

Effect of Birth Control Measures on Agricultural Production among Women Farmers in Ogun State

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Abstract

The need to promote good reproductive health of women is based on the truism that good health would increase agricultural production. This study therefore assessed the effect of birth control measures on agricultural production among women farmers in Ogun State. Multistage sampling technique was used to select 142 respondents who were rural women farmers for the study. Data were collected through the use of structured interview schedule and were analyzed using descriptive and inferential statistics. The result revealed that the level of use of traditional birth control methods was very low among the respondents. However, injectable contraceptives has relatively high utilization with a mean score of ($\bar{X} = 1.72$). Majority of the respondents (90.8%) strongly agreed that birth control measures improves health of female farmers for improved farming activities. However, about 48.6% of the female farmers were having high level of perceived effects of birth control on their agricultural production while 51.4% were having low level of perceived effects of birth control on their agricultural production. Fear of side effects, taboo/cultural belief and sexual displeasure from contraceptives use were the main constraints identified by women farmers limiting their use of birth control measures. It was therefore recommended that Planned Parenthood Federation of Nigeria (PPFN) should view the social group of female farmers as an important channel through which they can be easily reached and convinced of the use of birth control measures for improved reproductive health and higher agricultural production.

Keywords: Birth control, Agricultural production, Measures, Contraceptives

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I. Introduction

Population explosion in the face of limited resources as posited by Inah *et. al.*, (2014) has necessitated conscious efforts by humans to devise means of living within resource constraints. World Bank, (2010) asserted that agriculture is central to Nigeria's economy with about 42 per cent share in Gross Domestic Product, (GDP) in 2008. This submission was corroborated by the National Bureau of Statistics (2017) that agricultural sector in Nigeria contributed 29.15 per cent to overall GDP in the third quarter of 2017. However, this trend is reflected in general macro-economic growth indicators. This implies that Nigeria's economic status has largely resulted in a substantial increase in the number of the poor. Nevertheless, the impact of recent growth has not been evidently translated into poverty reduction; rather, Nigeria's agricultural production has remained generally low. According to Brownstein (2014), the struggle is now to ensure pareto optimality in resource use—a concept that describes improvement in the welfare of one individual without having to reduce those of the others. One of the choices that humans have to make in the face of depleting common resource is the choice of uncontrollable procreation (high birth rate) with its implications on resource optimality (adequacy) and having to control procreation (birth control) to optimize utility per individual of available resources.

Oladejo *et. al.*, (2011) reported that 40 percent of female farmers regarded farming as their major occupation. Similarly, Arshad *et. al.*, (2010) affirmed that women form the majority of the world's agricultural producers, playing important roles in the agricultural sector. In the same context. Generally, women are rarely connected with agricultural export crops rather they are involved in the production of food crops such as cassava, pepper, melon, and vegetables. In some cases, women participate in small scale animal production including small ruminants, poultry and aquaculture (Sahel, 2014).

The need 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 reproductive 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, opposition from their husbands and communities, misperceptions about side effects, and cost as posited by Bongaarts *et. al.*, (2012).

The importance of birth control practices captured earlier among other considerations prompted the government of Nigeria to consider population control as an aspect of the National Policy on Population for Development, Unity, Progress and Self-reliance". This was later reviewed to improve the standards of living and the quality of life of the people especially through prevention of premature death and illness among high risk groups of mothers and children and to achieve an effective child spacing through reduction of birth rates by voluntary fertility regulation methods that are compatible with the attainment of economic and social goals of the nation while achieving a more even distribution of population between urban and rural areas. (Okemakinde *et. al.*,2013).

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 contracting Sexually Transmitted Diseases (STDs), high birth and high mortality rates. Utilisation rather than low awareness is suspected for this anomaly. To provide empirical information that could help in understanding the remote cause of seeming ineffectiveness of birth control awareness creation, this study intends to assess perceived effects of birth control measures on agricultural production.

Since the adoption and use of birth control measures is dependent on women, their perception of the birth control programme is very important to ensuring not just adoption but compliance with the programme dictates. In other words, if perception of female farmers on birth control measures is known, effort could be made to design birth control campaign in such a way that it addresses possible fears that could stall adoption. Hence, improving women active participation in the agricultural value chain would lead to economic empowerment of female farmers.

