

# RECURRENT ISSUES

## IN SOCIAL & ECONOMIC DISCOURSE



*Inieke E. Umanah*

# Chapter 7

## UTILIZATION LEVELS OF PRIMARY HEALTHCARE (PHC) FACILITIES IN AKWA IBOM STATE

By

**Inieke E.Umanah, RN; B.sc (Economics); Cert.  
Health Economics; MNES (Investigator)**

**Ekpo, Idongesit M, M.sc (Maths.); (Investigator)**

**Okon J. Umoh, Ph.D (Economics); MNES  
(Research Consultant)**



## EXECUTIVE SUMMARY

**T**his study was conducted to determine the utilization levels of Primary Healthcare (PHC) facilities in Akwa Ibom State. It was sponsored by Akwa Ibom State Health Systems Development Project (HSDP) II in collaboration with the World Bank in 2007. The major objective of the study was to determine the level of utilization of selected facilities, identify the reasons for under-utilization and propose strategies that would improve utilization and therefore increase access to organised health care.

Two instruments, Questionnaire 'A' and 'B', were used in the survey.

Questionnaire 'A' was designed to elicit responses from the respondents about their utilization patterns while Questionnaire 'B' focused on the PHC facility attendance and availability of basic equipment and infrastructure.

The study revealed a high level of decay of physical facilities in the PHCs, inadequate number of personnel, poor management structure at the PHC level, and a consequent low level of attendance and utilization of existing PHC facilities in the state.

Recommendations are made based on the findings of the study. These include, posting of medical doctors to the PHCs, recruitment of more nurses and midwives to work in PHCs, renovation of the PHC buildings and other infrastructure /re-equipping; and collaboration with partners to improve healthcare at the local government level; etc.

## INTRODUCTION

**H**ealth is both a goal of development and a means of achieving higher labour productivity for any nation. It is important to note that Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR) and under-5 Mortality Rate (U<sub>5</sub>MR) are better indicators of health status in Akwa Ibom State. Variations in these rates can be explained by the quality of healthcare services and the level of utilization of the health facilities at the primary healthcare level in the state.

Healthcare facility utilization is therefore defined as the extent to which the public patronizes a given facility on health grounds. Environmental conditions vary from place to place and this invariably has implications for the pattern of demand for healthcare at these facilities. The spatial dimension is also important in utilization behaviour but accessibility depends more on products availability at a given facility thus another major determinant of the use of healthcare facility. The World Health Organization (WHO) requires that there should be at least one (1) health post within the radius of ten (10) kilometers of road and should be equitably distributed.

In Nigeria, explicit consideration has not been given to the need for equity in the planning and distribution of healthcare facilities over the years (Onokerhoraye, 1999)<sup>1</sup>. This has contributed to the emergence of many political wards within the country not provided with healthcare facilities. States and villages with difficult terrain are neglected in the provision of public health facilities. Akwa Ibom State is one of the States of the Federation in the Niger Delta with environmental challenges.

### BACKGROUND OF AKWA IBOM STATE

Akwa Ibom State is one of the two States created in September 23, 1987 by Decree No. 24 of 1987 from the Old Cross River State. Currently, the state has thirty-one (31) Local Government Areas (L.G.As).



### Location

The territorial size of Akwa Ibom State is approximately 6,900 square kilometers on the South-Eastern Corner of Nigeria between the Latitudes 433° and 533° North and Longitudes 725° and 825° East. It is bounded on the North by Abia State, on the South by the Atlantic Ocean, on the East by the Cross River State and on the West by the Rivers and part of Abia State.

### Climate and Vegetation

Akwa Ibom State falls within the tropical zone. It is dominantly, green vegetation. There are two (2) main seasons, the rainy and dry. The rainy seasons lasts from the month of May to October while the dry season starts from November to April.

### Population and Political Units

The population of Akwa Ibom State is 3,920,208. (by 2006 census results) with a growth rate of 2.83 by the 1991 census result. The people are homogenous and commonly speak Ibibio and Annang language. There also exist 5 ethnic groups, the Ibibio, the Annang the Oro, the Obolo and the Ekid. They live together in well organized communities divided into 31 Local Government Areas. The people are predominantly farmers and fishermen. They also occupy themselves with trading, woodcarving, raffia works and black-smithing. There are two major religions in the state, the Christian religion and the Traditional African religion. A few cultural groups like Ekpe, Nnabo, Ekpo, Ekong, Akata, Abio-Okpo, etc. also exist.

