

KNOWLEDGE AND UTILIZATION OF FAMILY PLANNING METHODS BY WOMEN
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ABSTRACT

Background: Family Planning (FP) contribute to reductions in fertility, unwanted pregnancies, and maternal death. This study was carried out to assess the knowledge and utilization of FP methods by women in Dobi Community Gwagwalada Abuja. **Methodology:** A cross-sectional study of women of reproductive age (15-49) in Dobi. Data on socio-demographic characteristics, knowledge and utilization of FP methods were collected from the 217 subjects selected by multi-stage sampling technique. Data was analyzed on SPSS version 23 and presented in tables and figures. Chi-square test of significance was applied and p -value set at ≤ 0.05 . **Results:** Findings showed that, 65 (31.1%) of the respondents were aged 16-20 years, 145 (69.4%) were married and 43 (20.6%) had no formal education. Seventy two (72.7%) had good knowledge of family planning methods; the commonest source of information was clinic 134 (64.1%). The most commonly known FP were male condom 167 (79.9%) and injectable 158 (75.6%). A total of 55 (26.3%) respondents used a FP method; the commonest were injectable 42 (20.0%) and implant. Fear of contraceptive side effects 152 (72.8%) and desire for more children 121 (57.9%) were the most frequently given reason for non-use of FP. Age group of respondents. Educational level and source of information were all significantly associated with level of knowledge and utilization of FP methods. **Conclusion:** Knowledge of Family Planning Methods was high among the women in this study, yet their utilization was poor. Adequate health education, guidance and counselling should be carried out by health workers to dispel fears and encourage higher contraceptive use among women of child bearing age.

INTRODUCTION

Family planning (FP) has been defined in different ways in literature, but essentially it implies enabling individuals and couples to attain the desired number, spacing and timing of their children, through the use of modern or traditional (also called natural) contraceptive methods.^[1] Family planning methods (contraceptives) help individuals or couples to avoid unwanted pregnancies, regulate the intervals between pregnancies, control the time of birth in relation to the age of the parents and determine the number of children in the family.^[2]

Use of FP methods can contribute to a substantial reduction in fertility and reduce the proportion of unwanted pregnancies, as well as maternal deaths that would otherwise occur in the absence of contraception.^[3] Although efforts to expand and promote the use of family planning services in sub-Saharan Africa have received recent international attention, the unmet need for modern family planning methods continues to remain high.^[4,5] Fear of contraceptive side effects and associated treatment costs, cultural barriers and low male

involvement continue to hamper effective use of FP services in most countries.^[6]

Lack of knowledge of where to obtain FP methods^[7] and lack of information on what women consider to be trusted sources of FP information and services, are key barriers that affect access to, and utilization of FP methods in most sub-Saharan African countries.^[7,8] This calls for interventions that can simultaneously improve women's knowledge of FP methods and improve uptake of such services by utilizing sources that they trust most. However, despite prior research on the uptake of contraceptive services in sub-Saharan Africa,^[9,10] there is still limited research on the extent to which women are aware of specific methods of family planning; and if they do, where they obtain this information from. There is virtually no literature on what women consider to be the most trusted sources of FP information and services, yet knowledge of such sources is important for targeted FP promotion.^[11] This presents a missed opportunity for full-scale expansion of FP programs and calls for a need to document and understand not only whether women have correct knowledge of FP methods, but also whether

they know where to obtain the methods from, and whether they trust those sources.

The methods of modern contraceptives available at the regional and national levels include: pills, intrauterine contraceptive device, injectable, implants, male condom, female condom, male and female sterilization, diaphragm, foam/jelly, lactational amenorrhea method (LAM) and emergency contraception.^[12]

Even though it has long been established that adequate knowledge and utilization of family planning methods is fundamental to reducing MMR and NM, little is known about the current level of knowledge and utilization of family planning methods by women in Dobi community of Gwagwalada FCT-Abuja. It is with this mindset that this study is designed.

