

Awareness and Utilization of Birth Control Measures as a Means of Increasing Production Output Among Rural Women in Fishing Communities of Lagos State, Nigeria

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Abstract

In spite of women huge labour investment, rural women often get low agricultural production, less accruing returns, limited roles in decision making on the farms and lack of access to productive resources as a result of their multiple roles in the home. Nevertheless, to enhance the level of production of these women, their reproductive health needs to be taken seriously and one way to do that is through promotion of birth control practices that help to minimize manday losses during pregnancy period and burden of raising many children. Hence this study was carried out to look at Awareness and Utilization of Birth Control Measures (BCM) as a Means of increasing production output among Rural Women in Fishing Communities of Lagos State, Nigeria. Simple random sampling technique was used to select three hundred and thirty-one respondents in the coastal areas. Data were collected with interview guide and analysed using descriptive statistics, Pearson Product Moment Correlation (PPMC) and linear regression analysis. Results of the study showed that the mean age of respondents was 40.1 years; 88.8% were married; 79.5% had formal education; 78.5% realized more than ₦31,000/month; 59.8% practiced nuclear family; and 63.4% had less than 4 children in their households. Also, 83.4% and 91.5% of the respondents were aware of traditional and modern methods of birth control measures respectively. But, 49.8% always used Combined Oral Contraceptives and 44.4% always used injectable contraceptives of modern birth control measures. Health Care Providers (85.5%), radio (66.5%) and television (81.3%) were the predominant sources of information on BCM in the coastal areas. Most of respondents strongly agreed that the use of BCM allows women' notable participation in more fish processing activities thereby contributing significantly to women' earning power (82.2%), and it reduces poverty by contributing to economy of the family, community and national level (75.5%). Similarly, production output was high after use of BCM (more than 10kg/day) than before use of BCM (less than 4kg/day). However, sexual displeasure from contraceptive use (92.4%), fear of side effect (83.7%), and fear of infidelity among women (25.1%) have been identified as most serious constraints to the use of BCM. Results of correlation revealed a significant relationship between socio-economic characteristics of the respondents and use of BCM in the study area at $p < 0.05$ level of significance. Linear regression indicated that utilization of BCM has significant influence on the production output of the respondents ($t = 2.05$, $p = 0.04$) at $p < 0.05$ level of significance. The study concluded that use of BCM increase production output in the coastal areas. It is hereby recommended that Health Care Providers should keep on emphasizing the advantages of birth control measures to the fish processors to encourage them to adopt and use it.

Keywords: Awareness, Utilization, Birth Control Measures (BCM), production output, Rural Women

1.0 Introduction

The problem of wants and scarcity were now been exacerbated by common ecological resource depletion due to unprecedented world population growth and adverse environmental factors. This has long been recognized by economists as the bane of human existence, forcing human to make choices between alternatives or among competing options. One of the choices that humans have to make in the face of depleting common resource is the choice of uncontrolled procreation (high birth rate) with its implications on resource optimality (adequacy) and having to control procreation (birth control) to optimize utility per individual from available resources. Unplanned birth rate negatively affects women's reproductive health and often causes infant and maternal mortality. Hence, the need to control birth through various means (including contraceptive use, barrier methods, and in the process, improve production and reduce abject poverty (United State Agency for International Development (USAID), 2012; Adindu, 2012; Bongaarts *et al.*, 2012). Effort to promote good reproductive health of women is based on the truism that good health would increase agricultural production. This truism is known to governments, development agencies and many scholars that family planning (of which birth control is a very important part) improves health, reduces poverty, and empowers women. Yet, today, more than 200 million women in the developing world want to avoid pregnancy but are not using a modern method of contraception.

They face many obstacles, including lack of access to information and healthcare services. The position above underscores the importance of birth control and describes economic implications of satisfactory birth control practices on poverty reductions and better health care that are essential to increasing production. More alarming is the fact that Sub-Saharan Africa is projected to have the highest population growth due to high rate of fertility (Nettey *et al.*, 2015). Countries like Nigeria cannot afford to ignore population control to ensure healthy living. Mothers, who mostly bear the brunt of unplanned maternity in terms of damaged health and even death need to be given due consideration. Nigeria according to NPC (2009) has one of the highest mortality rates in the world. Family Planning campaigns therefore need to be given a massive boost to get better results, particularly in the rural areas. There is no gainsaying that lots of awareness has been created about birth control particularly under Family Planning Programme Campaigns and various other communications have been targeted at both urban and people at grassroots level. However, birth control practices in Nigeria are still regrettably low resulting in risks of high maternal deaths; fish processing activities of rural women in the coastal areas are most affected because they are not easily accessible by the health experts. Women, therefore, need to be made more productive and their production accounted for and duly recognized. Nevertheless, to enhance the level of production of these women, their reproductive health needs to be taken seriously and one way to do that is through promotion of birth control practices. It is against this background that this study assessed the awareness and utilization of birth control measures as a means of increasing production output among rural women in fishing communities of Lagos State, Nigeria.

1.2 Specific objectives of the study are to:

- i. describe the socio-economic characteristics of rural women in the study area.
- ii. ascertain the rural women level of awareness and utilization of various birth control measures available for use in the study area.
- iii. identify the various sources of information on birth control measures among rural women in the study area.
- iv. ascertain the benefits derived by rural women from the use of birth control measures in the study area.
- v. identify constraints militating against use of birth control measures among rural women in the study area.

1.3 Hypotheses of the Study

The following hypotheses were stated in null forms:

H₀₁: There is no significant relationship between the socio-economic characteristics of rural women and production output of the artisanal women fish processors in the study area.

H₀₂: Utilization of birth control measures has no significant influence on the rural women production output in the study area.

