# A Cross-sectional Study on Assessment of Birth Control Methods in Family Planning Facilities among Pregnant Mothers in parts of Hong, Adamawa State, Nigeria

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#### **Abstract**

The study assessed the knowledge, accessibility and utilized birth control methods among pregnant mothers. Surveys and choice-type questionnaires were the study methodology used. A total of 222 pregnant women were drawn at random from three different health facilities in Hong. Frequency and percentage were used in the data presentation. Age group 36-50 (47.1%) years, NCE/Diploma (38.1%), civil servant (25.1%), pregnant women with parity of 3 and 4 children (24.8%) and child spacing of  $\geq 2$  years (53.4%) had the highest number of subjects, according to the sociodemographic characteristics of those who participated. Participant's knowledge of and access to birth control methods revealed those who were already sensitized (83.3%), knowledge source of birth control method was hospital (46.3%), who knew the precise time of ovulation (65.2%), who had access to birth control through Primary Health Care centers and acknowledge the importance of birth control techniques (80.5%) recorded high numbers of participants. According to the utilization of birth control techniques, the highest rates were seen in both participants who frequently breastfed and utilized a calendar or rhythm with equal score (40.5%) as a natural method of birth control, those who employ coitus interruptus (54.3%), menstruated while breastfeeding (56.6%), and who frequently used condoms, pills etc. (37.4%). Additionally, 57.4% cited cost serve as a barrier for condom utilization, while 58.2% cited their culture and religious beliefs have not prevented them from utilizing birth control. Therefore, Birth control technique sensitization at home and health care center, level of education alongside availability and access point to modern contraceptive at health care influence utilization of both natural and modern methods of birth control.

Keywords: Accessibility, Birth Control, Hong, Parity, Utilization

#### INTRODUCTION

Population growth has been a problematic issue all over the world. Consequently, many developed countries have approved and resorted to birth control or family planning (Daris, 2003). Family planning is an essential aspect of reproductive health that allows individuals and couples to make informed decisions about the number and spacing of their children. The unplanned pregnancy shattered many dreams because most families cannot cater for their children's shelter, nutrition, education and health care. Knowledgeable on various methods of birth control techniques, its importance, accessibility and utilization lower the number of unintended pregnancies, lower maternal and infant mortality and unsafe abortion among others. As such, utilization of birth control technique benefits individual, families and society at large (Idowu *et al.*, 2021).

Reproductive health applies to everyone, and public health initiatives should focus on prevention to lessen negative medical consequences (Geleas, 2022). Despite the importance of family planning in maternal and child health, many pregnant women in developing countries have limited knowledge and access to birth control methods. Studies have shown that not all women of reproductive age were well informed about birth control methods to some extent, others may have inaccurate and misleading information (Menhaden et al., 2012; Hardy et al., 2015). The availability and accessibility of birth control methods are critical factors that affect the utilization of family planning services. Pregnant women are an important target group for family planning interventions because they are at increased risk of maternal and child health problems, and they may have a higher motivation to adopt birth control methods. The preferences for birth control methods evolved from family planning needs either to control the number of children, timing and spacing of births or stopped childbearing. The choice of the birth control methods may be short-acting method, one that can start and stop on their own, that does not necessarily require professional, or a permanent method such as sterilization or intrauterine device (IUD) that may require professional help (United Nation, 2019). Factors such as inadequate knowledge about the available birth control methods, cultural norms and misinformation plays a factor in the perspective and attitude which can impact where and how one accesses birth control are often overlooked (Geleas, 2022). However, knowledgeability and access point to birth control methods may differs across region, one's own orientation, this confers with the work of Galeas (2022), California. Hence, the study aims to assess the level of knowledge, accessibility, and utilization of birth control methods for family planning among pregnant women.

## **METHODOLOGY**

#### Study area

Hong town is the administrative headquarter of Hong Local Government Area (LGA), situated along Yola-Mubi Road of Adamawa State. Hong LGA is situated within Adamawa Central Zone with about seven districts

# **Study Design and Population**

We conducted facilities based-cross sectional study conducted in May to June, 2019 in some health facilities situated within Hong town. The population of the study were pregnant mothers who attend their routine Antenatal Care in three health centers consisting of Cottage Hospital, Clinic A, and Clinic B within Hong, aged 18-50 years old residing in Hong irrespective of their affiliation to educational and tribe who were informed about the purpose of the study and volunteered to take part in the study. We engaged two hundred and twenty two (222) pregnant mothers and they were randomly selected into the study.