The findings of this study will provide information on the knowledge and utilization of family planning methods by women in Dobi community in Gwagwalada FCT Abuja, which will guide policymakers to design appropriate interventions. It can also be used to educate the communities and the general public, as well as serve as a reference material for future research.

The objectives are: to determine the knowledge and identify the type of contraceptive methods known and utilized by women in the study area; to identify the respondents sources of information on FP; and to determine the factors affecting the utilization of FP methods among women in the study area.

$$n = \frac{1.96^2 \times 0.151 \times 0.85}{(0.05)^2} = \frac{3.8416 \times 0.151 \times 0.85}{0.0025} = \frac{0.49299235}{0.0025} = 197.2$$

At 10% (0.1) for non-response, $0.1 \times 197.2 = 19.72$; $= 197.2 + 19.72 = 216.92 = 217$

Inclusion Criteria: Women of reproductive age (15-49) who currently reside in Dobi.

Sampling Technique: Multistage sampling technique was used, the first stage involved selection of the Federal Capital Territory (FCT) Abuja from a sampling frame of 36 states using simple random sampling method by balloting without replacement. Subsequent stages involved the selection of Gwagwalada Area Council from 6 clusters using the Area Councils, Selection of Dobi ward from the 10 wards of Gwagwalada Area Council, Selection of Dobi Community from the 11 Communities of Dobi ward, all above were done using simple random sampling method by balloting without replacement. Subjects who met the criteria and were willing to participate in the study were randomly selected and the questionnaire administered.

METHODOLOGY

Study Area: This study was carried out in Dobi, one of the ten wards of Gwagwalada Area Council of the Federal Capital Territory Abuja. Gwagwalada is located at latitude 8° 56' 29" N and longitude 7° 05' 31" E^[13] with a land area of 1,043km².^[13] The major religions are Islam and Christianity, the climate is tropical. The rainy season extends from the month of March to October, while the dry season spans from November to February. The population of Dobi Community is not known, has a diverse multi ethnic background comprising Hausas, Fulanis, Igbos, Yorubas, Bassas, Gades, etc. The natives are mainly of the Gbagyi ethnicity and engage in subsistence farming. It has a Primary School, Junior Secondary School, Senior Secondary School, Primary Health Care Centre, and some Mosques and Churches. Other basic amenities such as pipe-borne water, roads and electricity supply are also present in the Community. Malaria is endemic and of major public health concern along with other communicable diseases.

Study population: This study population was women of reproductive age (15-49) years, resident in Dobi Community.

Study Design: A descriptive, cross-sectional, questionnaire-based design was adopted for this study, which was carried out between March and April 2018.

Sample Size Estimation: The sample size was calculated using the Leslie-Kish formula, $n = Z^2 pq/d^2$ ^[14] Where n is the sample size, Z is standard normal deviation taken as 1.96, P is prevalence taken as 15.1%^[15] (0.151), $q = 1 - p$ (0.85), and d is degree of precision taken as 5% (0.05),

Data Collection: A pre-tested semi-structured self/interviewer administered questionnaire comprising of four sections was used to collect data. Section A obtained respondents socio-demographic data, Section B assessed knowledge on family planning methods, Section C collected information on utilization of family planning methods, and Section D was on factors affecting utilization of family planning methods.

Two research assistants were recruited and trained for one week on proper interviewing, interpretation of vernacular speech and accurate data keeping. Respondents gave informed consent before the questionnaires were administered, and were politely left alone where they declined.

Data Analysis: Data collected was cleaned, coded, entered into a computer and was analyzed using Statistical Package for Social Sciences (SPSS version 23). Findings were presented using appropriate charts

and tables. P value of 0.05 was taken for statistical significance. Categorical variables were described using frequencies and percentages while continuous variables were expressed as mean and standard deviation. Cross tabulation and Pearson Chi-square was used to determine association between dependent variables.

Ethical Considerations: Ethical approval for this study was obtained from the Health Research and Ethics Committee (HREC) of the University of Abuja Teaching Hospital. Permission for this study was also sought from the traditional rulers of the Community. All respondents were duly informed about the details of the study, and informed consent received from them.

