com/text.a sp?2016/10/1/3/189801

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