2.0 RESEARCH METHODOLOGY

2.1 Description of the Study Area

This study was carried out in Lagos State, Nigeria. The State was created on May 27th, 1967. It has 57 Local Government Areas and was the capital of Nigeria until 1976. It is referred to as the 'centre of excellence'. It is the nation's largest urban centre and economic hub of Nigeria (Oyediran *et al.*, 2016). The state covered a total of 3,939km² of land. It spans the Guinea coast of the Atlantic Ocean for over 180km, from the Republic of Benin on the west to its boundary with Ogun State in the east. It extends approximately from latitude 6^o2North to 6^o4 North and from longitude 2^o45 East. Of it is about 787km² and 22 per cent is water.

2.2 Sampling technique and sample size

The study population was artisanal women fish processors in Lagos State, Nigeria. Multi-stage sampling technique was used to select the respondents. There are three geographical zones in Lagos State. The first stage was purposive selection Far Eastern and Western zones out of the three zones. Five major coastal areas were purposively selected in the two selected zones. These are Magbon, Ajah, Epe-Eredo, Badagry and Ilaje. Random selection of 2 fishing communities was carried out from each of the selected blocks and it gave rise to 10 fishing communities. The communities used for this study are Ifolu, Akodo, Oniyarin, Ilaje, Ebute Chief, Epe, Badagry, Orimedu, Ilaje 2, and Eredo. In the final stage, random selection of 20% fish processors from each of the selected fishing communities was done and it gave a total of 331 as sample size for this study.

2.3 Validity and Reliability test

The interview guide used for data collection was validated by experts in the field of agricultural extension, nurses and midwiferies. The reliability of the research instrument was tested using test re-test method in order to determine its internal consistency. In addition, reliability of the instrument was estimated by calculating

Cronbach's alpha for various items in the instrument. Alpha level of 0.75 indicates that the instrument is good for the research work.

2.4 Measurement of Variables

Age, number of children, production output, monthly income, fishing experience were measured at ratio level. Religion, educational status, marital status, family type and awareness were measured at nominal level. Utilization was measured on a 3-point indicator of Always used (3), Sometimes used (2), and Never used (1). Similarly, sources of information were measured on a 3-point indicator of Always (3), Occasionally (2), and Never (1). Benefits derived by the fish processors from the use of birth control measures were measured on 5-point Likert scale type of Strongly Agree (5), Agree (4), Undecided (3), Disagree (2) and Strongly Disagree (1). Constraints were measured as serious constraint (3), minor constraint (2) and not a constraint (1). Effect of women birth control measures on production output was measured at ratio level. Descriptive statistics were used for the objectives while Pearson Product Moment Correlation (PPMC), chi-square and regression analysis were used for the hypotheses.

3.0 RESULTS AND DISCUSSION

3.1 Socio-economic characteristics of the respondents

Result in Table 1 revealed that the average age of the respondents was 40.1 years. Below half (48%) of the respondents were above 41 years of age; 31.4% were between 31 – 40 years of age; 16.9% were between 21 – 30 years of age; and 3.6% were less than 20 years of age. This shows that the respondents are economically active and within the child-bearing age. These results agreed with the previous findings of Ahmed-Adamu (2012) that most women in age bracket 20 – 39 years are in active reproductive stage. Similar findings by Sodiya and Oyediran (2014) affirmed that people in the age bracket 20 – 40 years are economically active. Majority (63.7%) of the respondents had primary education and 15.7% had secondary education. It means that the respondents are literate. Education has been seen as an important factor that promotes contraceptive usage among women in many developing countries. Anaman and Okai, (2016) stated that better educated women are also thought of having more knowledge of birth control methods and also of ways to obtain them than people who are less educated because of the level of literacy and much more familiarity with modern institutions. But, 20.5% did not have formal education. About ninety (88.8%) of the respondents were married while 11.2% were separated. These results are similar to the findings of Oyediran *et al.* (2016) that majority of fish processors are married (79.2%) in the coastal areas of Lagos State, Nigeria. Marriage has been reported to confer some level of responsibility on individuals that are involved like provision of food items, clothing and shelter for their household members (Omoare *et al.*, 2015; Oyediran *et al.*, 2016). Christianity (53.5%) and Islam (42.6%) were the major religion practice in the study areas but Christians predominate. Only very few (3.9%) were into traditional practice. Since the respondents are religious their decision to use birth control measure will be limited because religion bodies did not preach and encourage the use of birth control measures. Biblically, “God instructed man in the Book of Genesis that ‘man should go and replenish the earth’”. According to Ahmed-Adamu (2012) rural women in Northern part of Nigeria did not use family planning on religion ground. Furthermore, about 35% of the respondents had spent 16 – 20 years; 29% had spent 11 – 15 years; 12.4% had spent more than 21 years. The mean year of experience was 7.04 years. It implies that the respondents have been in fishing for a quite long time. Omoare *et al.* (2015) opined that years of fishing experience play a vital role in any farming enterprise. Also, the average income of the respondents was ₦30,290.0/month. Majority (78.5%) of the respondents realized more than ₦31,000/month; 8.5% got ₦21,000.00 – 30,000.00/month and 9.1% realized ₦10,000.00/month. The income obtained from fish is substantive and it can be used for basic needs and livelihood sustainability of the fisherfolks. So also, nuclear family (59.8%) was predominant in the fishing community; 35.6% were polygamy; and 4.5% were extended family. Economic and education enlightenment have changed marital life in urban and rural areas of Nigeria; the era of large family is over. The implication for this study is that women in polygamy are known to compete with one another by having as much as possible children and therefore would feel reluctant to take birth control measures unlike their counterparts in the nuclear family who are likely to adopt birth control measures with ease. Ahmed-Adamu (2012) reported that polygamy practice has been characterized with non-use of contraceptives in Nigeria. Above sixty percent (63.4%) of the respondents had less than 4 children and 36.6% had between 5 – 9 children. The average number of children was 4. This shows that the number of children was commensurate the Federal Government of Nigeria recommendation of 4 children for a family during General Ibrahim Babangida regime in 1988/89. It against the practice in the rural areas of Nigeria where newly married people are encouraged to have many children as the number of children is used to show the strength of a family without given consideration to reproductive health of the women and financial status of the husband. There is a common saying in the rural areas of Nigeria that “*God will take care of the children*”. Oyediran (2017) asserted that household size is an important index in any rural development intervention which can affect the outcome of such intervention.