Limitations: There may be attrition of some respondents due to the sensitive nature of sex related topics and some women may decline to participate or be interviewed. To overcome this, adequate privacy and use of female research assistants were employed in the course of the research work.

RESULTS

A total of 217 questionnaires were administered out of which 209 were properly completed and returned. Eight questionnaires were discarded due to errors and incomplete response, giving a response rate of 96.3%. A total of 209 questionnaires were eventually analyzed. Table 1 summarizes the socio-demographic characteristics of the respondents. Mean age was 25.47 ± 7.39 years, with the majority 66 (31.1%) falling within 16-20 years age group. Majority of the respondents, 43 (20.6%) never attended school, while most of those who attended 116 (55.5%) stopped at secondary school level. Most respondents 145 (69.4%) were married, 60 (28.7%) single, 3 (1.4%) divorced and only 1 (0.5%) being widowed. The major ethnicity of the respondents was Gbagyi 94 (45.0%). One hundred and forty four (68.9%) of the respondents have ever given birth, and the major decision maker on health issues is the husband 100 (47.8%).

Knowledge was assessed by asking respondents questions on family planning methods; a score of one was allotted for every correct answer and zero for incorrect answers. The total score obtainable was 18, respondents with scores of 9 and above were said to have good knowledge and a score of less than 9 was considered poor knowledge. Figure 1 above showed that majority of the respondents 152 (72.7%) had good knowledge and 57 (27.3%) had poor knowledge.

Table 2 shows that the major modern family planning methods known by respondents were male condom 167 (79.9%), injectable 158 (75.6%) and oral contraceptive pills 144 (68.9%). Major traditional family planning methods known by respondents were: Abstinence 160 (76.6%), withdrawal 160 (76.6%) and prolonged breastfeeding 136 (65.1%). The least known family planning methods known by respondents were:

Vasectomy 8 (3.8%), IUCD 45 (21.5%) and Tubectomy 69 (33.0%). The major source of information on Family Planning Methods is hospital/clinic 134 (64.1%). Other sources included: posters 21 (10%), radio 4 (1.9%) and friends/family 6 (2.9%). (Figure2). According to figure 3, only 55 (26.3%) of respondents utilized one form of family planning, or the other and 154 (73.7%) were not using any form of family planning method. Also the commonest FP methods utilized by respondents were: injectable 42 (20%), implant 11 (5.3%) and oral contraceptive pills 2 (1.0%). In table 3, it is shown that motivations to use of Family Planning Methods were: Easy accessibility of FP methods 146 (69.9%), Family Planning Methods are cheap 140 (67.0%). Barriers to utilization were: Fear of side effects 152 (72.8%) and desire for more children 121 (57.9%).

Table 4 summarizes the result of the cross tabulation and Pearson's Chi-square tests. It shows that age group, educational level and source of information were all found to affect the level of knowledge and utilization of family planning methods significantly ($p < 0.05$). In addition, a significant association was found between marital status and level of utilization, number of children and level of knowledge of family planning methods ($p < 0.05$).

TABLES AND FIGURES

Table 1: Socio-demographic Characteristics of Respondents

<i>Variable</i>	<i>Frequency N=209</i>	<i>Percentage N (%)</i>
Age groups(years)		
16-20	65	31.1
21-25	60	28.7
26-30	37	17.7
31-35	24	11.5
36-40	15	7.2
41-45	15	2.4
>45	3	1.4
Ethnicity		
Gbagyi	94	45
Hausa	22	10.5
Igbo	21	10.0
Yoruba	13	6.2
Bassa	5	2.4
Others	54	25.8
Marital status		
Single	60	28.7
Married	145	69.4
Divorced	3	1.4
Widowed	1	0.5
Educational level		
Nil	43	20.6
Primary	36	17.2
Secondary	116	55.5
Tertiary	14	6.7
Others	-	-
Religion		
Islam	111	53.1
Christianity	98	46.9
Ever given birth		
Yes	144	68.9
Parity		
Nil	64	30.6
1-3	102	48.8
4-6	34	16.3
7-10	9	4.3
Decision maker on health issues		
Self	58	27.8
Husband	100	47.8
Parent	48	23.0
Others	3	

