

## Awareness and Utilization of Modern Contraceptives among Women of Reproductive Age in Rural Community, Osun State, South-West, Nigeria

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### Abstract

**Background:** Utilization of modern contraceptives is an important public health action to prevent unplanned, pregnancy unsafe abortion and its complication thereby reducing maternal and child morbidity and mortality rate. Utilization of modern contraceptives can effectively control population explosion especially in developing countries. However, low utilization has been reported among women of reproductive age in rural community. This study thus examined the awareness and utilization of modern contraceptives among women of reproductive age in rural community.

**Methods:** This study adopted a descriptive research survey design. 206 respondents were selected using purposive sampling. A self-developed structured questionnaire was used to collect data. Data were analysed using the Statistical Package for the Social Sciences (SPSS) version 21. Descriptive statistics of tables and percentages were used to analyze data collected and hypothesis was tested using chi-square at 0.05 level of significance.

**Result:** The finding showed high level of awareness (99.5%) of modern contraceptives among women of reproductive age in rural community but low current utilization (21.4%) of modern contraceptives was recorded among rural women of reproductive age and the most commonly utilized method was injectable (10.7%) followed by oral pills (5.8%). Hypothesis result shows that there was no significant relationship between awareness and utilization of modern contraceptives ( $x^2 = 0.357$ ;  $df = 1$ ;  $p = 0.275$ ).

**Conclusion:** Modern contraceptives utilization was found to be low, creating awareness about benefits of modern contraceptives and effective counseling would improve utilization of modern contraceptives among rural women of reproductive age.

**Keywords:** Awareness, Modern Contraceptives, Rural Community, Utilization, Women of Reproductive Age

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### I. Introduction

Unplanned pregnancy is the most common public health issue with high tendency among sexually active women<sup>1</sup>. Globally, an estimate of 40% unplanned pregnancy was reported among women of reproductive age<sup>2</sup>. Modern contraceptives remains the most cost-effective methods of averting unplanned pregnancies<sup>3,4</sup>. However, in spite of the wide range of effective choice of modern contraceptives available to women of reproductive age alongside its benefits, global statistics suggests low utilization with growing rate of unplanned pregnancy<sup>4</sup>. Research evidence in Africa consistently report low prevalence rate of modern contraceptives utilization which increase the incidence of unplanned pregnancy, unsafe abortion and increased maternal mortality<sup>4,5</sup>.

According to<sup>6</sup>, increased maternal and child morbidity and mortality rate have been a long term problems facing most of the developing countries including Nigeria which is attributed to low utilization of modern contraceptives. Federal Ministry of Health, based on 2013 National Population Survey, reported that Nigeria recorded the overall national maternal death rate of 545/100,000 live birth variations in different state, region, urban and rural settings<sup>7</sup>. United Nation Population Fund<sup>8</sup> also reported that about 287,000 women of reproductive age died annually as a result of pregnancy and birth related complications, most especially from developing countries which would have been averted through effective utilization of modern contraceptive services.

Contraceptive prevalence in Nigeria is one of the lowest in the world. The National Demographic Health Survey (2008) recorded a prevalence of 13%, and 85% of Nigerian women and 95% of Nigerian men reported having knowledge of a contraceptive method, only 15% of currently married women utilized a contraceptive method, with an unmet need for family planning of 16% among married women<sup>7</sup>. Among married women, 34.3% have an unmet need for family planning, with a higher unmet need in rural compared to urban areas (37% and 23%, respectively)<sup>8</sup>. In 2011, only 30% of currently married women were using contraceptives<sup>8</sup> compared to a global average of 63% (United Nations Population Fund, 2015). Among married women with an unmet need for family planning, 13.5% are in need of limiting birth and 20.8% are in need of birth spacing<sup>8</sup>.

A similar study found that 61.3% of respondents in a rural community were currently using one form of family planning method or another<sup>9</sup>. Globally, Nigeria has the second highest maternal mortality (after India) and this has been attributed to illegal abortions and pregnancy related complications which are directly or indirectly related to low utilization of modern contraceptives<sup>10</sup>. However, Family planning could reduce maternal mortality by 20% or more and infants are twice more likely to survive if the previous birth interval is at least 2 years.

