

Evaluation of Residents' Accessibility and Utilization of Healthcare Facilities in Oko-Ito Gberigbe, Ikorodu Local Government Area, Lagos State, Nigeria

Omolola Adegoke^{a,*}, Timothy Morenikeji^b, Oladotun Morakinyo^c, Rashidat Alade^d, Sodiq Odutola^e, Tobi Saliu^f, Jessica Grant^g

^{a,f,g}*The Hope For Us Charity (International Headquarter), 9661 South Gessner Rd Houston TX, 77071 United States of America*

^{b,c,d,e}*The Hope For Us Charity (Nigeria Chapter), No. 6, Aperin street, off Awolowo Road, old Bodija, Ibadan, Nigeria*

^{a,f,g} *Email: hopeforuscaharity@gmail.com*

^{b,c,d,e} *Email: nigeria@hopeforuscharity.com*

Abstract

This study evaluated the accessibility and utilization of healthcare facilities in Ikorodu Local Government Area of Lagos State, Nigeria. The World Health Organization emphasized the importance of healthy living, therefore, it becomes imperative for major stakeholders especially the Government, to ensure the availability of ultramodern healthcare facilities with adequate medical personnel and ensure equitable access by the residents. Socio-economic status of the residents, their location and accessibility are some of the factors identified that influence the residents' use of the healthcare facility. For the purpose of this research, primary data was collected by random administration of questionnaire and direct interview of residents in Oko-Ito, Gberigbe, Ikorodu. The population of the study area is projected from 3,550 in 2015 to 4,035 in 2019 using the projection formula with a population growth rate of 3.2 percent. With the aid of SPSS, the data collected were analyzed using descriptive statistics. Demographic features of the respondents such as gender, age, level of education and occupation were taken into consideration, and a bulk of the population of the respondents affirm that the utilization of the available healthcare facility, despite its distance from the study area, is greatly influenced by the fact that it is owned by the Government – a Primary Health Center located at Igbalu community with a walking distance of over 1km from the study area.

* Corresponding author.

The influencing factor for the utilization of this healthcare facility was evaluated using the Usage Factor Index (UFI) with 'quality of staff' having the highest coefficient followed by 'nature of illness.' 'Proximity to home' has the lowest coefficient followed by 'good road network.' The UFI values indicate the need for a standard healthcare facility in Oko-Ito community, and it is highly recommended for community leaders to reach out to all relevant stakeholders including religious bodies and Non-Governmental Organizations both at local and state level to help in building accessible health care facility in this community.

Keywords: Accessibility; Facilities; Healthcare; Health Sector; Utilization.

1. Introduction

Health as defined by the World Health Organization (WHO) is the complete state of physical, mental and social well-being and not just mere absence of diseases. The healthier we are, the greater our potentials for human effectiveness [1]. Health is the greatest natural resources of a nation. Investing in health is not only deemed good but also of utmost importance to societies. Since the early times, health as always has been the fundamental part of a Nation's Economic success. Health performance is a great determinant of a Country's Economic performance. The effect of health on development cannot be overemphasized; countries with weak health care systems find it harder to achieve sustained growth. Good healthcare is also synonymous with a higher life expectancy. In South Africa, 8.9% of its GDP were spent on healthcare and life expectancy is capped at 56.7 years, United State of America spends 17.2% GDP on healthcare and the life expectancy is capped at 79 years, while Nigeria spends 3.7% of its GDP on healthcare and life expectancy is capped at 53years [2]. Healthcare is the sustenance or enhancement of health through the prevention, diagnosis and treatment of diseases and physical and cognitive impairments. Provision of quality healthcare is a fundamental right for all and sundry that should be guaranteed by the governments of all countries [3]. Deviation from this has being a major concern to the global community as the system ought to be made available to people irrespective of varying levels of living [4]. Importance of healthcare to human can never be over-emphasized, it can be likened to food that fuel human existence, and the role of the government in this sector determines the wellness of the people [5]. Health care is delivered by Health professionals in a Health facility. Health facilities are places that are furnished with resources that are required to cater for the needs of various patients. Health facilities was categorized into; primary, secondary, and tertiary institutions [4]. Economic variables alone cannot explain health care utilization as the type of health services provided in a particular medical establishment is a significant determinant in decisions about outpatient visits [6]. Poverty endangers the health and lives of many in developing countries since the most widespread and severe poverty occurs in countries such as Nigeria, Togo, Liberia and so on [7]. Hospitals and clinics are not easily accessible to care seekers due to spatial inequalities and contradictions inherent in the urban distribution of services [8]. Most governments in developing countries spent 70% on urban based care, while 30% goes to rural areas, and about 70-80% of urban health-seekers compared to rural health-seekers live within 10km to available health facilities [9,10]. There is a nexus between inadequate access to healthcare facilities with increasing avoidable and preventable deaths, which was as a result of the geometric increase in the population of people in the city which has met with a decrease in medical facilities in the city [4], which has created an obvious gap in access to health care facilities between the rich and the poor in developing countries [11]. The choice of health facility is dictated by economic factors or influenced