The presence of industrial, commercial and government establishments in a few urban centres creates a clear demarcation between the cities and the rural areas. The consequent drift of the population from the rural areas to the cities and the massive influx of other Nigerians and aliens into the cities also put pressure on the existing public utilities and welfare services (like water, electricity, housing, waste-disposal, health services etc). Government effort is geared towards addressing these problems in the cities and in the rural areas where the poor, and the majority of women/mothers

dwell, and are being trapped in the backwaters of inadequate supply of essential social amenities. The living conditions of the majority of rural dwellers are further worsened by environmental degradation resulting from the unrestrained activities of the multinational oil companies.

Some of the major problems identified during oral interview for this study are that some rural women at the grassroots do not visit healthcare facilities because they are over-engaged in domestic agriculture and as such have no time to access facility-provided care. They also have limited means of transport and traveled long distances to be able to access a PHC facility. The facilities are poorly staffed and equipped. This situation informs the object of this study which tries to examine the impact of the access factors and type of services provided in every facility and the level of utilization of the primary healthcare facilities in Akwa Ibom State.

In the light of the above, the study seeks to examine the distribution, accessibility and utilization level of primary healthcare facilities in Akwa Ibom State. The purpose of this study is therefore to provide policy theorizing on how to improve primary healthcare facilities utilization through improvement in the supply side efficiency. The supply side efficiency takes cognizance of the availability of Physician, Nurses/Midwives, basic hospital equipment and number of beds in a given facility measuring them against the volumes of inpatient and outpatient attendance at a given facility. In addition to this, it examines the consumer behaviour with respect to type of services such as ante-natal, delivery and immunization, etc., provided at a given healthcare facility.

The specific objective of this study shall be tied to the following terms of reference. These include among others:

- i Conduct a survey of selected PHCs in all Local Government Areas of Akwa Ibom State to determine the level and distribution pattern of health services provided; the relevance and adequacy of the services provided with the prevailing health challenges.



- ii. Relate the services provided by the PHC facilities to population coverage, geographical coverage, state of buildings and infrastructure, availability of drugs, adequacy of equipment and manpower.
- iii. Estimate the records of each facility to quantify the actual services provided over a period of 12 months.
- iv. Assess the effect of the roles of private and traditional healthcare providers as well as community participation in the utilization of Public PHC facilities.
- v. Using acceptable statistical models, determine the levels of utilization of selected PHC facilities severally and jointly.
- vi. Determine the cause of sub-optimal utilization of PHC facilities.
- vii. Review the referral system operating at the Local Government Areas and State level.
- viii. Make recommendations including the articulation of a minimum health package for each PHC to improve the utilization of services throughout the State.

### THE CONCEPTUAL FRAMEWORK

The pattern of distribution of healthcare facilities has a strong and positive correlation on health status of a given population despite the fact that there is no definite theory for the location and distribution of healthcare facilities. Existing location theories are primarily concerned with agricultural, industrial, commercial and residential activities. There is therefore no theoretical basis for planning and evaluation of the general spatial efficiency

of public healthcare facilities (Onokerhoraye, 1999)<sup>1</sup>. However, good knowledge and understanding of how people use health facilities is vital for health resource allocation and planning. Shannon et al (1969)<sup>2</sup> opined that the decrease in utilization with distance from home (distance decay) is a key determinant for the use of health facility; along with gender roles, epidemiological patterns and the health systems (Fiedler, 1981)<sup>3</sup>. In a study on the effect of distance from home on attendance at small rural health centre in Papua, New Guinea, IVO et al (1998)<sup>4</sup> discover that attendance decreased markedly with distance both overall (50% decrease at 3.5km). the distance decay also affected patients with malaria and acute respiratory infections. This signified that spatial patterns accounted for 32% of variation in age and gender specific attendance rates and in considering spatial effect as a whole, more than 50% were due to distance effect.

Jonathan and Liu (2006)<sup>5</sup> also opine that utilization of primary healthcare facilities can be explained, to a large extent, by factors relating to economic status and walking time (distance) to clinic. Noor; et al (2003)<sup>6</sup> claim that distance is a crucial feature of healthcare services use and yet its application and utilization in healthcare planning have not been well explored particularly in the light of large-scale international and national efforts such as the Roll Back Malaria programme.

Noor; et al (2003) also observe that patients in the larger districts of Kwale and Makueni in Kenya, where access to government health facilities was relatively poor, traveled greater mean distances than those in other districts. More than 60% of the patients in the four districts attended health facilities with a 5-km range. Noor; et al further observe that interpolated physical access surfaces across districts highlighted areas of poor access and difference between urban and rural settings, where users from rural communities traveled greater distances to health facilities than those in urban communities.

The availability of qualified health personnel such as Physician and



Nurse/Midwives at a given facility could also explain the level of facility utilization. The primary aim of visiting a facility is for clients to be attended to by qualified personnel.