The objectives of this study therefore are to

- i. determine the female farmers' level of use of various birth control measures in the study area;
- ii. analyse women farmers' perception on the effect of birth control measures on agricultural production in the study area
- iii. identify constraints militating against the use of birth control measures among female farmers in the study area

II. Methodology

The study was conducted in Ogun State, Nigeria. The State covers a land area of 16085km². It lies between longitude 2^o45'E and 3^o55'E and latitude 7^o01'N and 7^o18'N. The natural vegetation ranges from fresh water swamp with mangrove forest in the South East and diverse forest communities to the woody Guinea Savanah in the North West. Generally, rain forest is still the largest ecological belt running through the centre of the State to the West. The rainy season starts around the middle of March and continues until the late October. The dry season commences in November and lasts until February. Humidity is between 85 percent and 95 percent. The study population comprised female farmers in Ogun State. Multistage sampling technique was used to select 142 respondents; primary data were used for the study and were collected through the use of structured interview schedule designed to elicit information from the selected respondents with respect to study objectives. The instrument for data collection was subjected to face and content validity, experts in Agricultural Extension and Rural Sociology and Planned-parenthood organization scrutinized the instrument and was considered reliable with a reliability coefficient ranging from 0.79 to 0.89. Alpha level of 0.75 was obtained.

III. Results And Discussions

Table 1 Distribution of respondents based on the use of birth control measures

Types of Birth Control Measures	Level of Use			Mean	Std. Dev.
	Always Used	Sometimes Used	Never Used		
Ogun (n = 142)					
Traditional Method					
Use of Herbs (powdered)	02(1.4)	04(2.8)	136(95.8)	1.06	0.28
Amulet (ifunpa)	0(0.0)	0(0.0)	142(100.0)	1.00	0.00
Waist Band (igbadi)	02(1.4)	04(2.8)	136(95.8)	1.06	0.29
Incision (gbere)	0(0.0)	04(2.8)	138(97.2)	1.03	0.17
Concoction (aseje)	0(0.0)	02(1.4)	140(98.6)	1.03	0.24
Concocted ring(oruksa ere)	10(7.0)	0(0.0)	132(93.0)	1.14	0.51
Hung Bottled concoction(agbeko)	0(0.0)	0(0.0)	142(100.0)	1.00	0.00
Natural Method					
Basal Body temperature (BBT)	02(1.4)	07(4.9)	133(93.7)	1.08	0.32

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Cervical Mucus Membrane	0(0.0)	24(16.9)	118(83.1)	1.17	0.37
Safe Period (rhythm method)	29(20.4)	45(31.7)	68(47.9)	1.73	0.78
Breast Feeding (amenorrhea method)	0(0.0)	20(14.1)	122(85.9)	1.14	0.35
Withdrawal method (coitus interruption)	22(15.5)	42(29.6)	78(54.9)	1.61	0.74
Modern Methods					
Hormonal					
Combined Oral Contraceptives e.g ordinary pills, emergency contraceptives.	28(19.7)	15(10.6)	99(69.7)	1.50	0.81
Injectable Contraceptives	45(31.7)	13(9.2)	84(59.2)	1.72	0.92
Contraceptives implants, (implanon)	18(12.7)	04(2.8)	120(84.5)	1.28	0.68
Contraceptives Ring (nuva ring)	11(7.7)	02(1.4)	129(90.8)	1.17	0.55
Skin Patch	02(1.4)	02(1.4)	138(97.2)	1.04	0.26
Intra-uterine contraceptives (IUCDs)					
Copper T shaped IUD (paraGard)	04(2.8)	02(1.4)	136(95.8)	1.07	0.35
Hormonal IUD (mirena)	0(0.0)	0(0.0)	142(100.0)	1.00	0.00
Voluntary surgical contraception					
Vasectomy (Male sterilization)	0(0.0)	0(0.0)	142(100.0)	1.00	0.00
Tubal Ligation (female sterilization)	0(0.0)	0(0.0)	142(100.0)	1.00	0.00
Tubal Implants	02(1.4)	09(6.3)	131(92.3)	1.09	0.33
Barrier Method of contraception					
Condoms (male and female)	51(35.9)	02(1.4)	89(62.7)	1.73	0.96
Cervical caps	04(2.8)	09(6.3)	129(90.8)	1.12	0.40
Diaphragms	02(1.4)	02(1.4)	138(97.2)	1.04	0.26
Spermicides (foam jelly, foaming tab, sponge)	0(0.0)	02(1.4)	140(98.6)	1.01	0.12

Field survey 2019

Table 1 revealed that more than ninety percent of the respondents never used traditional methods like herbs (95.8%), amulet (100%),waist band (95.8%), incision (97.2%),concoction(98.6%),concocted ring(93%),and hung bottled concoction (100%).The mean scores for utilization of various traditional methods was ($\bar{X} = 1.20$) which is an indication that level of use of traditional birth control methods was very low among the respondents. Many female farmers are reportedly reluctant to accept any traditional method (Gaur et. al., 2008). Chelsea et. al., (2016) also, reported inefficacy of traditional birth control methods which made the rural women not to rely on its use.