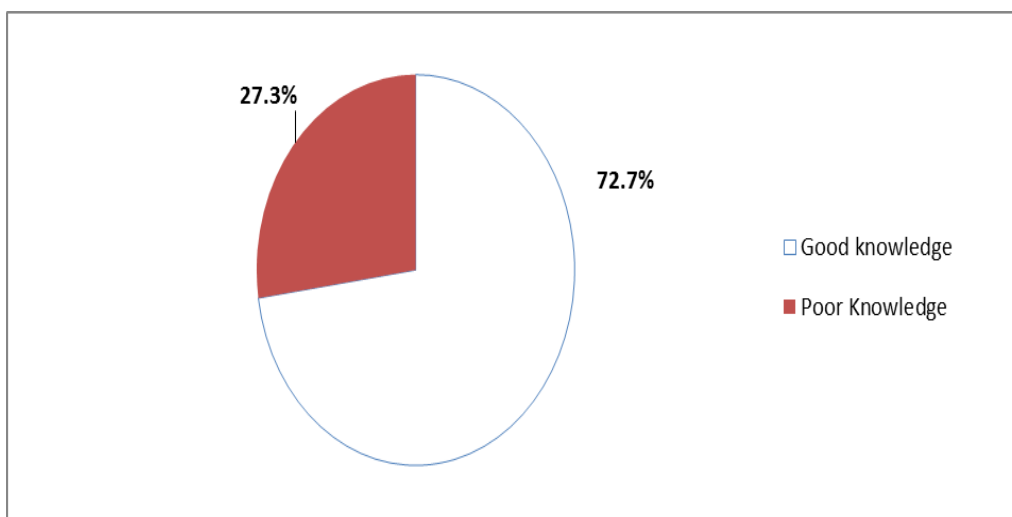


Figure 1: Respondents' knowledge on Family Planning Methods.

Table 2: Family Planning Methods known by respondents.

Family planning methods	Frequency N=209	Percentage N (%)
Oral contraceptives	144	68.9
Implants	139	66.5
Injectable	158	75.6
IUCD	45	21.5
Male condom	167	79.9
Female condom	92	44.0
Emergency contraceptive	110	52.6
Prolonged breastfeeding	136	65.1
Safe period	63	30.1
Vasectomy	8	3.8
Tubectomy	69	33.0
Withdrawal	160	76.6
Abstinence	160	76.6