## METHODOLOGY

**TABLE 1 SHOWING SAMPLING METHOD**

Senatorial Districts	Name of Facility	Local Govt. Area	Classification
<b>Uyo</b>			
1	Health Centre, Idoro Obio	Uyo	Urban
2	Health Centre, Ikot Obio Inyang	Etinan	Urban
3	Health Centre, Ibiaku Itam	Itu	Semi-urban
4	Health Centre, Aka Ididep	Ibiono Ibom	Rural
5	Health Centre, Ikot Mkpo	Nsit Atai	Rural
<b>Eket</b>			
6	Health Centre, Idung Iniang	Eket	Urban
7	Health Centre, Afaha Eduok	Oron	Urban
8	Health Centre, Ibekwe	Mkpat Enin	Semi-urban
9	Health Centre, Ibaka	Mbo	Rural
10	Health Centre, Amauko	Eastern Obolo	Rural
<b>Ikot Ekpene</b>			
11	Health Centre, Amayam	Ikot Ekpene	Urban
12	Health Centre, Afaha Obong	Abak	Urban
13	Health Centre, Mbiabong Ikot Udofia	Ini	Rural
14	Health Centre, Ikot Obioma	Etim Ekpo	Rural
15	Health Centre, Ikot Akpan Essien	Oruk Anam	Semi-urban

## The Study Area

This study took place in Akwa Ibom State of Nigeria. It cut across the 3No. Senatorial districts of the state. 15 Health centres were selected from the 100 No. Health Centres in Akwa Ibom State( health posts and dispensaries not inclusive) using stratified random sampling methods. These 15 Health Centres were classified in terms of their location as the urban, semi urban and rural local government areas (LGAs) in Akwa Ibom State. Above is the table of classification.

The classification of these Local Government Areas (LGAs) into Urban, Semi-urban and Rural were influenced by four major factors such as access to pipe borne water, electricity, availability of educational institutions and markets, etc. These fifteen (15) facilities were randomly selected using a table of random numbers. Therefore, this sample study is truly representative of the 100 No. PHC facilities in Akwa Ibom State.

## Data Collection

Two (2) sets of questionnaires were used for data collection. Questionnaire 'A' was administered on 500 No. households within each facility's spatial coverage. These facilities were randomly selected to minimize bias. Only heads of households were interviewed or the housewife as a proxy for head of household. Altogether, 7,500 questionnaires were administered that is, 500 questionnaires for the coverage area for each of the 15 studied facilities in the State.

Questionnaire 'B' was administered directly on the selected facilities mainly to capture the facility's data. This audit method was able to produce accurate facility data for the study. The dual questionnaire technique was able to "filter" the required information needed for the study.

## TECHNIQUES OF ANALYSIS

Both descriptive and parametric methods were used.



**(a) Descriptive Method**

Tables, line graphs and charts were used to show the effect of walking distance from home on the utilization of health centres. Here gender sensitivity to distance decay was also noted. Also explained, was income effect for using a particular facility. The descriptive analysis also explained why people abandoned public health centres to patronize other sources of healthcare.

**(b) Parametric Method**

Data: From the questionnaire, panel data was extracted for the required variables such as the volume of the Facility Attendance (FA), Number of Nurses per facility (NS), Number of Community Health Workers per facility (CH) and Number of Hospital Beds per facility (BC).

**MODELSPECIFICATION**

$$\begin{aligned} \text{FA} &= f(\text{NS}; \text{CH}; \text{BC}) \\ \text{FA} &= a + b_1 \text{NS} + b_2 \text{CH} + b_3 \text{BC} + \mu \end{aligned}$$

Where:

FA	=	Facility Attendance
NS	=	Nursing Staff per Facility
CH	=	Community Health Workers per facility
BC	=	Bed Compliments per facility
$\mu$	=	Stochastic Variables/Error Term
a	=	The Constant, intercept or the slope
$b_1, b_2, b_3$	=	Regression Coefficients

This model estimates the relationship between Facility Attendance (FA) and Nursing Staff (NS), Community Health Workers (CH) and Bed Compliments. FA is the regressand or the dependant or explained variable while NS, CH, and BC are the regressors or the independent or explanatory variables.

Note that Medical Doctors (MD) are not posted to Health Centres in Akwa Ibom State hence the absence of MD in the model. This has serious

implication for utilization of PHC facilities.

Broadly speaking, the model assumes that Facility Attendance (FA) is linearly dependent on Nursing Staff, Community Health Workers and the Bed compliment at the facility. Other factors like availability of equipment, electricity, water, spatial distance, socio-economic factors and availability of drugs also influence utilization levels of these PHC facilities.