Table 1: Distribution based on the socio-economic characteristics (n = 331)

Variables	Frequency	Percentages	Mean	Std. Dev.
Age (years)				
Less than or equal to 20	12	3.6		
21 – 30	56	16.9		
31 – 40	104	31.4	40.1	9.91
41 and above	159	48.0		
Educational attainment				
No formal education	68	20.5		
Primary education	211	63.7		
Secondary education	52	15.7		
Marital status				
Married	294	88.8		
Separated	37	11.2		
Religion				
Islam	141	42.6		
Christianity	177	53.5		
Traditional practice	13	3.9		
Fishing experience (years)				
Less than 10	78	23.6		
11 – 15	96	29.0		
16 – 20	116	35.0	16.06	7.04
21 and above	41	12.4		
Monthly income (₹)				
Less than 10,000	30	9.1		
11,000 – 20,000	13	3.9		
21,000 – 30,000	28	8.5		
31,000 and above	260	78.5	30,290.0	1,980.4
Family type				
Nuclear	198	59.8		
Extended	15	4.5		
Polygamy	118	35.6		
Number of children				
Less than 4	210	63.4	4	2
5 – 9	121	36.6		

Source: Field Survey, 2018; Std. Dev. = Standard Deviation

3.2 Awareness and Utilization of Birth Control Measures

The results in Table 2 showed that large proportion of the respondents were aware of traditional birth control methods. Above half of the fish processors were of use of herbs (83.4%), amulet (77.9%), waist band (75.5%), incision (64.0%), concoction (60.4%), concocted ring (53.2%) and hung bottled concoction (42%). People in the rural areas have indigenous knowledge of traditional medicine to prevent and treat diseases and health issues. It is worthy of note that a certain level of awareness usually precedes the use of a particular birth control method. Results on the use of traditional birth control measures indicated that 36.6% of the respondents always used herbs, 23.3% sometimes used it and 40.2% never used it; 21.1% always used amulet, 27.2% sometimes used it and 51.7% never used it; 20.8% always used waist band, 5.4% sometimes used it and 73.7% never used it; 20.5% always used incision, 14.2% sometimes used it and 65.3% never used it; 17.5% always used concoction, 8.8% sometimes used it and 73.7% never used it; 31.7% always used concocted ring, 23.3% sometimes used it and 45% never used it; 12.1% always used hung bottled concoction, 9.1% sometimes used it and 78.9% never used it. This shows that respondents are using traditional methods though very low in numbers. The low rate could be attributed to failure nature of traditional medicine. Rural women are reluctant to accept any traditional method because it is associated with high failure rates (Gaur *et al.*, 2008). Furthermore, more than seventy percent of the respondents were aware of natural methods. They were aware of Basal Body temperature (BBT) (74.3%), cervical mucus membrane (70.1%), safe period (rhythm method) (91.2%), breast feeding (amenorrhea method) (33.2%) and withdrawal method (coitus interruption) (92.4%). Results on the use of natural birth control measures revealed that 10.3% of the respondents always used Basal Body temperature, 3.3% sometimes used it and 86.4% never used it; 1.5% always used Cervical Mucus Membrane, 3.3% sometimes used it and