Access to modern contraceptive services can bring about a drop in unintended pregnancies by about 77%; which can lead to a corresponding reduction in the number of women requiring medical care from complications of unsafe abortions<sup>8</sup>. By this, it confers important health benefits to individuals, families, and the nation at large which contributes toward the control of population growth and the achievement of the MDGs<sup>6</sup>.<sup>11</sup> documented that the total fertility rate in some Nigerian rural communities is higher than that in urban communities (6.2 versus 4.7), a situation that has been made worse by low contraceptive prevalence in rural communities. Most women's contraceptive knowledge and utilization are influenced by several factors which make it extremely difficult or impossible for these women to take decisions concerning their health including choice of family planning<sup>11,12</sup>. It is upon this background that this study assessed the awareness and utilization of modern contraceptives among women of reproductive age in rural community, Osun State. To:

1. Assess the level of awareness of modern contraceptives among rural women of reproductive age;
2. Assess utilization of modern contraceptive utilization among rural women of reproductive age;
3. Determine the relationship between awareness and utilization of modern contraceptives among rural women of reproductive age.

## **II. Material and Methods**

This study used descriptive research survey design. Purposive sampling technique was used to select women of reproductive age 15-49 years from Health Facility in selected Community. A total number of 206 women of reproductive age were purposively selected for the study.

**Study design:** Descriptive Research Survey Design

**Study location:** This was in Ilie Rural Community Health Facility

**Study Duration:** February 2019 to July 2019

**Sample Size:** 206 Respondents

**Sample Size Calculation:** Sample size was determined using Kish Formular. 187 was actually obtained, 10% attrition rate was added to make 206

**Subject and Selection Method:** Purposive Sampling Technique was used to select Women of Reproductive Age 15-49 years from selected Health Facility

**Instrumentation:** A self-developed structured questionnaire was consisting of three (3) sections was used to collect data.

**Section A:** This section focused on Demographic Characteristics (such as age, educational level, marital status, number of children alive, and sex of children)

**Section B:** This elicited information on awareness of modern contraceptives, it is a 15 items scale using "Yes" and "No" format yes was graded 1 and No was graded 0 lowest score for respondent is 0 while highest score was 15. 0-7 was graded poor awareness; 8-15 was good awareness.

**Section C:** This elicited information on level of Utilization of Modern Contraceptives.

### **Inclusion criteria:**

1. Willingness to participate after gaining verbal consent
2. Woman Reproductive Age.
3. Women of age 15- 49 years in selected Community

### **Exclusion criteria:**

Exclusion criteria include women of reproductive age that were not present at the time of collecting data and those that were not willing to participate.

**Procedure methodology**

Ethical approval for the study was obtained from Babcock University Health Research Ethics Committee (BUHREC) with approval reference number BUHREC025/19 on January 30<sup>th</sup>, 2019. Babcock University Ref. number NUREC/24/01/2018. The researchers had obligation to the subjects by getting their informed consent consistent with the principle of individual autonomy. Their voluntary participation, anonymity, privacy and confidentiality when collecting the data was guaranteed. Their right to participate and not to participate was also respected. Data was collected over a period of 8 weeks.

**Statistical analysis**

Firstly, the entire structured questionnaires were checked for completeness. Data generated were coded and entered into Epi data; the statistical analysis program used for data analysis purpose was (Statistical package for service solution (SPSS), version 21. Descriptive statistics such as frequency counts, percentage, tables, mean score and standard deviation were used to analyze demographic data of respondents and research objectives. Inferential Statistics of Chi-square, was used to test the hypothesis at 0.05 level of significance

**III. Result**

Table no 1 shows that majority 84(41.0%) of the respondents were young adult, aged 25 to 29 years with mean age of 25 and  $\pm 1.9$ , above two third 151(73.3%) of the respondents were Muslims and almost all (92.3%) the respondents were Yoruba. The Table also shows that nearly all the respondents 201(97%) were married, more than half 118(57.3%) were from polygamous family, majority 88(42.7%) had male and female children and highest proportion of the respondents 86(41.7%) had about 1-2 children.