**RESULTS**

$$\begin{aligned} \text{FA} &= a + b_1 \text{NS} + b_2 \text{CH} + b_3 \text{BC} \\ \text{FA} &= -322.6 + 83.0 \text{NS} - 21.2 \text{CH} + 72.6 \text{BC} \\ &\quad (-4.874)^{**} (2.177)^* (-0.750) (3.412)^{**} \\ t &= \text{Values are in parenthesis} \\ ** &= \text{Significant at 1\% level} \\ * &= \text{Significant at 10\% level} \\ 0 &= \text{Not significant} \\ R^2 &= 90.5\%; \\ \bar{R}^2 &= 88\%; \\ \text{Durbin Watson} &= 1.889 \\ \text{SER} &= 95.5285; \\ \text{Mean of the Dependent Variable} &= 285.27 \end{aligned}$$

**ANOVA**

Model 1	Sum of Squares	df	Mean Square	F-test
Explained	957920.38	3	319306.8	34.990**
Residual	100382.56	11	9125.7	
Total	1058302.9	14		

\*\* = F-test significant at 1% level



### Explanation of Result

$R^2$  of 90.5% shows a higher degree of fitness of the model explaining the relationship between facility attendance and the explanatory variables such as Nursing Staff, Community Health Workers and the Bed Compliments. It also indicates that 90.5% variations in Facility Attendance (FA) are influenced by the Number of NS, CH, and BC. Looking at the t-values, it can easily be seen that Nursing Staff (NS) and the Number of Beds (BC) at a particular health centre have the tendency to increase attendance at any given facility. This is indicated by the level of statistical significant where nursing staff is significant at 10 % level and bed compliment at 1% level. The Number of Beds therefore is more likely, to take more people to a given facility than the nursing staff. The negative coefficient for Community Health Workers (CH) in the model shows that these groups of staff are not significant in bringing patients to PHC facilities. The behaviour of CH in the model shows that an increase in the number of community health workers at PHC facilities would result in a higher decrease of patient attendance. It should be noted that no patient will visit any centre where the staff on duty can not display sufficient evidence of requisite aptitude to render his or her professional services freely as required by the law. Its negative co-efficient portrays their inability to manage PHC facilities. In other words, the continual flooding of the PHC facilities with CH at the expense of qualified medical doctors, nurses and midwives is repulsive to facility attendance. The overall result is considered good since the error term of the model is minimal as shown by Durbin Watson (1.889). The explained sum of squares (ESS) of 957,920.38 is greater than the unexplained or the residual sum of squares (RSS) of 100,382.56. This also adds to the efficacy of the model in estimating the predetermined relationships which posits that facility attendance is a function of nursing staff, community health workers and bed compliments at the facility.

### UTILIZATION PATTERN OF PHC IN AKWAIBOM STATE

In order to determine the relationship between the location of primary

healthcare centres and their utilization by people living in different distances from them, a utilization survey was carried out. This form of survey is important because utilization vary from one locality to another in the state and Nigeria as a whole depending on the socio-economic, demographic, cultural and environmental conditions which planners of future healthcare delivery must recognize (Onokerhoraye, 1999). The primary source of data on the relationship between the utilization of PHC facility located in a community and the distance from home was the individual respondent questionnaire B (Appendix II).

The questionnaire was administered to female and male members of the selected households randomly. In each community, five hundred (500) respondents were selected for interview. The instrument used was designed to elicit information on their attitudes to primary healthcare facility and the distances they travel to receive this healthcare services. The questionnaire focused on the background of the respondents, his/her relative location in terms of distance from existing PHC, utilization in relation to his/her distance from the PHC facility and his/her views on the improvement of existing facilities especially in terms of provision of amenities and geographical coverage.

### SAMPLE FRAME FOR THE INDIVIDUAL RESPONDENT QUESTIONNAIRE

The sampling frame for the individual respondent questionnaire was provided using the maps received from each primary healthcare facility selected from the 3No.senatorial districts. Five PHC facilities were selected from each senatorial district of which two (2) were from the urban, one was from the semi-urban and two were from the rural areas. From each selected centre, the following distance ranges were used:



1km	-	2.5km
2.5km	-	5km
5km	-	7.5km
7.5km	-	10km
10km	-	and above

From each of these distances coverage around the PHC facility, five hundred (500) respondents were interviewed and the questionnaire administered.

### Descriptive Data Analysis

The data collected were analyzed using descriptive and inferential statistics. The data were also presented in tables and charts.