95.2% never used it; 41.7% always used Breast Feeding, 45.9% sometimes used it and 12.4% never used it; 14.5% always used Withdrawal method, 54.7% sometimes used it and 30.8% never used it. It is an indication that low proportion of the respondents used natural methods. Previous studies by Olugbenga-Bello *et al.* (2011) and Ahmed-Adamu (2012) have found that only very few (6.7%) women were using natural methods in rural communities of Nigeria. Scholars have established that although most couples have knowledge about natural birth control methods but they lack adequate skill to practice it effectively in fertility regulation (Audu *et al.*, 2006). Most of the respondents were aware of modern birth control measures (hormonal) such as combined oral contraceptives (91.5%), injectable contraceptives (95.8%), contraceptives implants, (implanon) (95.2%), contraceptives ring (nuva ring) (95.5%), and skin patch (94.6%). Ijadunola *et al.*, (2010) reported that awareness of birth control measures was high in Ile-Ife, Osun State, Nigeria. Awareness of contraception among women is becoming important and should be intensified to achieve the objective of reducing unplanned births and maternal mortality. Awareness of birth control methods is the logical first step necessary for their use by women. Since intensity of awareness is related to the available information and experience, the extent of use of birth control methods is also dependent on the intensity of awareness of these methods (Anaman and Okai, 2016). Results on the use of modern birth control measures (hormonal) showed that about fifty percent (49.8%) of the respondents always used Combined Oral Contraceptives, 3.0% sometimes used it and 47.1% never used it; 44.4% always used Injectable Contraceptives, 16.9% sometimes used it and 38.7% never used it; 17.8% always used Contraceptives implants (implanon), 25.1% sometimes used it and 57.1% never used it; none (0.0%) always used Contraceptives Ring (nuva ring), none (0.0%) sometimes used it and all (100%) never used it; none (0.0%) always used skin patch, 12.4% sometimes used it and 87.6% never used it. The results depict that pills and injectable were the common methods of modern contraceptives used in selected communities of southwest, Nigeria. Women preference for injectable contraceptive has been attributed to its relatively long duration of action of at least 2 months (Kebede, 2006). Contraceptive use has historically been low among married women of reproductive age in Nigeria, especially with respect to modern methods (USAID, 2009). Also, majority (83.4%) of the respondents were aware of copper T shaped IUD but 87.9% were not aware of hormonal IUD. It was also found out that majority were not aware of vasectomy (87%), tubal ligation (95.8%) and tubal implants (81.6%). In addition, no awareness was reported for cervical caps (88.5%), diaphragms (93.1%) and spermicides (93.4%). Accordingly, results on use of Intra-uterine contraceptives (IUCDs) indicated that 15.1% sometimes used Copper T shaped IUD (paraGard); and all (100%) never used Hormonal IUD (mirena). On voluntary surgical contraception method the results revealed that all (100%) never used Tubal Ligation (female sterilization); and all (100%) never used Tubal Implants. These birth control measures were not popular and as such not used by fish processors in the coastal areas. It has been reported that the introduction and use of modern methods of birth control measures though very useful in some cases at fertility regulation, its uses are not accepted by some couples for many reasons such as the report of side effects on users of some of the hormonal birth control measures like sterility, cancer, high blood pressure, weight gain or loss, or fear of untimely death (Ahmed-Adamu, 2012). Contrary to this was the result of high awareness (80.4%) and always use (70.1%) of condoms (male and female). This result supports the findings of Senbet *et al.* (2005) that sexually active adolescents and young women were aware of condom. Utilization of Barrier Method of contraception further revealed that 2.0% always used Cervical caps, 3.1% sometimes used it and 94.9% never used it; 1.0% always used Diaphragms, 1.0% sometimes used it and 98% never used it; 0.4% always used Spermicides (foam jelly, foaming tab, and sponge), 1.2% sometimes used it and 98.4% never used it. Advantages of modern birth control measures have not fully taken by the fish processors in Lagos State, Nigeria. Public awareness and education on birth control measures should be the priority of medical experts for the fish processors in coastal areas of Nigeria. Oye-Adeniran *et al.* (2005), and Nyengidiki and Allagoa (2011) stated that despite high level of awareness of family planning services, utilization was low in Nigeria.

Table 2: Distribution based on Awareness and use of birth control measures (n = 331)

Types of Birth Control Measures	Awareness		Level of Use		
	Aware	Not Aware	Always Used	Sometimes Used	Never Used
Traditional Method					
Use of Herbs (powdered)	276(83.4)	55(16.6)	121(36.6)	77(23.3)	133(40.2)
Amulet (ifunpa)	258(77.9)	73(22.1)	70(21.1)	90(27.2)	171(51.7)
Waist Band (igbadi)	250(75.5)	81(24.5)	69(20.8)	18(5.4)	244(73.7)
Incision (gbere)	212(64.0)	119(36.0)	68(20.5)	47(14.2)	216(65.3)
Concoction (aseje)	200(60.4)	131(39.6)	58(17.5)	29(8.8)	244(73.7)
Concocted ring(oruکا ere)	176(53.2)	155(46.8)	105(31.7)	77(23.3)	149(45.0)
Hung Bottled concoction(agbeko)	139(42.0)	192(58.0)	40(12.1)	30(9.1)	261(78.9)
Natural Method					
Basal Body temperature (BBT)	246(74.3)	85(25.7)	34(10.3)	11(3.3)	286(86.4)
Cervical Mucus Membrane	232(70.1)	99(29.9)	05(1.5)	11(3.3)	315(95.2)
Safe Period (rhythm method)	302(91.2)	29(8.8)	138(41.7)	152(45.9)	41(12.4)
Breast Feeding (amenorrhea method)	110(33.2)	221(66.8)	15(4.5)	57(17.2)	259(78.2)
Withdrawal method (coitus interruption)	306(92.4)	25(7.6)	48(14.5)	181(54.7)	102(30.8)
Modern Methods					
Hormonal					
Combined Oral Contraceptives e.g ordinary pills, emergency contraceptives	303(91.5)	28(8.5)	165(49.8)	10(3.0)	156(47.1)
Injectable Contraceptives	317(95.8)	14(4.2)	147(44.4)	56(16.9)	128(38.7)
Contraceptives implants, (implanon)	315(95.2)	16(4.8)	59(17.8)	83(25.1)	189(57.1)
Contraceptives Ring (nuva ring)	316(95.5)	15(4.5)	0(0.0)	0(0.0)	331(100.0)
Skin Patch	313(94.6)	18(5.4)	0(0.0)	41(12.4)	290(87.6)
Intra-uterine contraceptives (IUCDs)					
Copper T shaped IUD (paraGard)	276(83.4)	55(16.6)	0(0.0)	50(15.1)	281(84.9)
Hormonal IUD (mirena)	40(12.1)	291(87.9)	0(0.0)	0(0.0)	331(100.0)
Voluntary surgical contraception					
Vasectomy (Male sterilization)	43(13.0)	288(87.0)	0(0.0)	0(0.0)	331(100.0)
Tubal Ligation (female sterilization)	14(4.2)	317(95.8)	0(0.0)	0(0.0)	331(100.0)
Tubal Implants	61(18.4)	270(81.6)	0(0.0)	0(0.0)	331(100.0)
Barrier Method of contraception					
Condoms (male and female)	266(80.4)	65(19.6)	232(70.1)	70(21.1)	29(8.8)
Cervical caps	38(11.5)	293(88.5)	0(0.0)	06(0.0)	325(98.2)
Diaphragms	23(6.9)	308(93.1)	0(0.0)	10(3.0)	321(97.0)
Spermicides (foam jelly, foaming tab, sponge)	22(6.6)	309(93.4)	0(0.0)	12(3.6)	319(96.4)

