

Assessment of Modern Family Planning Infrastructures and Services Accessibility and Availability in Rural Akwa Ibom State, Nigeria

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ABSTRACT

This Cross-sectional study aimed at assessing the state of family planning infrastructures and services in rural areas of Akwa Ibom State of Nigeria, people cannot practice contraception when the infrastructures and services are not accessible and available. Non-use of contraceptive was directly related to high fertility level and rapid population growth. The primary data for this study was obtained from 516 women (age 15 to 49) selected through systematic random sampling techniques. The Data collected was analyzed in terms of descriptive statistics to present the background characteristics of the respondents, infrastructures and services factors. The primary findings show that family planning infrastructures and services are limited in the study area because service facilities are not accessible and available; and because of paucity of trained service providers and their negative attitudes toward their work and clients. Finally, based on the key findings of the study, some plausible recommendations were made.

Keywords: Assessment, accessibility, availability, Rural, Modern Family Planning, Akwa Ibom, Nigeria

INTRODUCTION

Family planning could prevent as many as one in every three maternal deaths by allowing women delay motherhood, space birth, avoid unintended pregnancies and abortion and stop childbearing when they reached or achieved their desired family size (Carl and Kent, 2008; Gizaw and Regassa, 2011). Evidence suggests that more than half of all couples in the developing world are using family planning to delay space or limit feature pregnancies, yet the need for family planning keeps increasing, as the number of women of reproductive age continues to grow. An estimated 137 million women worldwide have unmet need for family planning, that is,

they are not using any method and report that they want to avoid pregnancy (Rhoda *et al.*, 2009).

Nigeria is one of the developing countries where population issue has become a major area of concern during the last few decades. The country began family, planning services through family planning council of Nigeria in 1964. As at 2013, Nigeria had a Total Fertility Rate of 5.5 and a population growth rate of 3.2percent per annum. Knowledge of contraceptive has remained consistently high with 85 percent of the currently married women having heard of at least one method of contraception (National Population Commission and ICF International, 2014). Only 15 percent are currently using a contraceptive method. (Population Reference Bureau, 2013). However, actual contraceptive practice among women of reproductive age group remained very low (15 percent) with use level higher in urban areas (27 percent) than rural areas (9 percent). This high knowledge level with low level of utilization is mainly because of different barriers to decision on use of contraceptives (National Population Commission and ICF International, 2014).

During the last few years, studies have shown that family planning utilization is influenced by various factors which include demographic characteristics, psychological, knowledge and attitudinal factors and the like (Gizaw and Regassa, 2011; Nidiaye, 2003). Availability of a broader range of contraceptive methods and health personnel (which are indicators of quality of family planning services) have been shown to have positive effects on the use of modern contraceptive methods (Hong *etal*, 2006,; Neeraja, 2003; Thang and Huong, 2003, Bruce, 1990). One study measured quality of family planning services based on clients' reports of provider-client interactions; and examined it relationship with continuation of contraceptive methods at clients' follow-up visit in two provinces in the Philippines (Ramarao *et al*, 2003). Another study in rural Bangladesh, defined quality based on clients' perception of practices and behaviors of family planning providers and associated it with their subsequent use of contraceptive (Koeing *et al.*, 1997). Other family planning service quality indicators, such as accessibility of family planning infrastructures and availability of family planning services have also been shown to have positive effects on the use of contraceptive methods among new and returning clients(Brown *etal*, 1995 and Gbison*etal*, 1995). Yet, there is limited empirical evidence in the study area to access the state of these family planning service quality indicatorsIt should be noted that accessibility of family planning infrastructures and availability of family planning services have contributed to increasing contraceptive use and

declining fertility rates in developing countries (Leete and Alan, 1999; Hong *et al*; 2006). In view of the above consideration, the present study in Akwa Ibom State is first of its kind and therefore, seems more justification.

Based on the above observations, it is hypothesized that there is no signification relationship between availability of family planning sources/supplies and continuous use of family planning. Arising from the above, the following are the objectives of the study:

1. To examine the state of modern family planning infrastructures in the study area.
2. To examine the state of modern family planning services in the study area.

In terms of the significance of the study, obviously, the findings of the study can help policy makers to design appropriate policy paradigms that would help to improve the organization and delivery of family planning and other reproductive health care services in rural Nigeria.

FAMILY PLANNING KNOWLEDGE AND USE LEVELS IN THE STUDY AREA

Despite the fact that this study did not gave as one of its objectives the investigation of levels of knowledge, use and current use of contraceptives in the study area , It is important that information about knowledge and use levels should be presented. This is necessary in order to provide a true picture of the state of family planning situation (especially its prevalence) in the rural area of Akwa Ibom State.