**Table 2**  
**Distance from PHC facility and Attendance Pattern**

Distance from PHC (km)	No. of Respondents	No. of Attendance per year		
		M	F	Total
0 - 2.5	500	102	281	383
2.5 - 5.0	500	123	268	391
5.0 - 7.5	500	86	101	187
7.5 - 10	500	48	72	120
10 and Above	500	48	81	129

The table above indicates a general poor attendance and utilization of PHC facilities, with respect to distance coverage. From the table, males show a much lower patronage to the facilities than the females. A sharp decay in attendance is also shown from the distance above 5km to the PHCs. This indicates that about 1 patient (respondent) utilizes the facility per day. This corroborates the findings of Friedler (1981)<sup>3</sup> IVO et al (1998) and Shannon

et al (1969)<sup>2</sup> which agreed that there is a general decrease in utilization of health facility with distance from home (distance decay). Other contributory factors to low utilization include gender roles, local epidemiological patterns and health systems.

**Table 3**  
**Income Level of the Respondents and Attendance**

Distance from PHC (km)	No. of Respondents	Average Income Per year (N)	Average Attendance Per year
0 - 2.5	500	= 231,000	383
2.5 - 5.0	500	= 274,320	391
5.0 - 7.5	500	= 224,640	187
7.5 - 10	500	= 242,640	120
10 and Above	500	= 262,560	129

From the table above, correlating the average attendance per year with the average income per year in each distance bracket gives an r-value of 0.1067. This indicates a very low positive co-relationship between income and attendance. This r-value is not however significant at p 0.5 which suggest that attendance and patronage of these health facilities may not be explained by income of the respondents. This proves that healthcare services are income inelastic. This also portends that an individual can pay higher to obtain care provided it is qualitative, efficient and friendly.

Jonathan and Liu (2006), opine that utilization of PHC facility is closely linked to economic status and walking time (distance) to the clinic. From this data available, it implies evidently that, walking time (distance) and other factors rather than economic status is a major influence in the utilization pattern of the PHC in Akwa Ibom State.



Table 4

S/No.	Reasons For Not Patronizing the (PHCs)	% Response
1.	No Nurse/Midwife	62%
2.	No Doctor	72%
3.	No Bed/Cots	14.3%
4.	Long Walking Time/Long Distance to the facility	56%
5.	No Means of Transportation	21.4%
6.	Poor Location (Terrain)/Bad Roads	5.6%
7.	Non Availability of Basic maternity/pediatric services	68.2%
8.	No Drugs and other Equipment	82%

From the table above, lack of drugs and other basic medical equipments in the PHC (82%) and lack of medical doctors (72%) account for top reasons for not patronizing the health facilities while lack of midwives and non-availability of basic services account for second level reasons. This finding agrees with the findings of Onokerhoraye (1999). According to him, lower cadre health establishments known as primary health centres do not have the required facilities and personnel to carry out minimum package of healthcare services and in most cases they may not function for weeks or months because of lack of personnel or materials/equipments to provide services.

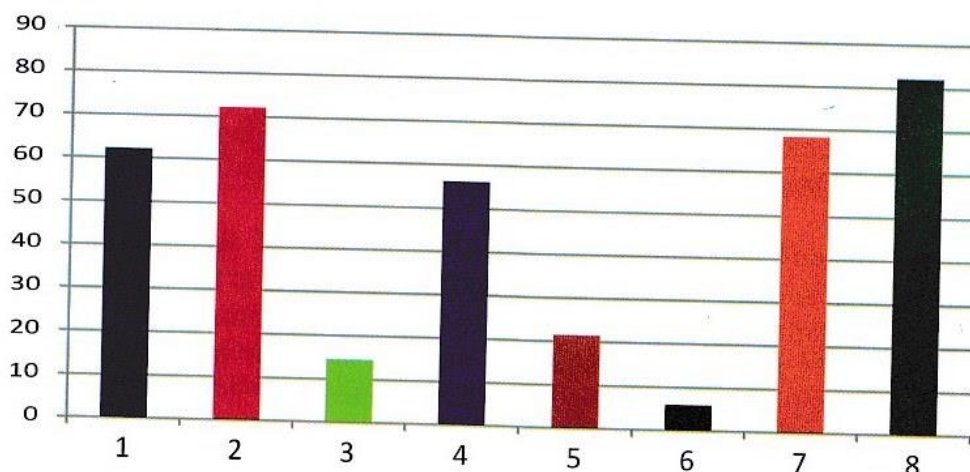


Figure 1 above: Bar Chart Showing Reasons for not Patronizing PHCs in Akwa Ibom State

The other major components of healthcare delivery system of Nigeria comprise the secondary and tertiary health establishments otherwise known as general and specialist hospitals respectively. The emphasis placed on these general and specialist hospitals (both private and public) with the consequent neglect of PHCs including diminishing provision of drugs, other basic medical equipments and insufficient personnel renders the primary health centres un-utilized.

Other major reasons advanced for not patronizing the PHC facilities include long walking time/distance to the facility (56%). Another reason advanced during the oral interview with the respondents is the poor attitude of some of the available medical personnel. The respondents generally agree to the fact that most of the nurses/midwives in the centres are usually too harsh with patients and they thus resort to private clinics, traditional birth attendants and spiritualists for help.