Source: Field Survey, 2018. Values in parenthesis are in percentages

3.3 Sources of information

The results in Table 3 showed that more than ninety percent (94.3%) of the respondents never aware of modern birth control measures through Extension Agents. Rather, information diffused to the fish processors always through the Health Care Providers (85.5%), radio (66.5%) and occasionally through television (81.3%). This shows that Health Care Providers and radio stations are effective in disseminating information on birth control measures to the fish processors in Lagos State. Opoku and Kwaununu (2011) have reported that health workers are the major source of information on contraception. This is supported by Ahmed-Adamu, (2012) that shift to hospitals as the major source of information may be due to several efforts made by the Nigerian government through hospital/healthcare centres at reducing the rate of unwanted pregnancy in all states of the federation. Government ensures distribution of the contraceptives commodities to all 36 states, which are expected to distribute to their LGAs and public health facilities. So also, information has never gotten to 91.2% of the respondents through social media. Whereas, close to ninety percent (88.8%) got information through their friends, and occasionally through neighbours (76.7%) and relatives (75.8%). In addition, 92.7% of the respondents received information from their fellow fish processors. Ijadunola *et al.* (2010) also reported similar findings that the most popular sources of information about birth control measures were the radio, friends and television. A study conducted in Ghana revealed that majority of youth who were aware of birth control through friends (Anaman and Okai, 2016). Print media (95.2%) and Poster/fliers (84.6%) were not used to disseminate

information to the fish processors, and this could be attributed to their low level of formal education. Also, Church (96.4%) and Mosque (98.2%) have never been used to disseminate information on modern birth control measures; this may be attributed to the fact that right from time immemorial the two religious bodies oppose child control not until recent time of over population, economic hardship and increasing crime rate due to lack of parental care for many children.

Table 3: Distribution based on Sources of information (n = 331)

Sources of information	Always	Occasionally	Never
Extension Agents	04(1.2)	15(4.5)	312(94.3)
Health care Providers	283(85.5)	48(14.5)	0(0.0)
Radio	220(66.5)	95(28.7)	16(4.8)
Television	48(14.5)	269(81.3)	14(4.2)
Social Media	05(1.5)	24(7.3)	302(91.2)
Friends	294(88.8)	37(11.2)	0(0.0)
Neighbours	77(23.3)	254(76.7)	0(0.0)
Relatives	74(22.4)	251(75.8)	06(1.8)
Print Media	06(1.8)	10(3.0)	315(95.2)
Fellow Fish Processors	307(92.7)	18(5.4)	06(1.8)
Poster/Fliers	0(0.0)	51(15.4)	280(84.6)
Church	0(0.0)	12(3.6)	319(96.4)
Mosque	0(0.0)	06(1.8)	325(98.2)

Source: Field Survey, 2018. Values in parenthesis are in percentages

3.4 Benefits derived from the use of birth control measures

The benefits of modern contraceptives are well known as one of the most important key strategies in preventing the deaths of women, neonates, infants and children (Stover and Ross, 2010). Birth control measures play a crucial role in population management, poverty alleviation, and human development. Effective birth control measures have a wide range of benefits. The results in Table 4 showed that majority (82.2%) of respondents strongly agreed that use of birth control measures allows women' notable participation in more fish processing activities thereby contributing significantly to women' earning power, 75.5% indicated that it reduces poverty by contributing to economy of the family, community and national level, and 67.1% strongly agreed that it mitigates the impact of population dynamics on natural resources. Women who use contraceptives tend to have a better quality of life, higher social status and greater autonomy (Asiinwe *et al.*, 2013). Furthermore, more than half (51.7%) of the respondents indicated agreed that to a large extent it is beneficial as it reduces risk of certain cancer, while 60.1% and 55% agreed that it regulates or lessen menstrual flows, menstrual cramps and other pre-menstrual symptoms, and slows population growth and the resulting negative impacts on the economy respectively. The results also showed that above fifty percent (54.4%) of the respondents strongly agreed that it reduces the risk of acquiring and transmitting Sexually Transmitted Infections (STIs), 56.5% strongly agreed that it guarantees child spacing thereby enhancing nutritional status of both mother and child, 54.4% strongly agreed that it reduces child and maternal morbidity by preventing unintended pregnancies and unsafe abortions and 62.2% strongly agreed that it enables partners enjoy sex more since there is no fear of unwanted pregnancies. Channon *et al.*, (2010) opined that smaller families resulting from effective use of birth control measures have lower expenses on children, and therefore can easily make ends meet and have higher potential for making savings and investments. These findings coincide with the report of World Health Organization, (2010) that highlighted benefits of birth control measures as increased maternal and child survival, improved nutrition, better educational prospects, increased possibility of girls and women getting into places of authority both at home and in society, and the prevention of sexually-transmitted infections.