Knowledge of contraceptive is widespread (98.2percent) in Akwa Ibom State (NPC and ICF International, 2014) knowledge levels reported for rural areas in some studies are far below 98.2percent state average for example Etukudo (2015a) reported a level of 53.0percent. Etukudo (2015b), Etukudo, and Inyang (2015) reported 65.6percent and 52.9 percent knowledge level respectively.

Use levels are very low in the study area. Ever-use levels as reported in current studies are: Etukudo (2015a) 49.2percent; Etukudo (2015b) 32.0percent; Etukudo and Inyang (2015) 26.0percent. For current use levels, Etukudo (2015a). Etukudo (2015b), Etukudo, and Inyang (2015) reported levels of 31.4percent, 27.8percent and 17.4percent respectively. These reported current levels are close to the state level of 25.5percent as reported by NPC and ICF International (2014).

THE STUDY AREA

The study was conducted in Akwa Ibom State in Nigeria. It is located in South – South part of Nigeria with a population of about 3,920,208 across a land mass of 8,412kilometers² It has 31 local government areas. Uyo is the State capital.



Majority of the inhabitants belong to Ibibio Ethnic groups in the State. The major occupations range from trading to civil service. It is one of the oil producing State in the country. Just as in other states in Nigeria, a few modern healthcare facilities exist in the rural areas of Akwa Ibom State. These health facilities lack facilities and personnel necessary for high quality healthcare services. Fertility levels are high in the state, especially in the rural areas. Total fertility rate and the desired family size for the area are 8.1 and 6.7 respectively. These figures point to the need for increased family planning programmes in the area.

METHODOLOGY OF THE STUDY

The main data for this study was the primary data collected from 516 aged 15 to 49. The study employed cross – sectional study design where the data were collected at a specific point in time (Gizaw and Regassa, 2015).The study was restricted to six Local Government Areas. The selection of Local Government Areas was made to reflect the socio-ethnic backgrounds of the state. Two villages were selected from each of the six local government

areas. The twelve villages provided the 516 respondents used in the study. The sample size was considered adequate because of the homogeneous nature of the population. In order to achieve accurate and representative sample size for the entire population under study, a combination of simple random sampling and multi-stage sampling technique was used. The use of simple random sampling technique was to avoid bias in the selection of elements. Since list of households in the study areas were not readily available, multi-stage sampling technique was also used, the first stage was the selection of local government areas from the three senatorial districts. The second was the selection of the villages from the local government areas and finally the selection of the households from which the respondents were interviewed. The selection of the households was done with systematic sampling technique. This method was preferred because it was efficient and required less time, thus permitting data to be collected in the absence of lists of households in the streets selected from where respondents were selected. Six trained field assistants who were all females conducted interviews in the local languages/dialects. They were undergraduate students of higher institutions in the State. The field assistants were natives of the twelve local government areas from which the respondents were drawn. This was particularly useful in the overcoming ethnic and cultural barriers in each of the study areas, because their confidentiality was assured. Structured interview was used to collect past and current data. Additional information was collected from health workers in the health facilities visited. These health workers were not part of the 516 respondents interviewed. The interview schedule contained questions on respondents' socio-demographic characteristics. Questions concerning family planning knowledge, use levels, local availability of service centers', availability of family planning methods, information and equipment as well as staffing and service hours were asked. Respondent's responses to questions were interpreted with simple percentages.

FINDINGS

Characteristics of Respondents

Table 1 shows the demographic characteristics of the respondents. About the age distribution, it is seen that about 43.6 percent of them were between age 15 to 24, 32.4 percent (25-29) while the rest of the respondents (24.0 percent) were 30 and above years old. About 30.6 percent of the respondents had no formal education, 39.0 percent had primary level education, 21.9 percent had secondary level education and 8.5 percent had

higher level of education. Table 1 also shows that majority of the respondents were farmers (25.2 percent), home keepers (21.3 percent) and petty traders (30.0 percent).

The table further indicates that most (95.3 percent) of the respondents were Christians while a negligible percentage (4.7) were worshippers of African Traditional Religion. In terms of marital status, 68.6 percent of the respondents were married while 31.4 percent were not married. When the number of living children is considered, Table 1 shows that 34.5 percent of the respondents had between one and three children while 65.5 percent had four children and above.