Furthermore, majority of the respondents never used Basal Body temperature (93.7%), Cervical mucus Membrane (83.1%), and Breast Feeding (85.9%). However, 47.9%used Safe period while 54.9% used withdrawal method and they have relatively high utilization mean scores of ($\bar{X} = 1.73$) and ($\bar{X} = 1.61$) respectively.

Also 69.7% of the respondents never used Combined Oral Contraceptives; From the results only Injectable Contraceptives has relatively high utilization mean score of ($\bar{X} = 1.72$). This revealed that injectable contraceptives were the common measures of modern contraceptives used in Ogun State. Olivia *et.al.*,(2014) attributed the women preference for injectable contraceptive due to its relatively long duration of action of at least 2 months.

Table 2: Perception of female farmers on effects of birth control measures on agricultural production in Ogun State (n = 142)

Perception Statements	SD	D	U	A	SA	Mean	Std. Dev.	Rank
Use of birth control measures improves health of female farmers for improved farming activities	0(0.0)	0(0.0)	0(0.0)	13(9.2)	129(90.8)	4.91	0.29	1 st
*Use of birth control measures does not guarantee women's healthy living therefore not contributing to sustained agricultural production	27(19.0)	111(78.2)	0(0.0)	4(2.8)	0(0.0)	4.13	0.54	13 th
*Farm production is not dependent on the use of birth control measures but on other factors that could be outside the reach of the farmers e.g. climate change	49(34.5)	42(29.6)	2(1.4)	17(12.0)	4(2.8)	3.68	1.29	15 th
Use of birth control measures Improves farm labour production and agricultural output	0(0.0)	2(1.4)	0(0.0)	58(40.8)	82(57.7)	4.55	0.58	7 th
Use of birth control measures reduces incidence of child and maternal mortality	0(0.0)	0(0.0)	0(0.0)	68(47.9)	74(52.1)	4.52	0.50	8 th

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and thus increase family farm labour supply								
*Child and maternal mortality is as a result of destiny and has nothing to do with birth control measures. Hence no effect on agricultural production	52(36.6)	75(52.8)	2(1.4)	9(6.3)	4(2.8)	4.14	0.93	12 th
Use of birth control helps in increasing productive time which is wasted during pregnancy	0(0.0)	0(0.0)	0(0.0)	45(31.7)	97(68.3)	4.68	0.47	5 th
*I do not believe that contraceptive use has a more comfortable life attached to improved agricultural production	54(38.0)	64(45.1)	12(8.5)	8(5.6)	4(2.8)	4.10	0.97	14 th
Farmer couple are committed to use of birth control as a boost to agricultural production	0(0.0)	0(0.0)	0(0.0)	18(12.7)	124(87.3)	4.87	0.33	2 nd
Though there are other factors contributing to improved farm output, the use of birth control is outstanding.	0(0.0)	0(0.0)	0(0.0)	33(23.2)	109(76.8)	4.77	0.42	4 th
My extended family believes that contraceptive use is beneficial as part of measures to improve agricultural production.	0(0.0)	0(0.0)	0(0.0)	48(33.8)	94(66.2)	4.66	0.47	6 th
My community accepts that there are benefits in contraceptive use as it enhances women participation in farm activities.	4(2.8)	0(0.0)	0(0.0)	65(45.8)	73(51.4)	4.43	0.77	9 th
*I do not see the number of children I have affecting farm output	53(37.3)	71(50.0)	6(4.2)	12(8.5)	0(0.0)	4.16	0.86	11 th
*I am afraid to use contraceptives as it may have a negative effect on my health thereby limiting my involvement in farming activities.	67(47.2)	61(43.0)	2(1.4)	12(8.5)	0(0.0)	4.29	0.86	10 th
I am comfortable with the use of birth control measures since its regular use assists in increased farming involvement.	0(0.0)	0(0.0)	0(0.0)	30(21.1)	112(78.9)	4.79	0.41	3 rd
My religion's belief support contraceptive use as a means for improved farming activities	37(26.1)	59(41.5)	13(9.2)	25(17.6)	8(5.6)	2.63	1.35	16 th

Source: Field Survey, 2019; Std. Dev. = standard deviation; * negative statement

Table 2 revealed that majority of the respondents 90.8% strongly agreed to the positive statements that use of birth control measures improves health of female farmers for improved farming activities, and 68.3% of the respondents strongly agreed that use of birth control measures leads to increasing productive time which is wasted during pregnancy, Likewise, 52.1 % and 57.7 % strongly agreed that it reduces incidence of child and maternal mortality and thus increase family farm labour supply and boost to agricultural production respectively. Though majority of the respondents strongly agreed to the statement that birth control measures improves health of female farmers for improved farming activities the female farmers stated that pregnancy and raising children are strenuous, cause pains and weakness of the body system which inhibit women's agricultural production but with birth control measures they are confident, healthy and agile, work without any hindrance, and maximize production output and profit. Birth control measures can reduce the number of deaths among women by preventing unintended pregnancies, which account for about 30 % of all births in sub-Saharan Africa (WHO, 2010).