Table 4: Benefits derived by the fish processors from the use of birth control measures (n = 331)

Statement	SA	A	U	D	SD
It allows women' notable participation in more fish processing activities thereby contributing significantly to women' earning power.	272(82.2)	57(17.2)	02(0.6)	0(0.0)	0(0.0)
It reduces poverty by contributing to economy of the family, community and national level	250(75.5)	81(24.5)	0(0.0)	0(0.0)	0(0.0)
It mitigates the impact of population dynamics on natural resources	222(67.1)	109(32.9)	0(0.0)	0(0.0)	0(0.0)
It reduces risk of certain cancer. e.g. ovarian and cysts cancer	171(51.7)	160(48.3)	0(0.0)	0(0.0)	0(0.0)
It regulates or lessens menstrual flows, menstrual cramps and other pre-menstrual symptoms	127(38.4)	199(60.1)	05(1.5)	0(0.0)	0(0.0)
It slows population growth and the resulting negative impacts on the economy.	146(44.1)	182(55.0)	03(0.9)	0(0.0)	0(0.0)
It reduces the risk of acquiring and transmitting sexually Transmitted Infections (STIs)	180(54.4)	147(44.4)	04(1.2)	0(0.0)	0(0.0)
Birth control guarantees child spacing thereby enhancing nutritional status of both mother and child	187(56.5)	141(42.6)	03(0.9)	0(0.0)	0(0.0)
It reduces child and maternal morbidity by preventing unintended pregnancies and unsafe abortions	180(54.4)	143(43.2)	08(2.4)	0(0.0)	0(0.0)
It enables partners enjoy sex more since there is no fear of unwanted pregnancies.	206(62.2)	117(35.3)	08(2.4)	0(0.0)	0(0.0)

Source: Field Survey, 2018. Values in parenthesis are in percentages.

SA – Strongly Agree, A – Agree, U – Undecided, D – Disagree, SD – Strongly Disagree

3.5 Effects of birth control on production output

Results in Table 5 revealed that 44.1% of the respondents processed less than 4kg of fish per day before the use of birth control measures (BCM). Whereas, 55.9% processed fish that worth 5 – 9kg/day and 75.8% processed more than 10kg/day after use of birth control measures. This shows that production output was high after use of BCM than before use of BCM.

Table 5: Effects of birth control on production output (n = 331)

Effect of BCM	Before use of BCM	After use of BCM
Production output (kg/day)		
Less than 4	146(44.1)	0(0.0)
5 – 9	80(24.2)	185(55.9)
10 and above	0(0.0)	251(75.8)

Source: Field Survey, 2018. Values in parenthesis are in percentages

3.6 Constraints militating against contraceptive use

Problems confronting contraceptive use in Nigeria are enormous. From results in Table 6, most (92.4%) of the respondents indicated perceived sexual displeasure from contraceptive use, 83.7% mentioned fear of side effect, and 25.1% stated fear of infidelity among women as the serious constraints and were ranked 1st, 2nd and 3rd respectively. But, very few of the respondents considered lack of funds to purchase (10.9%), lack of awareness of the benefits (7.3%), and fear of abortion when used (1.8%) as serious constraints and were ranked 4th, 5th and 6th respectively. Scholars have reported that fear of side effects, cultural value, husband's disapproval and the desire for children limit the use of birth control measures in Nigeria (Asekun-Olarinmoye *et al.* (2013); Nwachuckwu and Obasi, 2008). In addition, those identified as minor constraints were taboo/cultural belief (100%), sexually inactive (98.2%), illiteracy (96.4%), inadequate availability of contraceptives (94.6%), indiscipline in following prescriptions (87.3%), indiscipline in sexual relationship (86.7%), and non-qualified personnel recommending birth control measures (84.6%), these were accordingly ranked 7th, 8th, 9th, 10th, 11th, 12th, 13th, and 14th respectively. The case of quack medical practitioners is rampant in Nigeria while there are reports self-medication and drug abuse among many Nigerians. Seigh *et al.* (2006) stated that misinformation about the side effects associated with contraceptives increases women's reluctance to seek out family planning options. There should be access to basic reproductive health information and women-friendly services that will enable them to take control of reproductive health decisions. However, religious belief about its use (55.3%), social stigmatization (74%), lack of access to contraceptives (75.2%) and spouse or family pressure (85.5%) were regarded as not a constraint. This implies that religion, family and spouse did not prevent people in the

study area from using contraceptives, and that they have access to it.

Table 6: Distribution based on Constraints militating against contraceptive use (n 331)

Constraints	Serious Constraint	Minor Constraint	Not Constraint	Rank
Indiscipline in following prescriptions	0(0.0)	289(87.3)	42(12.7)	11 th
Indiscipline in sexual relationship	0(0.0)	287(86.7)	44(13.3)	12 th
Inadequate availability of contraceptives	0(0.0)	313(94.6)	18(5.4)	10 th
Non-qualified personnel recommending birth control measures	0(0.0)	280(84.6)	51(15.4)	13 th
Spouse or family pressure	0(0.0)	48(14.5)	283(85.5)	18 th
Lack of funds to purchase	36(10.9)	235(71.0)	60(18.1)	4 th
Illiteracy	0(0.0)	319(96.4)	12(3.6)	9 th
Fear of side effect	277(83.7)	54(16.3)	0(0.0)	2 nd
Taboo/cultural belief	0(0.0)	331(100.0)	0(0.0)	7 th
Perceived sexual displeasure from contraceptive use	306(92.4)	19(5.7)	06(1.8)	1 st
Sexually inactive	0(0.0)	325(98.2)	06(1.8)	8 th
Lack of awareness of the benefits	24(7.3)	80(24.2)	227(68.6)	5 th
Fear of infidelity among women	83(25.1)	90(27.2)	158(47.7)	3 rd
Religious belief about its use	0(0.0)	148(44.7)	183(55.3)	15 th
Fear of Abortion when used	06(1.8)	188(56.8)	137(41.4)	6 th
Social stigmatization	0(0.0)	86(26.0)	245(74.0)	16 th
Lack of trust from Health Workers	0(0.0)	158(47.7)	173(52.3)	14 th
Lack of access to contraceptives	0(0.0)	82(24.8)	249(75.2)	17 th