**Table no 1: Socio-Demographic characteristics of Respondents**

Variables	Values	Frequency (N=206)	Percentage (%=100%)
<b>Age in years</b> (mean= 25 years SD = $\pm 1.9$ )	15-19 years	30	14.5
	20-24 years	62	30.0
	25-29 years	84	41.0
	30-34 years	20	9.7
	35-39 years	10	4.8
<b>Religion</b>	Christianity	52	25.2
	Islam	151	73.3
	Traditional	3	1.5
<b>Ethnicity</b>	Yoruba	190	92.3
	Others	16	7.7
<b>Marital status</b>	Single	5	3.0
	Married	201	97.0
<b>Type of family</b>	Polygamous	118	57.3
	Monogamous	84	40.7
	Single parent	4	2.0
<b>Sex of children</b>	Male and female	47	42.7
	Male only	71	34.5
	Female only	88	22.8
<b>Number of children alive</b>	None	5	2.5
	1-2 children	86	41.7
	3-4 children	76	36.9
	5 children and above	39	18.9

Table no 2 reveals a very high level of awareness as almost all 205 (99.5%) the respondents reported being aware of modern contraceptives and as high as 175 (85%) has good knowledge about benefit of modern contraceptives. Majority 152 (73.8%) were aware of modern contraceptives through health workers, 145 (70.4%) heard it in Government health institution, while 129(62.6%) through mass media. The most widely known method of modern contraceptives were injectable 152 (73.8%), oral pills 151 (73.3%), intrauterine devices 131 (63.3%) and implants 124 (60.2%).

**Table no 2: Awareness of Modern Contraceptives**

Variables	Frequency	Percent (%)
<b>Awareness of modern contraceptives ( n=206 )</b>		
Good	205	99.5
Poor	1	0.5
<b>Total</b>	<b>206</b>	<b>100</b>
<b>Knowledge about benefit of modern contraceptives (n=206)</b>		
Good knowledge	175	85
Poor knowledge	31	15
<b>Total</b>	<b>206</b>	<b>100</b>
<b>Medium of awareness of modern contraceptives</b>		
Health workers	152	73.8
Government health institution	145	70.4
Mass media	129	62.6
Religious centres	27	13.1
<b>Types of modern contraceptives known</b>		
Oral pills	151	73.3
Injectable	152	73.8
IUCD	131	63.3
Implants	124	60.2
Condom	98	47.6
Tubal ligation	68	33.0
Spermicidal gel	1	0.4

Table no 3 reveals that 63(30.6%) of the respondents have utilized modern contraceptives in the last 6 months and the most widely utilized was injectable 50(24.3%) while 44(21.4%) are currently utilizing modern contraceptives and injectable 22(10.7%) were mostly utilized. The finding also reveals that modern contraceptives were being utilized for the purpose of preventing unplanned pregnancy 63(30.6%). Majority 21(10.1) of the respondents have been utilizing modern contraceptives for the past 6 months and 30(14.5%) were satisfied with the method being used.

**Table no 3: Utilization of Modern Contraceptives among Respondents**

Variables	F	% (100%)
<b>Modern contraceptives utilization in the last 6 months (N=206)</b>		
Utilized	63	30.6
Never utilized	143	69.4
<b>Total</b>	<b>206</b>	<b>100</b>
<b>Reasons for utilizing modern contraceptives</b>		
To space the birth interval	63	30.6
To have sex without having children	60	29.1
To promote health of born child	50	19.4
To prevent unplanned pregnancy and sexually transmitted diseases	63	30.6
To stop having children	30	14.6
<b>Types of modern contraceptives ever utilized</b>		
Oral pills	22	10.7
Injectable	50	24.3
Implants	4	1.9
IUCD	10	4.9
Condom	16	7.8
<b>Current utilization of modern contraceptive methods (N=206)</b>		
Currently utilizing	44	21.4
No longer utilizing	38	18.4
<b>Types of modern contraceptives currently utilized</b>		
Oral pills	12	5.8
Injectable	22	10.7
Implants	3	1.4
IUCD	3	1.4
Condom	4	1.9
<b>Duration of use by current users</b>		
Less than 6 months	21	10.1

6-12 months	20	9.8
Over 12 months	3	1.4
<b>Satisfaction with methods being used</b>		
Satisfied	30	14.5
Not satisfied	14	6.7

Table no 4 showed the Chi-Square test that was used to establish the significant relationship between awareness and utilization of modern contraceptives. From the result there was no statistically significant relationship between respondent level of awareness and utilization of modern contraceptives ( $\chi^2 = 0.357$ ,  $df = 1$ ,  $p > 0.05$ ) with highest number 151(73.3%) of rural women of reproductive age not utilizing modern contraceptives despite their high level of awareness 205(99.5%).