by significant others like the accessibility and utilization of health facilities by the public, coupled with location and perception of the significance of health [7]. Despite the huge amount of money pumped into health sector, some still resorts to self-medication by patronizing hawkers of both herbal preparations and modern pharmaceutical drugs on streets or in transport vehicles. Human beings as the center of concern for sustainable development and this should entitle them to a healthy and productive life and live in harmony with nature [12]. More so, effectiveness of health sector has become one of the parameters to measure the level of development of any country, and its accessibility are been considered as a dividend of democracy by the populace. It is against this backdrop that this study seeks to evaluate residents' accessibility and utilization of healthcare facilities in Oko-Ito Gberigbe, Ikorodu Local Government Area, Lagos state, Nigeria.

2. Literature Review

The factors that determine access and utilization of health care facilities are the result of how these facilities are positioned, operated and what hinders individuals in the community from seeking appropriate healthcare services. Different studies have drawn nexus between socioeconomic inequalities and utilization of healthcare. Also, there is always a demanding interest in the health care system, which depends on its adequacy level based on the substantive need of the population that it served [13]. Accessibility to these facilities involves multidimensional process and distance is the most important factor that influences the utilization [14, 15]. Health system in Nigeria is dysfunctional and grossly under-funded with a per capita expenditure of US\$ 9.44 [16], this makes it one of the worst health indices in the world and accounts for 10 percent of the world's maternal deaths [17]. The distribution of health facilities in Nigeria varies with the number of primary health facilities estimated to be 88% primary, 12% secondary and 0.25% tertiary [18]. These values highlight the lack of specialized health facilities in Nigeria. The study also reported that 67% of the facilities are government-owned while the remaining 33% are privately-owned. Even though there are more public to private facilities particularly in the north, the distribution based on regions and urban versus rural creates an unequal access to health services. The lack of proper distribution of healthcare resources based on regions is also supported by a study executed in Ethiopia. The study uncovered the inequality of health care services in 3 urban and 4 agrarian regions in Ethiopia. This hampers the access to health services and utilization of health facilities [19]. In addition to distribution of healthcare facilities, there are other factors that cause detrimental damages to individuals in need of healthcare. Geographical health seeking factors are social, cultural, demographics, and political [20]. The study further explains that education, resource scarcity, finance, body of healthcare organization, and transportation are key determinants in how people access health care services. Another factor that plays a key role in the accessibility of healthcare is the availability of drugs that is pocket friendly [21] this emphasizes the importance of healthcare costs. Individuals are less likely to seek health services including the pharmacy if they can't afford it. The inadequacies in the access to health facilities has drastically reduced the life expectancy of rural dwellers and increased infant mortality, as they often spend a lot of time getting to the nearest available health care center due to the problem of unreliable means of transportation [13]. The access and utilization of health facilities is an issue that needs immediate resolution. The focus on Oko-Ito Gberigbe, Ikorodu Local Government, Lagos state, Nigeria will analyze critical factors that influence access to health facilities.

3. Materials and Methods

Primary data for the study was collected through questionnaire administration to the residents of the community; interview session was conducted with the stakeholders of the community in acquiring supplementary information, and; direct observation of the community was also employed. Secondary data includes relevant information regarding the research work extracted from relevant textbooks, journals, newspapers etc. The study was conducted at Oko-Ito Gberigbe community with a population of 3,550 in 2015 [22]. Population projection formula ($N_t = P_e^{(t \cdot r)}$) [23] was used to project the population of the community in 2019. The Annual Growth rate of 3.2% of the state [24] was adopted. The population of the study area was projected to 4,035. To determine the sample size, a convenient sample ratio of 3% was selected due to the fact that for any increase in study population, the sampling ratio decreases [25], which amounted to 121 respondents. Convenience sampling technique was adopted; questionnaire was administered to residents above the age of 18 who were willing to participate in the exercise. Descriptive statistics was used in data analysis with the aid of SPSS.