## Sampling Technique

The instrument for data collection employed was survey and choice type questionnaire choice question types. Questionnaire was used to gather information on subjects' sociodemographic characteristics, knowledge, accessibility to and utilization of birth control methods. Research Clearance

#### **Research Clearance**

Prior to this study, permission was sorted from the respective health centers. Participants were informed on the purpose of the study and were anonymously included in the study voluntary.

# **Data Analysis**

The data collected was analyzed using SPSS version 23. Descriptive statistics were described and presented using frequency count, percentage and tables. Those options that were not filled by the respondents were regarded as a mission value and as such were not included in the calculation.

#### **RESULTS**

Table 1: Distribution of participants according to socio-demographic characteristics

Variable	Characteristics	N	n	0/0
Age	18 – 25 years	221	47	21.2
	26 – 35 years		70	31.7
	36 <b>-</b> 50 years		104	47.1
<b>Educational Status</b>	O-Level		51	23.7
	NCE/Diploma	215	82	38.1
	Degree		47	21.9
	Non – formal		35	16.3
Occupation	Farmer	211	29	13.7
	Student		33	15.6
	Trader		45	21.3
	Civil servant		53	25.1
	Full house wife		51	24.2
Parity	1 child	222	35	15.7
	2 children		39	17.6
	3 children		55	2.8
	4 children		55	24.8
	5 above		38	17.1
Child spacing	<1 year	219	12	5.5
	< 2 years		90	41.1
	≥ 2 years		117	53.4

Table 2: Distribution of participants knowledge and accessibility on birth control method

Variable	N	n	0/0
Sensitization on Birth Control Method	216		
Yes		180	83.3
No		31	14.7
Knowledge Source of Birth Control Method	214		
Hospital		84	39.3
Mass media		31	14.4
Home		99	46.3
Knowledge on the Exact Time of Ovulation	221		
Yes		144	65.2
No		77	34.8
Access to Birth Control Method	215		
Secondary Health Care		38	17.6
Primary Health Care		127	59.1
Patent medicine store		50	23.3
Knowledge of Birth Control Method Very Important	220		
Yes		177	80.5
No		43	19.5

Table 3: Utilization of birth control methods

Variable	N	n	0/0
Natural method of birth control frequently used	220		
Abstinence		22	10.0
Breast feeding		89	40.5
Calendar/rhythm		89	40.5
Withdrawal method		20	9.0
Employ Coitus interruptus during Intercourse	184		
Yes		100	54.3
No		84.0	45.7
Menstruation While Breast Feeding	221		
Yes		125	56.6
No		96	43.4
Modern Method of Birth Control Frequently Used	219		
Pills		49	22.4
Norplant		33	15.1
Condom		82	37.4
Injectable hormone		55	25.1
Cost as Barrier for condom, pills utilization	216		
Yes		124	57.4
No		92	42,6
Do Cultural & Religion Views Hinder you on Birth	220		
Control			
Yes		92	41.8
No		128	58.2

Table 1 showed the distribution of subjects by sociodemographic characteristics, with 36 to 50 year olds (47.1%) having the highest group and 18 to 25 year olds (21.3%) having the lowest. NCE/Diploma had 82 (38.1%) of the highest recorded educational status, while non-formal had 35 (16.3%). Farmers and public servants had the largest and lowest occupation percentages, with 25.1% and 13.7%, respectively. NCE/Diploma had 82 (38.1%) of the highest recorded educational status, while non-formal had 35 (16.3%). Pregnant mothers with 3 and 4

parity (24.8%) had the and child spacing of 2 years and above (53.4%) had the highest respondents.

Table 2 displays the distribution of the subject's accessibility and knowledge of birth control methods. The highest subject (85.8%) was found among those who had been exposed to birth control, while the lowest subject (14.2%) was found among those who hadn't. Birth control knowledge came from the home the most (46.3%) and the least (14.5%), respectively. The respondents who knew their specific ovulation time got the greatest scores (65.2%), whereas those who didn't knew their exact ovulation time had the lowest scores. Clinics had the highest access to birth control methods, with 127 (59.1%), while hospitals had the lowest, with 38 (17.7%). The percentage of those who believed that knowing how to use birth control is crucial was 80.5%, while 19.5% disagreed.