**Table no 4: Hypothesis**

Awareness of Modern Contraceptives	Utilization of Modern Contraceptives		Chi-Square $X^2$	Df	P value
	Utilized	Never Utilized			
Good Awareness	54(26.2%)	151(73.3%)	0.357	1	0.275
Poor Awareness	0(0%)	1(0.5%)			
Total	54(26.2%)	152(73.8%)			

#### IV. Discussion

Finding from the study shows that almost all the women of reproductive age in rural community are aware of modern contraceptives and greater number of them had good knowledge about the benefits of modern contraceptives. Also majority of women of reproductive age in rural community heard about modern contraceptives through Health Workers in Government Health Institution and Mass Media. This might be due to advocacy and comprehensive community mobilization for modern contraceptives, dissemination of family planning information by health workers during antenatal and infant welfare clinics at primary health centres, expansion of modern contraceptive methods by health workers. This findings is supported by<sup>13</sup> that 84.6% of married women of reproductive age have heard of at least one method and also stated that sources of information about modern contraceptive include televisions, communities health agencies, religious organizations, seminars, health talks and even social medias.<sup>14,15</sup> also indicated that sources of information on modern contraceptives include Family Planning campaign, antenatal care health personnel and program planners who targeted only women, health centres, villages' health team and health educators. Moreso, the study suggested that modern contraceptives were well know and popular among rural women of reproductive age, similar to other studies, injectable was largely known by the respondents followed by oral pills, intrauterine contraceptive device and implants.

Findings from the study shows that one-third 63(30.6%) of the respondents had utilized modern contraceptives in the last six months and the most widely used method was injectable 50(24.3%) while less than one-fourth 44(21.3%) of the respondents are currently utilizing modern contraceptives with injectable methods 22(10.7%). This study shows low utilization of modern contraceptives among rural respondents. This result is in tandem with the study conducted by<sup>16</sup> which shows modern contraceptive utilization of 31.7%. This finding is also supported by the report of<sup>13</sup> that contraceptives utilization was still very low in rural community where only 23.7% of married women had ever used one despite their high fertility rate and high level of awareness. <sup>17</sup>in study conducted in a community also reported good awareness but low utilization of modern contraceptives as only 25.4% were currently on a method despite their sexual activities. Similar low utilization was also documented by<sup>18</sup> with current modern utilization rate of 25.4%.

The above result is slightly different from the findings of<sup>19</sup> who reported modern contraceptive utilization 56% among women of reproductive age in Southern Nigeria with most commonly used method being oral pills, injectable and IUCD. However, currently in Nigeria, modern contraceptives services are offered at all levels of health care at a subsidized rate most especially in Primary Health Centre located in almost all the community, yet the utilization is still being reported by this study to be low with current utilization rate of 21.4% among women of reproductive age in rural community.

#### Discussion of the Hypothesis

The result revealed that there is no significant relationship between awareness and utilization of modern contraceptives. This showed that good awareness about modern contraceptives does not corroborate with the utilization or translate to high utilization of modern contraceptives among women of reproductive age in rural community. The findings support previous study by<sup>4</sup> that although the awareness of family planning services among community members could be high, it does not necessarily increase the rate of modern contraceptives utilization. However, this study slightly different from the report of<sup>20</sup> that knowledge about benefit of modern contraceptives methods were important factors for utilization of modern contraceptives

because women who were knowledgeable about modern contraceptives are more likely to utilize them than non-knowledgeable ones, in other words, lack of knowledge about the importance and benefit of modern contraceptives has great influence on utilization of modern contraceptives services.

## V. Conclusion

There was high level of awareness about modern contraceptives and its benefit. The most widely known method of modern contraceptives by women of reproductive age are oral pills, injectable, intrauterine contraceptive device, implants and barrier methods. Utilization of modern contraceptives was very low among women of reproductive age in rural community. The most commonly utilized methods of modern contraceptives were injectable and oral pills.

## VI. Recommendation

Based on the finding from the study these are recommended;

- Health education and counseling on modern contraceptives utilization should be intensified in the community health centres during antenatal and infant welfare clinics
- Community health care personnel should ensure Community enlightenment programme to re-create awareness on utilization of modern contraceptive methods among rural women of reproductive age.
- Different Medias such as bill board, radio jingles, and posters should be used to dispel taboos, myth, and misconception about modern contraceptives to ensure effective utilization of the services.

### Compliance with ethical standard

**Conflict of interest:** (Nil)

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