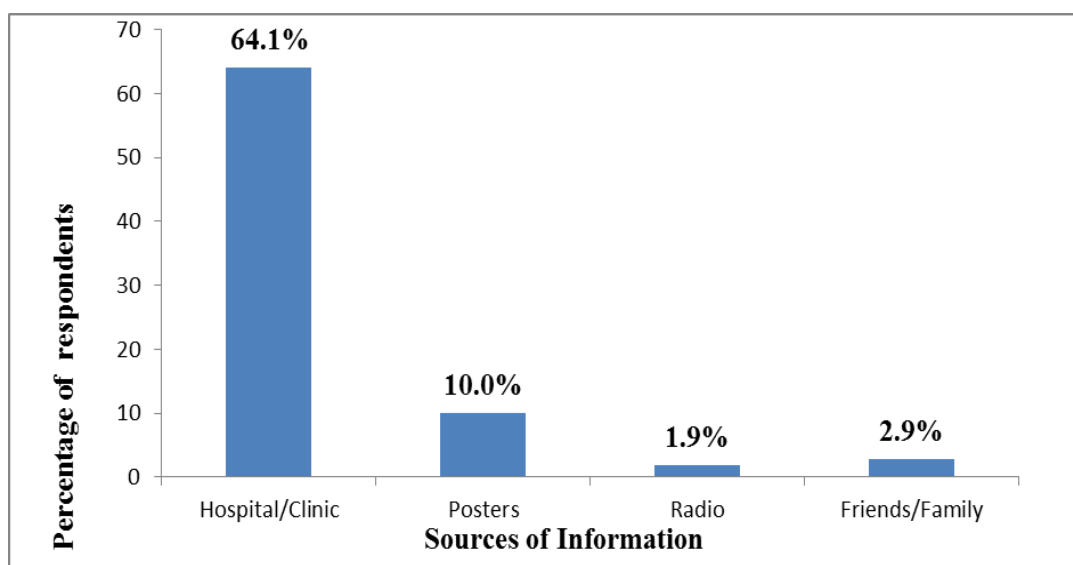


Figure 2: Respondents' Sources of Information on Family Planning Methods.

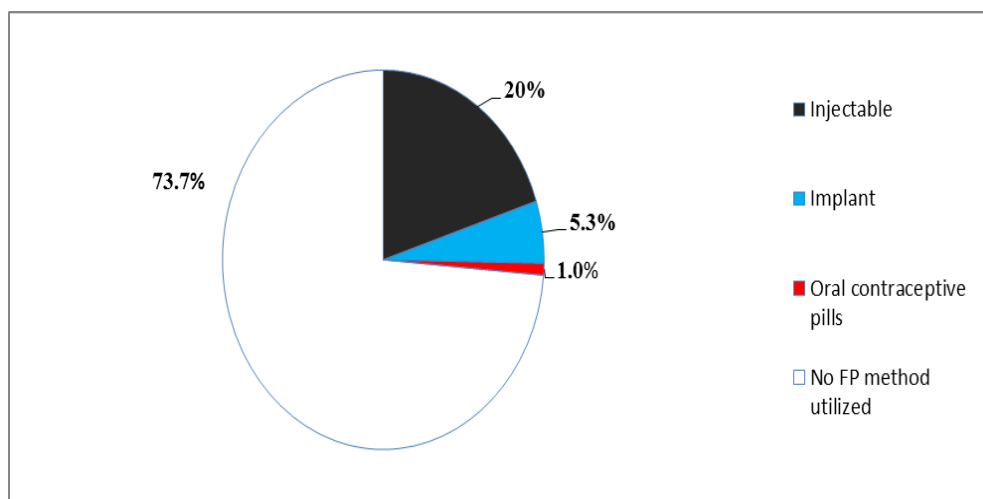


Figure 3: Family Planning Methods Utilized by respondents.

Table 3: Factors Affecting Utilization of Family Planning Methods.

Factors	Frequency N=209	Percentage N (%)
FP methods are cheap	140	67.0
FP methods are easily accessible	146	69.9
Fear of side effects	152	72.8
Against religious belief	11	5.3
Against norms and culture	2.0	1.0
Partners opposition	15	7.2
Promotes promiscuity	25	12.0
Desire for more children	121	57.9

Table 4: Relationship between Socio-demographics and outcome variables

Variable Knowledge of FP methods X ² P-value	Utilization of FP methods X ² P-value
Age group 16.331 0.012*	29.249 <0.001*
Marital status 1.735 0.629	29.985 <0.001*
Educational Level 40.941 <0.001*	16.606 0.001*
Number of children 27.327 <0.001*	5.736 0.057
Source of Information 140.688 <0.001*	37.828 <0.001*

*Significant at p-value <0.05.

DISCUSSION

Findings from this study show that majority of the women were in the age group of 16-20 years. This is similar to findings of Stephen et al^[16] in Uganda, Jobert et al^[17] in Cameroun, Paschal et al^[18] in Ghana and Ofonime et al^[19] in South-South Nigeria. Also, the level of education of the respondents was highest at the secondary school level and majority of the respondents were married as this is typical of most rural settings in Nigeria. This is similar to findings by Ofonime et al^[19] in South-South Nigeria, Paschal et al^[18] in Talensi district of Ghana and Jobert et al^[17] in Mbouda district Cameroun. Majority of the respondents had less than 3 children as opposed to findings reported by Paschal et al^[18]. This may be due to the fact that at the age of 16-24 years (mean age 25.47 ± 7.39 years) the women were just starting off their families i.e. the act of reproduction.