Table 3: Distribution based on constraints militating against contraceptive use

Constraints	Serious Constraint	Minor Constraint	Not a Constraint	Mean	Rank
Indiscipline in following prescriptions	104(73.2)	24(16.9)	14(9.9)	2.63	5 th
Indiscipline in sexual relationship	60(42.3)	69(48.6)	13(9.2)	2.33	7 th
Inadequate availability of contraceptives	37(26.1)	78(54.9)	27(19.0)	2.07	9 th
Non-qualified personnel recommending birth control measures	113(79.6)	21(14.8)	08(5.6)	2.76	4 th
Spouse or family pressure	37(26.1)	43(30.3)	62(43.7)	1.82	16 th
Lack of funds to purchase contraceptives	23(16.2)	41(28.9)	78(54.9)	1.61	18 th
Illiteracy	43(30.3)	64(45.1)	35(24.6)	2.05	11 th
Fear of side effects	127(89.4)	14(9.9)	01(0.7)	2.89	1 st
Taboo/cultural belief	112(78.9)	27(19.0)	03(2.1)	2.77	2 nd
Sexual displeasure from contraceptive use	105(73.9)	32(22.5)	05(3.5)	2.70	3 rd
Sexually inactive	84(59.2)	51(35.9)	07(4.9)	2.54	6 th
Lack of awareness of the benefits	27(19.0)	36(25.4)	79(55.6)	1.63	17 th

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Fear of infidelity among women	28(19.7)	30(21.1)	84(59.2)	1.61	18 th
Religious belief about its use	41(28.9)	97(68.3)	04(2.8)	2.26	8 th
Fear of Abortion when used	26(18.3)	100(70.4)	16(11.3)	2.06	10 th
Social stigmatization	12(8.5)	122(85.9)	08(5.6)	2.02	12 th
Lack of trust from Health Workers	10(7.0)	122(86.0)	10(7.0)	2.00	13 th
Lack of access to contraceptives	10(7.0)	122(86.0)	10(7.0)	2.00	13 th
High cost of purchase	10(7.0)	122(86.0)	10(7.0)	2.00	13 th

Source: Field survey, 2019

Result in Table 3 shows that fear of side effect (89.4%), taboo/cultural belief (78.9%), sexual displeasure from contraceptive use (73.9%), and non-qualified personnel recommending birth control measures (79.6%) were serious constraints in Ogun State and were ranked according to the mean scores as 1st, 2nd, 3rd, and 4th respectively. Results further revealed that indiscipline in following prescriptions (73.2%), sexually inactive (59.2%), indiscipline in sexual relationship (42.3%), and religious belief about its use (28.9%) constituted serious constraints and were ranked 5th, 6th, 7th, and 8th respectively. But inadequate availability of contraceptives (54.9%), fear of abortion when used (70.4%), illiteracy (45.1%), and social stigmatization (85.9%) were regarded as minor constraints and ranked according to the mean scores as 9th, 10th, 11th, and 12th respectively. High cost of purchase (7.0%), spouse or family pressure (43.7%), and lack of funds to purchase contraceptives (54.9%) were however considered not a constraint to contraceptive use.

IV. Conclusion And Recommendations

The study assessed the perceived effects of birth control measures on agricultural production among female farmers in Ogun state. Implanon, injectable contraceptives and combined oral contraceptives were predominant the birth control measures used in the study area. More so, the female farmers' perception of the effects of birth control measures on their agricultural production is low. The fear of side effects, taboo/cultural belief and sexual displeasure from contraceptives use were the most serious constraints identified as major limitation to contraceptives use among rural women in the state. It is therefore recommended that Government should promote and sustain existing strategies of reaching female farmers through Healthcare Providers by training of health workers on new development on birth control measures. Planned Parenthood Federation of Nigeria (PPFN) should view the social group of female farmers as an important channel through which they can be easily reached and convinced of the use of birth control measures for improved reproductive health and higher agricultural production. Extension agents and healthcare providers in collaboration with Planned Parenthood Federation of Nigeria (PPFN) should liaise with government to strategize on sensitizing the female farmers on the significance of use of birth control measures on their economic empowerment.

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