Source: Field Survey, 2018. Values in parenthesis are in percentages

3.7.0 Hypotheses testing

3.7.1 Test of relationship between socio-economic characteristics and birth control measures (BCM)

Results of correlation in Table 7 revealed that age ($r = 0.72$, $p = 0.00$), educational status ($r = 0.41$, $p = 0.00$), marital status ($r = 0.69$, $p = 0.02$), religion ($r = 0.23$, $p = 0.01$), fishing experience ($r = 0.81$, $p = 0.00$), monthly income ($r = 0.61$, $p = 0.00$), family type ($r = 0.38$, $p = 0.03$) and number of children ($r = 0.55$, $p = 0.00$) were significant to the use of birth control measures at $p < 0.05$ level of significance. Based on this evidence of significant, it can be inferred that there is significant relationship between socio-economic characteristics and birth control measures in the study area. Hence, null hypothesis is rejected.

Table 7: Relationship between socio-economic characteristics and birth control measures

Socio-economic variables	r	p-value	Decision
Age	0.72	0.00	Significant
Educational status	0.41	0.00	Significant
Marital status	0.69	0.02	Significant
Religion	0.23	0.01	Significant
Fishing experience	0.81	0.00	Significant
Monthly income	0.61	0.00	Significant
Family type	0.38	0.03	Significant
Number of children	0.55	0.00	Significant

Source: Field Survey, 2018; S - Significant at $p < 0.05$ level of significance; df – degree of freedom

3.7.2 Test for relationship between Utilization of birth control measures and production output

The R-Square indicated that 29.3% of the variation in production output was brought about by variation in the explanatory variable used in the model. There is significant relationship between utilization of birth control measures and production output at 1% level of significance ($t = 2.050$, $p = 0.044$). This implies that birth control measures had influence on rural women production output. The more the rural women abide by the use of birth control measures the higher their level of production output would be. The significant of F-statistic (6.12) affirmed that the null hypothesis (H_{02}) in the sample remained rejected at 1% level of significance. That is, alternate hypothesis (H_{a1}) that, “Utilization of birth control measures has significant influence on the production output” is accepted.

Table 8: Linear regression of relationship between utilization of birth control measures and production output

Variables	Unstandardized Coefficient		Standardized Coefficient	t	Significance
	β	Std. Error	Beta		
Constant	192.670	19.921		9.672	0.000
Utilization	10.301	5.026	0.229	2.050	0.044*
Obs.					
F – statistics	6.12				
R ²	29.30				
Adjusted R ²	24.90				
Prob(F-Statistics)	0.00				

Source: Field Survey, 2018; *= Significant at 0.01 level

Conclusion

Most of the respondents were aware of both traditional and modern birth control measures but the level of utilization was very low among the women in the coastal areas. Many of the respondents always used concocted ring (oruka ere) and Safe Period (rhythm method) of traditional method. Modern birth control measures that are always used were Combined Oral Contraceptives and injectable contraceptives. Health Care Providers, radio and television were the major sources of information on birth control measures in the coastal areas. Results of correlation revealed that there is significant relationship between socio-economic characteristics and birth control measures in the study area at $p < 0.05$ level of significance. Linear regression indicated that utilization of birth control measures has significant influence on the production output at $p < 0.05$ level of significance.

The study recommends that Health Care Providers should keep on emphasizing the advantages of birth control measures to the fish processors to encourage them to adopt and use it. Community leaders and heads of families should be a focus of change on birth control measures because of the influence they have on their followers if a meaningful increase in the level of use of birth control measures is to be achieved. Government should promote and sustain existing strategies of reaching coastal areas through Health Care Providers and Agricultural Extension Agents by training and re-training of health workers on new development on birth control measures in the study areas.

Acknowledgements

The research team, Mrs. Akinsola, O. O., Mr. Rasaki Badaru, and Dr(Mrs.) Ayodeji Omoare humbly appreciate the Management of Federal College of Education, Abeokuta, Ogun State, and TETFUND, Abuja, Nigeria for their supports and funding of this research work. So also, the research team extends gratitude to the academic and non-academic staff of the Federal College of Education that assisted in the course of this study to ensure its success. Efforts of the nurses, midwives, community health workers, enumerators and fish processors in Lagos State are also acknowledged. Thank you all and God bless.

References

- Adindu, S. K. (2012). *Consequences of Population Growth on Agricultural Production in Obingwa Local Government Area of Abia State Nigeria* (B.Sc.). Novia University of Applied Sciences, Raseborg, Finland, pp 9-27.
- Ahmed-Adamu, Z. B. (2012). Knowledge, Attitude and Practice of natural family planning among couples in Kaduna metropolis. Published MSc Thesis, Department of Sociology, Ahmadu Bello University, Zaria, Kaduna State, Nigeria. 146p.
- Akanni, K. A., Adeokun, O. A. and Akintola, J. O. (2012). Rural-Urban Transformation in Nigeria. *The Journal of African Development*. www.jadafea.com 14(2), p.6.
- Anaman, K. A. and Okai, J. O. A. (2016). Extent of Awareness of Birth Control Methods and Their Use by Women in a Peri-Urban Area of Accra, Ghana. *Modern Economy*, 7, 39-54.
- Asekun-Olarinmoye, E. O., Adebmpe, W. O., Bamidele, J. O. Odu, O. O. and Ojefeitimi, E. O. (2013). Barriers to Use of Modern Contraceptives Among Women in Inner City of Oshogbo Metropolis, Osun State, Nigeria. *Dove Tress Journal, International Journal of Women's Health*, 5(3), pp. 655.
- Asiwe, J. B., Nduggo, P. and Mushomi, J. (2013). Socio-Demographic Factors Associated with Contraceptive Use Among Young Women in Comparison With Older Women in Uganda, Working Paper, USAID, ICF International, Calverton, Maryland, USA, p.34.
- Audu, B. M., Yahya, S. J. and Bassi, A. (2006). Knowledge, Attitude and Practice of Natural Family Planning Methods in A Population With Poor Utilization of Modern Contraceptives: *Journal of Obstetrics and Gynaecology*, 26(6): pp.555-560.