Table 1: Percentage Distribution of respondents by socio-demographic characteristics

Socio-demographic characteristics	No of Respondents	Percentage (percent)
Age:		
15-19	52	10.1
20-24	173	33.5
25-39	167	32.4
30+	124	24.0
Education:		
Higher Education	44	8.5
Secondary School	113	21.9
Primary School	201	39.0
No Formal Education	158	30.6
Occupation:		
Teaching	28	5.4
Farming	130	25.2
White collar Job	56	10.9
Business	37	7.2
Trading	155	30.0
Home Keeping	110	21.3
Religion:		
Christianity	492	95.3
African Tradition	24	4.7
Marital Status:		
Married	354	68.6
Unmarried	162	31.4
Total Number of Living Children:		
1	64	12.4
2-3	114	20.9
4-5	206	39.9
6-7	108	20.9
8+	24	4.7

ACCESSIBILITY, AVAILABILITY OF FAMILY PLANNING FACILITIES AND SERVICES IN THE STUDY AREA

Accessibility of Family Planning Facilities

The use of family planning is determined by supply as well as demand. Women cannot use family planning methods- unless the facilities providing the services and accessible and the services available. (With the exception of rhythm, withdrawal, periodic abstinence and other traditional methods that do not involve the use of materials, chemicals, etc. (FOS, 1990).

Table 2: Percentage Distribution Of Respondents Living In Communities With Family Planning Services By Distance To The Nearest Facility Providing Family Planning Services, According To Method Ever Used

Family Planning Sources and Distance to Nearest Facility Providing (FP) Services	Types of Modern Methods	
	Clinical Methods	Supply Method
<u>Outreach Services:</u>		
Health Centres	6.1	15.6
Market Outlets	0.0	4.3
TOTAL	6.1	19.9
<u>Distance in (kilometers) to the nearest Stationary Facility</u>		
Above 10 kilometers	0.5	1.5
5-9 kilometers	1.8	5.4
Below 5 kilometers	2.2	14.6
TOTAL	4.5	21.5

In order to collect information on local accessibility of family planning facility in rural areas of Akwa Ibom State, the respondents who said they know where a person could obtain family planning services were asked if the service providers are available in their villages. Only about 187 respondents said yes. Out of the 187 respondents who said yes, 105 (56.15 per cent) said in their villages there exist modern health facilities (stationary) such as a hospital, maternity centre/home, health post, maternity and child health centre, private health centre/clinic, a pharmacy or patent medicine shop that provides family planning services.

Accessibility of family planning facilities is an obvious prerequisite for service delivery (Population Council, 1994). Women can only use family

planning methods (especially modern) when there are facilities close to their homes. How different are the users and non-users of family planning concerning functional access (accessibility of service delivery centers' and points/homes)? Do family planning users live in villages/communities with family planning services delivery centers'/points/homes? **Table 2** shows that of the 4.5 per cent of the respondents who have ever used clinical methods (IUDs, injectable, diaphragm and nor plant), 2.2 per cent lived below 5 kilometers of a facility offering family planning services and 2.3 percent lived within 5 and above kilometers of facility offering family planning services. For supply methods, out of the 7.1 per cent who have ever used them, 5.6 per cent lived below 5 kilometers of a facility offering them and almost 2.5 per cent lived within 5 and above kilometers of a facility offering family planning. For traditional methods, of the 13.4 percent using them, 9.0 percent lived below 5 kilometers of a facility/practitioner offering them and 4.4 percent lived within 5 and above kilometers of a facility/practitioner offering them. The table also shows that of the 26.9 percent of non-users, 5.4 per cent and 2.6 percent lived within 5 to 9 kilometers and below 5 kilometers of a facility/practitioner offering family planning services respectively.

Outreach Facilities for Family Planning Services

In terms of outreach facilities, providing family planning services, **table 2** further indicates that of the 157(26.0 percent) of the respondents who said they have ever used, family planning, 6.1 percent lived in a community where there was a facility/practitioner providing clinical, methods of family planning. For the supply methods, 15.6 percent and 4.3 percent of those who have used them identify health workers and market outlets respectively as those outreach facilities in their villages

AVAILABILITY OF FAMILY PLANNING EQUIPMENT

In order to know the actual availability of family planning equipment in rural areas of Akwa Ibom State, all the government health centers' in the six (6) sampled villages were visited. Each family planning unit leader was made to complete a questionnaire concerning their family planning activities and equipment in their health centers'. According to their responses, nearly all the government health (institutions) in the study area lack essential facilities for successful family planning services. An inventory of the available equipment necessary for successful and satisfactory family planning services in those health institutions is given in **Table 3**.