Table 5

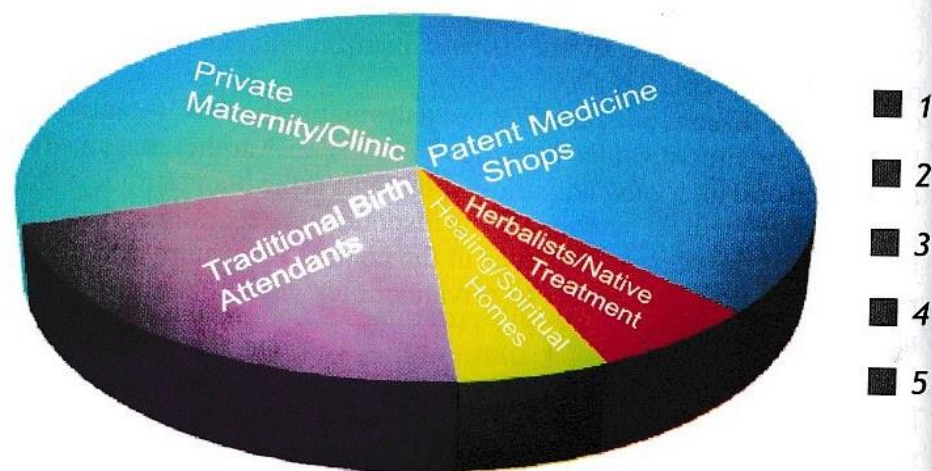
### Patronage of Alternative sources of Healthcare

Alternative source	%Of Patronage
Patent Medicine shops	85%
Herbalists/Native Treatment	14%
Healing/Spiritual Homes	12%
Traditional Birth Attendants	48%
Private Maternity/Clinic	70%

Primary health centres in Akwa Ibom State, as in other parts of Nigeria include clinics, health centres, health posts, dispensaries and maternity homes. Generally they are expected to serve as the first point of call at anytime people feel sick especially in the rural communities where there are few hospitals. However, from the table above, a greater percentage of the people resort to the private drugs sellers (85% of the respondents) who have



shops in the areas and also private maternity/clinics (70%) and TBAs (48%). Since the facilities in the PHCs are largely managed by nurses, midwives and community health workers who draw their pay from the Local Government coffers, they should be provided with facilities and opportunities to work. Also, the distribution and accessibility of these health facilities/services is therefore important in the rural communities.



**Pie Chart Showing Patronage of Alternative source of Healthcare**

## THE MAIN FEATURES OF THE AVAILABLE PHCs IN THE STATE

### Nature of PHC Facilities

Most PHC facilities are housed in dilapidated buildings with roofs heavily damaged, walls broken down and generally without maintenance of any sort. Where the buildings are in good shape, unkempt environment explains the level of neglect and lack of attendance/patronage of the facilities. Where the facilities have residential quarters for staff, most of the buildings are occupied by support staff while nurses/midwives operate from nearby towns/villages.

### Staffing

The study of the facilities reveals that over 80% of the facilities have between 1 and 3 nurses/midwives and over 90% have between 1 and 4 community health workers. The duties are shifted between these few staff. This implies that, few of these shifts, have only 1 nurse/midwife covering the duties which would have been covered by doctors, nurses and midwives while some shifts have no nurse/midwife at all.

This is evident from table 4 which 72% of the respondents complained of lack of doctors and 62% complained of lack of nurses/midwives as their reasons for not attending and patronizing the PHC facilities in their areas. This perhaps also explains why 85% of the respondents tend to patronize patent medicine shops and 70% patronizes private maternity/clinics.

### Infrastructure

Generally, most of the PHC facilities are located in terrains which are accessible to the inhabitants of the area where the facility was expected to serve. The access roads may not however be tarred. Over 70% of these facilities have no access to safe drinking water and power supply; while some were disconnected by Power Holding Company of Nigeria (PHCN) for the reason of non-payment of bills by the centres.

### Drugs and Equipment

The drugs revolving fund scheme, where the facility collects drugs from the PHC operational base and pays back the cost after use for subsequent collection of drugs is still in place/progress in the PHC facilities. It is however noted that drugs are generally not available in the PHC facilities apart from the operational base. Responses from the nurses' in-charge of each of the facilities indicate very low supply of drugs from the operational base.

From table 3; 82% of the respondents complained of non-availability of basic drugs and equipments as a major reason for not patronizing the PHC facilities in their areas.