- Bongaarts, J., Cleland, J., Townsend, J. W., Bertrand, J. T., and Gupta, M. D. (2012). *Family Planning Programs for the 21st Century: Rationale and Design*. New York, USA: Population Council pp.12-17.
- Channon, A. A., Falkingham, J., and Matthews, Z. (2010). Sexual and Reproductive Health and Poverty Ch.5 in Malarcher S, (ed.), 2010. *Social Determinants of Sexual and Reproductive Health: Informing Future Research and Programme Implementation*. WHO.
- Gaur, D. R., Goel, M. K., and Goel, M. (2008). Contraceptive Practices and Related Factors Among Females in Predominantly Rural Muslim Area of North India. *The Internet Journal of World Health and Societal Politics*, 5(1): 29-36.
- Ijadunola, M. Y., Abiona T. E., Ijadunola, K. T., Afolabi, O. T., Esimai, O. A., Ola-Olorun, F. M. (2010). Male Involvement in Family Planning Decision Making in Ile-Ife, Osun state, Nigeria. *African Journal of Reproductive Health*, 14 (4): p. 45.
- Nettey, O. E. A., Enameh, Y. A., Mahama, E., Sulemana, A., Adjei, G., Gyaase, S., ... Owusu-Agyei, S. (2015). Family Planning Awareness, Perceptions and Practice Among Community Members in the Kintampo Districts of Ghana. *Advances in Reproductive Sciences*, 03(01), pp.1-12.
- Nwachukwu, I., and Obasi, O. O. (2008). Use of Modern Birth Control Methods Among Rural Communities in Imo, State, Nigeria. *African Journal of Reproductive Health*, 12 (1): pp. 101-108.
- Nyengidiki, T. K. and Allagoa, D. O. (2011). Rupture of The Gravid Uterus in a Tertiary Health Facility in The Niger Delta Region, of Nigeria: A5 year Review. *Nigerian Medical Journal*, 52(4), pp. 230-234.
- Olugbenga-Bello, A. I., Abodunrin, O. L., and Adeomi, A. A. (2011). Contraceptive Practices Among Women in Rural Communities in South-Western Nigeria. *Global Journal of Medical Research*, 11(2): 1 – 8.
- Omoare, A. M., Fakoya, E. O. and Oyediran, W. O. (2015). Value Addition of Sweet Potato (*Ipomoea batatas L. Lam*): Impending Factors on Household Food Security and Vitamin A Deficiency (VAD) In Southwest and Northcentral Nigeria. *IOSR Journal of Agriculture and Veterinary Science (IOSR-JAVS)*, Volume 8, Issue 9 Ver. II pp. 06-14
- Opoku, B. and Kwaununu, F. (2011). Knowledge and Practices of Emergency Contraception among Ghanaian Women. *African Journal of Reproductive Health*, 15, 147-152.
- Oye-Adeniran, B. A., Adewole, I. F., Odeyemi, K. A., Ekanem, E. E., and Umoh, A. V. (2005). Contraceptive Prevalence Among Young Women in Nigeria: *Journal of Obstetrics and Gynaecology*, Vol. 25,(2) p.182.
- Oyediran, W. O. (2017). Economic Returns of Improved Melon Shelling Technology on the Well-being of rural women in Niger State, Nigeria. Unpublished PhD Thesis, Department of Agricultural Extension and Rural Development, Federal University of Agriculture, Abeokuta, Nigeria, 266p.
- Oyediran, W. O., Omoare A. M. and Ajagbe, B. O. (2016). Factors affecting sustainability of melon (*egusi*) production in rural farming households of Southwest, Nigeria. *American Journal of Agricultural Research*, 1(1): 1 - 10.
- Oyediran, W. O., Omoare, A. M., Oladoyinbo, O. B., Ajagbe, B. O., and Dick, T. T. (2016). Constraints limiting the effective utilization of low-cost fish processing technologies among women in selected fishing communities of Lagos State, Nigeria. *Fisheries and Aquaculture Journal*, 7:4, 1 – 5.
- Seigh, G., Hussain, R., Bankole, A., and Singh, S. (2007). Women with an Unmet Need for Contraception in Developing Countries and Reasons For Non- Use, Occasional Report, New York: Guttmacher Institute No. 37.
- Senbeto, E., Alene, G. D., Abesto, N. and Yeneneh, H. (2005). Prevalence and Associated Risk Factors of Induce Abortion In North West Ethiopia. *Ethiop. J. Health Dev.*, 19(1):pp.37-44.
- Sodiya, C. I. and Oyediran, W. O. (2014). Contributions of Melon Production to Livelihood Sustainability of Rural Farming Households in Oyo State, Nigeria. *Journal of Biology, Agriculture and Healthcare*, 4(12), pp.8 – 18.
- World Health Organization. (2010). Update on family planning in sub-Saharan Africa. In: *Repositioning Family Planning. Guideline for Advocacy Action*. http://www.who.int/reproductivehealth/topics/family_planning/fp_advocacytool_kit.pdf (accessed 20 September, 2010).