Table 3 showed the subjects' use of birth control methods, practiced breast feeding and calendar/rhythm methods having the highest prevalence (40.5%), followed by withdrawal methods (9.1%). The largest percentage (54.3%) was found in those who employed withdrawal techniques during sex, while the lowest percentage (84.0%) was found in those who did not. Based on those who menstruate while nursing, (56%) had the greatest and (43.4%) the lowest percentages. Subjects that used pills (37.4%) had the highest while those that used Norplant recorded the least. Subjects with opinion that cost serves as hindrance for usage of condom, pills, recorded highest while 42.6% observed that cost was not a barrier for condom use. Lastly those that says cultural and religious view does not hinder them were recorded highest (58.2%) while (41.8%) recorded.

## **DISCUSSION**

The purpose of this study was to determine how well-informed and how commonly birth control was utilized by expectant mothers in Hong. Our study corroborates that of Nansseu et al. (2015) were a significant proportion of the participants had previously experienced birth control technique sensitization, as it might be evidence that majority of the individuals in this study had at least an O-level. The highest number of parities among pregnant mothers are four (4) children, most of the range from age 36 to 50 years and more than half of them maintain 2 years and above age interval between subsequent children. This implies that most of the pregnant mothers observes recommendations made by WHO for child space between a live birth and attempt to the next pregnancy should be 24 months (WHO, 2010). Home is usually recognized as the primary setting for human interaction. This explains why a significant proportion of the study's participants had 46.3% of their knowledge of birth control methods at home. The reason for this may be attributed to the fact that couples, parents, or family members engaged in open and unrestricted family engagement and conversation over birth control information sources. However, fewer of the people who participated in this study did not receive birth control sensitization, it's likely that they were among those who completed non-formal education (16.3%). This concurred similar studies that reported, education level predicts one's knowledge of family planning, furthermore, Ibnouf et al. (2007) opined education of a mother has a significant influence on the usage of birth control more especially on the modern method of contraceptive. A further concern is that 34.8% of the individuals do not know their exact ovulation time. This may be due to fluctuations in the days of ovulation. Previously experienced birth control technique sensitization alongside patronage to primary health care accompanied by readily available family planning services rendered by the community health care workers might explain high response among those access birth control technique at the primary health care. Due to their awareness of birth control methods, the majority of these participants (80.5%) stated that knowledge of birth control methods is very significant.

Breast feeding and calendar/rhythm were the most cited natural method of birth control frequently employed, while concurring our result, Nansseu et al. (2015), cited the least. However, majority of the participants used coitus interruptus but usually not frequently as aforementioned natural methods. The need to informed women of reproductive age of the possibility to become pregnant while breast feeding might not be far from the response of majority of the participants that menstruate while breast feeding. Similar report by Olowolafe (2021) indicated the possibility that the nursing mothers might likely become pregnant before her menses returns after delivery. Furthermore, Wodaynew & Bekele (2021) cited in their study the amount of time following delivery that a woman is infertile is highly variable and dependent on multiple factors, including breastfeeding status. Ovulation can occur even if the mother has not resumed menstruation and could happen as early as 25 days postpartum. Our study showcases the most frequently used modern method of contraceptive is condom, which made it easy to use, and readily available at the patent medicine store or mostly dispense freely at the family planning unit and HIV care center, and it requires no professional personnel. This is supported by previous findings (Ukoji et al. 2022), however, cost is one of the barriers hindering utilization of modern contraceptives such as condom, pill etc. Majority of the participants in this study claim that cultural or religious beliefs do not prevent them from using birth control. This study reinforced the finding of early study by Ibnouf et al. (2007) that among married Sudanese on the utilization of contraceptive method was not against religion or cultural belief. However, a recent study by Olowolafe (2021) revealed that religion and cultural beliefs discourages women from practicing family planning as might be the case among the fewer respondents in this study with 41.8%.

## **CONCLUSION**

Quite number of participants had been sensitized on birth control and averred its importance. Birth control technique sensitization at home and health care center, level of education alongside availability and access point to modern contraceptive at health care influence utilization of both natural and modern methods of birth control.

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