## Conclusion

It is generally known that the Nigerian health system is characterized by inadequate healthcare facilities. In Akwa Ibom State, records show that, the state government has made tremendous efforts at revamping secondary health facilities. There is only one tertiary health facility in the state, but the government of Chief Godswill Akpabio laid a foundation stone for the construction of 20<sup>th</sup> Anniversary Specialist Hospital in Uyo Capital Territory on 25<sup>th</sup> September, 2007. However with this few number of secondary health facilities in the rural areas and one tertiary health facility in the state, the expectation therefore would have been greater utilization of the primary health facilities. This is not however the case in Akwa Ibom as is evidenced in the very poor level of patronage and utilization of these PHCs. The implication is that there is a greater patronage of private clinics/maternalities, quack medical personnel and traditionalists.

From the study, it was discovered that, the provision and distribution of primary health centres was largely inequitable. At the same time, the services provided in these primary health centres are quite limited, mainly, due to lack of working materials/tools and shortage of personnel.

Findings from the study also indicate that, the location of the households in relation to the primary healthcare facility, the nature of illness, the services available in the PHCs, the equipment and the number of health personnel were crucial factors that affect the utilization of the PHCs. This was explained by  $R^2$  of 90.5% and the Joint F-test of 34.99, significant at 1% level.

The perceived quality of services was noted to be an important determinant of the pattern of utilization of the PHCs. From the oral interviews, private practitioners were perceived to be providing better services in terms of service delivery, always readily available and accessible when need arises, with the availability of necessary drugs in their health establishments.

## RECOMMENDATIONS

Based on the results of the study, the following recommendations are made:

1. The management of the PHCs should be revisited. Medical Doctors should be posted to head these health facilities. A functional primary healthcare Management Board should be set up to oversee the management of the PHCs. This would improve funding and ensure regular monitoring and supervision of PHC services in the State.
2. The facilities should be re-equipped with modern equipment and drugs as this is the nearest delivery point to the masses especially the rural dwellers.
3. The State Government should make deliberate effort to recruit and post to the PHCs qualified nurses and midwives (especially the midwives) to provide effective response to the healthcare needs of mothers and children.
4. The role which PHCs are expected to play in terms of health education of the people has not been possible because of their poor staffing and lack of facilities. The challenge therefore is to train, retrain more village health workers to educate the communities on basic health promotion activities.
5. The dilapidated buildings in the primary health centres should be renovated and equipped. This on one hand will show the importance and seriousness attached to these centres by the Government and on the other hand improve the utilization level of the facility by the community where the facility is located. Provision of electricity or portable electricity generating sets and safe drinking water in these facilities would be a major boost to the level of utilization of the facilities.
6. More PHCs should be built especially for those communities which are up to 5 kilometres away from the existing facility. Also, mobile



clinics with adequate drug supply could be used as an alternative source of service delivery point especially for those localities above 5 kilometres from the existing facility. Localities where the population is so dispersed as observed in Ini, Ikot Ekpene, Oron, Mbo Local Government Areas should be provided with model PHC facilities.

7. Inducement allowances should be provided for those personnel who are willing to work in the rural areas.
8. A programme of personnel and facility improvement in the PHCs should be combined with a policy of deliberate dispersal of PHCs in the State; this should be closely related to programmes of rural development and settlement upgrading. If the PHCs are to be attractive and made functional in the rural communities, the availability of essential infrastructure such as roads, water, transport and electricity are very important.

This requires the participation of people, the Local Government Authorities, the Oil Companies, the Private Sectors, NGOs and other Agencies. This calls for collaboration of all agencies on development and donor partners.

9. There should be adequate awareness campaigns to launder the image of the PHCs in the minds of the people in the community and to call for patronage with the attendant improvement from the commitment of the state for greater productivity.
10. All the PHC facilities should be computerized with the view to having accurate and efficient data collection mechanisms and storage.
11. Vehicles and other transport facilities should be provided for easy and timely referrals.

**DEPARTMENT OF HEALTH SERVICES RESEARCH, MINISTRY OF HEALTH, UYO STUDY ON HEALTH FACILITY UTILIZATION IN AKS**

**QUESTIONNAIRE A**

Note: This questionnaire is to be answered by members of the community for which the facility is located.

**Part A**

1. Name of Respondent (Optional)
2. Title: Chief/Mr./Mrs./Miss
3. Sex ☐ Male ☐ Female
4. Age: ☐ below 10years ☐ 10-15 ☐ 16-25 ☐ 26-35  
☐ 36-45 ☐ 46-55 ☐ 55 and above
5. Religion:
6. Position in the Household
7. Educational Qualification
8. Occupation
9. Average Income per Month

**Part B**

10. Name of Health Facility
11. Village Located



12. Local Government Area

13. How would you classify the distance from your House to the facility?

Near ☐ Far ☐ Too far ☐ Average ☐

14. How would you estimate the distance?

2.5km ☐ 5km ☐ 7.5km ☐  
10km ☐ Above 10km ☐

15 (a). How often do you visit this facility?