The level of knowledge of FP methods was quite satisfactory with 72.7% of respondents having good

knowledge, but this is relatively lower compared to findings by Ofonime et al^[19] in South-South Nigeria, Adewale et al^[20] in North-West Nigeria, Utoo et al^[21] in North-Central Nigeria and Stephen et al^[16] in Uganda. This relative disparity in the level of knowledge may be due to the fact that majority of the respondents had little or no formal education.

The commonest contraceptive methods known by respondents were male condom 79.9%, injectable 75.6% and oral contraceptive pills 68.9%. This is similar to findings by Ofonime et al^[19], PM Utoo et al^[22] and Jobert et al^[17]. The condom is most commonly known, as it can easily be obtained from the local pharmaceutical shops, the injectable and oral contraceptives are also well known by the respondents as they are the readily available methods in the Primary Health Centre. The least known methods were vasectomy and tubectomy, as both are surgical procedures which are expensive,

requiring special expertise and are only carried out in tertiary health facilities.

It was found that age group, educational level and source of information are all significantly associated with level of knowledge, and utilization of FP methods ($p < 0.05$). In addition, a significant association was found between marital status and level of utilization, and number of children (parity) with the level of knowledge of FP methods ($p < 0.05$). The major source of information on family planning methods was the hospital/clinic 64.1%. This is similar to findings by Ofonime et al^[19], Utoo et al^[21], PM Utoo et al^[22] and Stephen et al.

Good knowledge concerning family planning methods does not automatically translate to their utilization. Many factors such as affordability and access to the services, cultural and religious acceptability, as well as their equitable distribution determine when, how, and who is likely to use the available services. From this study, knowledge of family planning methods was satisfactorily high, however the utilization was very low 26.3%. This is similar to findings by Ofonime et al^[19], Adewale et al^[20], Utoo et al^[21], Adogu et al^[23] and Paschal et al^[18] which all reported low utilization of family planning methods.

The commonest family planning method utilized by respondents in the study area was injectable 20.1%. This was similar to findings by Adewale et al, PM Utoo et al and Ofonime et al. The possible reasons for preference of injectable over other methods could be due to the convenience of use, as it does not involve elaborate procedures or daily use; it's readily available at the primary health centre and also it's cheap.

The major motivations for use of family planning methods were ease of access to family planning methods 69.9%, and that family planning methods were cheap 67%. Major barriers to utilization were desire for more children 57.9%, and fear of side effects 72.8%. This is similar to findings by Ofonime et al^[19], Utoo et al^[20], Adogu et al^[23] and PM Utoo et al.^[22] The purpose of this study which was to assess the knowledge and utilization of Family Planning Methods by women in Dobi Community Gwagwalada Abuja, has been achieved.

Recommendations: In order to improve utilization of Family Planning Methods, the FCT Primary Health Care Development Board (PHCDB) should strengthen the existing Primary Health Care (PHC) facilities through capacity building for healthcare personnel, establishment of more facilities where necessary and subsidizing products and services. Such facilities should be sited as close to the communities as possible with their active participation in the planning, implementation, and monitoring.

Women's educational level is still generally low in the rural areas Dobi ward inclusive and knowledge was

found to be positively correlated with contraceptive utilization. The study therefore recommended that policies that would encourage and enhance girl-child education should be enforced in the rural areas of Nigeria. Among other factors that influence contraceptive use such as age, parity, sources of information, marital status, education is the only variable that could easily be manipulated by policy makers to achieve a desired increase in contraceptive use.

The study revealed that one of the major barriers to utilization of family planning methods is fear of side effects, and in view of this recommends the establishment of Guidance and Counselling Unit (GCU) in all the available health centres or clinics located in the rural areas of the FCT. Aside this, the family planning unit of the health centres or clinics should have a qualified professional that will be able to handle the issue of health guidance and counselling as it relates to contraceptives.

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