Table 3: List of Equipment Needed for Providing Family Planning Services not Available in the 6 SDCS* Visited

Types of Equipment	Percentage of SDCs Lacking
Sterilizers	6 (66.7)
Angle Poise Lamp	7 (77.8)
Blood Pressure Gauges	2 (22.2)
Scale	2 (22.2)
Torch	3 (33.3)
Microscope	9 (100.0)
Sponge Holding Forceps	4 (44.4)
Artery Forceps	6 (66.7)
Uterine Sounds	5 (55.60)
Specula	2 (22.2)
Scissors	-
Instrument Containers	-
Swab Containers	7 (77.8)
Temecula	2 (22.2)
Sterilizing Lotion	9 (100.0)
Non-disposable Gloves	2 (22.2)
Disposable Gloves	7 (77.8)
Kidney Dishes	3 (33.3)
Stethoscope	7 (77.8)
Stainless. Steel Pails	2 (22.2)
Dustbins	-
Oblong Tray with Lid	7 (77.8)
Tables	-
Chairs	-
Examination Couch	6 (66.7)
Thermometer	6 (66.7)
Needles and Syringes	8 (88.9)
Minilap Kit	9 (100.0)
Uterine Elevator	9 (100.0)
Tubal Hook	9 (100.0)
Small Retractor	9 (100.0)
Xyclocarine	8 (88.9)
Suture	8 (88.9)
Operation Theatre	9 (100.0)
Recovery Room	9 (100.0)

* *SDCs: Service Delivery Centres*

When the **table 3** is closely examined, one can easily conclude that the picture is worrisome particularly when it is remembered that these figures describe equipment that are available not solely, for family planning but that maybe used for maternal and child health (MCH) and other services

provision. These shortages, therefore, will affect the delivery of other healthcare services provided by these health institutions”

For example, not all the health institutions had a microscope, sterilization lotion, operation theatre, recovery room, etc. In addition, more than 60 percent did not have sterilizers, disposable gloves, suture, thermometers, needles and syringes, etc. With these health institutions not having these instruments, it is difficult to see how good quality services can be offered. Moreover, since these items, are essential to ensure basic quality of care and services, any percentage of missing equipment should be regarded as significant, the percentages found here suggest that many government health institutions in rural areas of Akwa Ibom State are functioning under extreme conditions of paucity of family planning equipment.

QUALITY OF STAFF

Attempts were also made to know about the quality of staff in charge of government health (institutions) offering family planning services in the study area. Information collected indicates that family planning units in most of the health facilities studied were managed by staff who are not knowledgeable when it comes to providing clinical services manage family planning units in these institutions. Majority (80percent) of the respondents said most of the service providers could not provide clinical services and in most cases were referred to private health facilities. This situation was observed by United Nation Population Fund (2014) which labeled Nigeria as one of the countries deficit in midwifery workforce and care.

Almost (70 percent) of the respondents reported that service providers were often absent from duty or they come for a short period and leave early. They also reported that in public facilities, the behavior of service providers with clients lack courtesy and respect, which discourage most women from going for the services.

AVAILABILITY OF CONTRACEPTIVE COMMODITIES AND DRUGS

This is a basic and obvious prerequisite for family planning uptake and continuation. During our encounter with the staff of the six health institutions visited, it was realized that most of these health centers’ lack essential commodities and drugs. For example, not all these health institutions provided IUDs, nor plant and even injectables. According to the staff, these commodities were not available because of the economic situation in the country. Donor agencies such as Pathfinder, John Hopkins,

USAID, etc., have refused to donate these commodities to the country as before. This supports Adeku (2014) who regretted that the Nigeria government signed a memorandum of understanding (MoU) with United Nations Population Fund (UNFPA) to pay \$3million every year for the procurement of the commodities, but failed to do so since 2013. A highly placed health officer who said that many family planning units in health centres located in rural areas of Akwa Ibom State have been closed down because of lack of equipment and family planning commodities. This lack of essential commodities is a constraint on the choice of methods that can be offered and thus on the options available to a client, not only when she first accepts, but also more importantly if she needs to switch over to another method for any reason (Population Council, 1994).

Almost 80percent of the respondent said that in almost all the health facilities they visited, availability of contraceptives was unfortunately far from assured. They narrated how stock outs of various contraceptives forced them to go home empty-handed after their visits for the services.