Regularly ☐ At times ☐  
When Necessary ☐ Not at all ☐

(b) Please specify the number of times in a year.....

16. What are the reasons for not visiting the facility regularly (tick by assigning numbers to the options from 1-8 where 1 is stronger than 2, and so forth)

☐ No Nurse/Midwife

☐ No Doctor

☐ No Beds/Cots

☐ Long Walking Time/Long Distance to the Facility

☐ No means of Transportation

☐ Poor Location/Bad Roads

☐ Non Availability of Basic Maternity/Pediatric services

☐ No Drugs and other Equipment

17. What other reason(s) would you give for not patronizing the Facility?

18. Tick the available services in this facility

☐ Immunization

☐ Family Planning

☐ Delivery

☐ Circumcision

☐ Malaria and other common Ailment

☐ Health Education

☐ Ante-Natal

19. Which of the above takes you to the facility frequently .....

20. Where you do not visit the facility, which of these is your alternative source of care?

❖ Patent Medicine Shops

❖ Herbalists/Native Treatment

❖ Healing/Spiritual Homes

❖ Traditional Birth Attendants

❖ Private Maternity/Clinic



21. Give your reasons for (20) above  
.....  
.....  
.....
22. What is your general comment on the Health Facility?  
.....  
.....  
.....
- 23 Thank you for your kind cooperation.

**DEPARTMENT OF HEALTH SERVICES  
RESEARCH, MINISTRY OF HEALTH, UYO**

**QUESTIONNAIRE B**

To be completed by Heads of selected Facilities

Note: The aim of this study is to determine the levels of Primary Healthcare Facility utilization in Akwa Ibom State.

**Part A**

1. Name of the Facility .....
2. Village Located .....
3. Local Government Area Located .....
4. Name of the Reporting Officer .....
5. Designation .....

6. Population of the Local Government Area .....
7. Population of the Village Facility is Located .....
8. Number of Villages served by the Facility.....
9. Spatial situation of the facility.....

Located on  
plain land

Located on  
the Hill

Located on  
the Slop

**Part B**

10. Number of Physicians .....
11. Number of Qualified Staff Nurse/Midwives .....
12. Number of CHEWs .....
13. Number of Beds .....

List of Basic Equipment	Quantity	status	
		Functioning	Obsolete
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

15. State (5) Important Services Provided by the Facility
- (1) .....
- (2) .....



- (3) .....
- (4) ..... 1 .....
- (5) .....
16. What is your source of Water? .....
17. What is your source of Electricity? .....
18. How do you get your Drugs?.....
19. Drug Availability ☐ Poor ☐ Adequate ☐  
Not Available ☐
20. List 3 most highly demanded services in the facility  
(1)  
(2)  
(3)
21. Complete the monthly attendance for the facility in 2006

Months 2006	Disaggregate by Gender		Total
	Male	Female	
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
TOTAL			

22. How many Staff Nurse/Midwives live within or around the facility?
23. How many CHEWs live within or around the facility?
24. How often do you put on your Electricity?  
  
Only on day time  
Only in the night  
Both day and night  
Not All  
Occasionally
25. What is your reason for 24 above? .....  
.....  
.....
26. Does the facility have management structure in place?



## REFERENCES

1. Andrew G. Onokerhoraye, (1999) "Access and Utilization of Modern Healthcare Facilities in the Petroleum-producing Region of Nigeria: The case of Bayelsa State" Harvard School of Public Health, Boston Research paper No. 162.
2. Shannon G. W., Bashshur R. L., Metzner C. A., (1969) "The Concept of distance as a factor in accessibility and utilization of Healthcare". *Medicare Review* 1969:26:143-161.
3. Fiedler J. L. (1981) "A Review of Literature on access and utilization of Medical care with special emphasis on rural primary healthcare", *soc. Sti. Med.* 15c:729-142.
4. IVO Nuller, Tom Smith, Stere Mellor, Lawrence Rare and Blaise Genton (1998), "The Effect of Distance from Home on Attendance at Small rural Health Centre in Papua New Guinea, *International Journal of Epidemiology* 27:878-884, Britain"
5. Jonathan Baker & Liu Liu (2006) "The determinants of primary Healthcare utilization: a comparison of three rural Clinics in Southern Honduras", *Geo Journal*, Volume 66, pp. 295-310 (16), Springer, November 4.
6. A. M. Noor, D. Zurovac, S. I. Hay, S. A. Ochola, R. W. Snow (2003) "Defining equity in physical access to clinical services using Geographical Information Systems (GIS) as part of Malaria Planning and Monitoring in Kenya", *Tropical Medicine & International Health* 8(10), 917-926".