Attempts were made to collect information from proprietors of private health centres (modern) providing family planning services in the study area. The information collected from them concerning equipment at their disposal for family planning services were scanty. The only useful information collected was that they have facilities and commodities necessary for efficient and satisfactory family planning services. Accordingly, "most government health workers in the rural health centres refer patients to them for family planning services, most especially clinical; services.

DISCUSSION

This finding supports earlier observations made by FOS (1992) that in Nigeria, most especially in her rural areas, family planning services are limited. Its report indicates; that 37 percent of non-users of family planning services, compared to 17 percent of users, live 10 miles or more from a facility that offers family planning services. Only 10 percent of currently married rural women live in communities served by a health worker providing family planning outreach services. Pathfinder International Ethiopia (2004) and Akin *et al.*, (1995) averred that availability of healthcare services (especially those pertaining to family planning) which measure the impact of supply factors and which is very important in the early stages of adoption of family planning affects the utilization of family planning. Senderowitz (1994) also observed that it was one of the reasons given by

respondents in the population he studied for not using contraceptives. Even if women know about and want to use family planning, they may be unable to do so if contraceptive supplies and services are lacking (Population Reports, 1992 and Oliver, 1995). In the same vein, WHO (1992) notes that family planning has a major role to play in saving maternal lives. However, in many parts of the developing world, level of family planning utilization is low. In Africa as a whole, the percentage of married women of reproductive age who are practicing contraception is estimated to be about 117 per cent. This low rate of contraceptive use is because of lack of services, and that alternative services that are provided are inappropriate or give people insufficient choice to meet their family planning needs.

Kamran *et al.*, (2015); Molzan *et al.*, (1994); Hassouna (1980) and Valsan (1977); identified limited method choice, inadequate family planning training for staff, limited family planning service hours, limited materials and space for information, high absenteeism, devotion to too few hours per week for family planning services, absence of family planning communication or educational activities and communication or educational activities for recruiting acceptors, complicated bureaucratic procedures that cause poor and irregular dispatch of supplies from the central supply points to the rural service delivery points as factors responsible for the observed low use of contraceptive and high discontinuation rates among people in most developing nations, especially in their rural communities. Kost (1991) also observed that unreliable access to supplies might give some contraceptive users little choice but to discontinue with the practice. Greater availability of family planning services and trained personnel lead to greater utilization and high continuation rate of family planning (Simmons *et al.*, 1990; Lynam *et al.*, 1994; Leslie and Gupta, 1980 and TSU, 1980). Adeokun and Ottong (1989) noted that while some people could be favourably disposed to the idea of family planning, the practice could be affected by factors such as non-availability of the services among others.

CONCLUSION

This study identifies, lack of family planning methods needed, staff absenteeism, limited opening hours, lack of trained staff and equipment for clinical services that could limit the use and continuous use of family planning services in rural area of Akwa Ibom State. These findings call for greater availability of family planning facilities, supplies and personnel in the areas, for these will lead to greater use and continuous utilization of family planning. The lack of these would truncate and rubbish the

government's efforts in trying to reduce material and infant mortality in the country.

Health workers must have sufficient supplies, materials and equipment available to do their jobs. If clinics are stock-out or health workers in charge of outreach facilities workers do not have sufficient supplies to take to the communities where they work, they will not be able to provide family planning services and their clients will lose trust in them. Lack of family services can lead to women losing faith in the health service and discontinuing use of contraceptive. Making the journey to a health centre can be expensive for women, in terms of the cost of travel and the loss of income for being away from market or farm. If a woman has gone to a health centre, only to find that contraceptive supplies are not available or her method of choice is out of stock, if she is directed to a private provider that she cannot afford, she may well choose not to return, (Pathfinder International Ethiopia, 2014). Arising from the above issues, it is recommended that; Due to shortages in service providers and lack of money to establish more family planning centres in the rural areas, community-based distribution system should be adopted. Community based distribution of family planning services by the government, Non Governmental Organizations (NGOs), and the Community Based Organizations (CBOs) is inevitable. Government at all levels should support the services of community-based distributors so that contraceptives could reach the underserved persons in the rural areas of the states. Lastly, the Ministry of Health in collaboration development partners involved in the provision of family planning services need to enhance large scale training of service providers in quality care, client follow up, communication skills, counseling, referral and feedback and provision of a wide choice of methods. With good customer care, clients who seek contraceptives will have confidence in the staff, which in the process will attract more users while at the same time encouraging further usage on those currently using them. However, for this programme to be effective, donor support is critical.

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