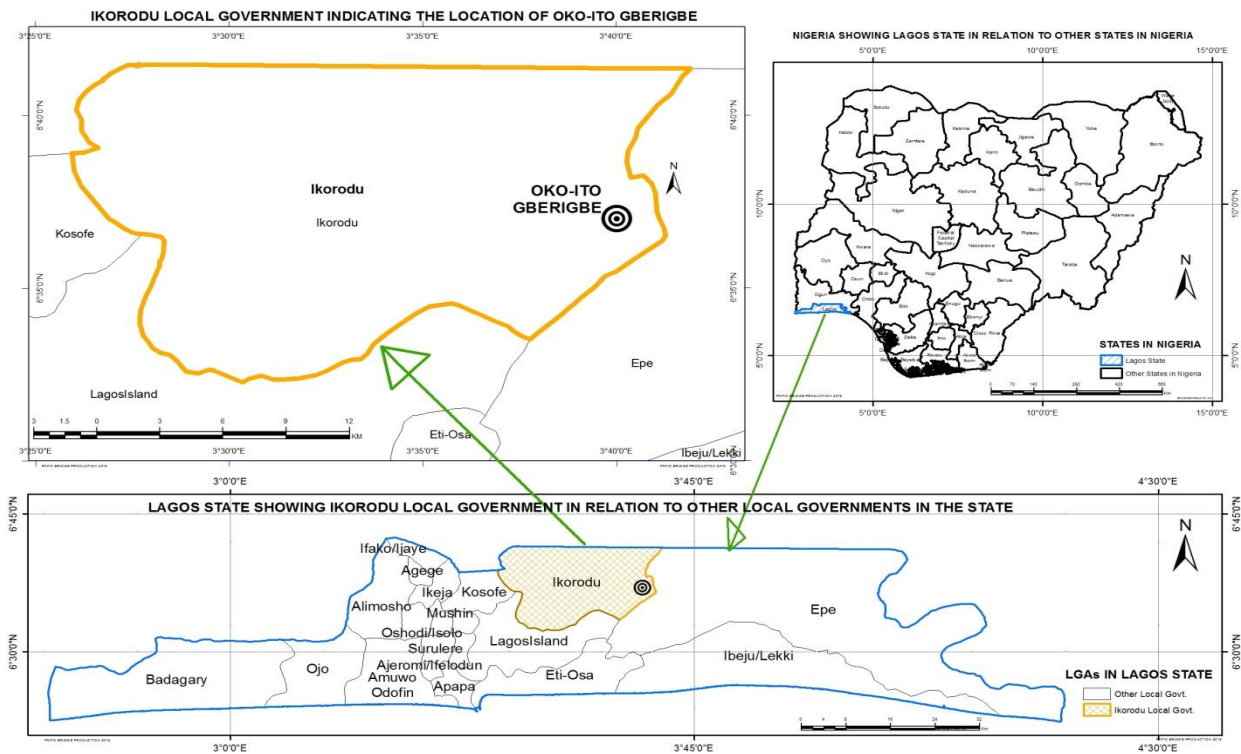


Figure 1: Oko-Ito Gberigbe Community within Ikorodu Local Government.

4. Results and Discussion

This section explained the result of the findings. Socioeconomic characteristics of the respondents; utilization of healthcare using perception of the respondents to know factors influencing its utilization; measurement of the satisfactory level of the services provided; efficiency and adequacy of notable healthcare facilities were also discussed.

4.1 Socio-Economic Characteristics of Respondents

The gender ratios of the respondents are 39.7% male and 60.3% female, it can be said that 2 out of 5 people in the area are females. Bulk of the respondents are within the age bracket of 36-45years (35.5%), others in descending order are 26-35years (23.1%), above 40years (27.3%) and 18-25years (14.0%), It can be deduced that most of these respondents are in their active age and mostly, utilization of medical facilities are age related because there are some ailments peculiar to some age bracket.

Table 1 revealed that there is no much disparity between those with primary education and secondary education in the study area as they account for 40.5% and 38.8% respectively; nearly all the respondents are literate which should serve as the basis of knowing the importance of being healthy and aid the usage of medical facilities.

Marital status is a determinant that shows health need variety of the society, it was discovered that bulk of the sampled size (71.9%) are married which posed increase with its attending spatial expansion and need to make adequate provision of health facilities for both the young and the old. The survey on occupational status revealed that the largest share are traders (35.5%) and 26.4% are artisans, the results implies that majority of the respondents are income earners. The income level of the respondents revealed that those with monthly income between ₦10,000-₦20,000 accounted for 37.2%, which is a little bit above the national minimum wage of ₦18,000. As at the time of conducting this research, a visible trend of income was noticed and level of their income would determine usage of health care service. It was also observed that 43.0% of the household size has 1-5people. Finding out the period of stay in the study area is necessary to measure how knowledgeable the respondents are about the study area, those living in the study area for period of 6-10years account for 36.4% while those living there for period of 1-5years represent 33.9%.

Table 1: Socio-Economic Characteristics of Respondents

Socio-Economic Characteristics		Frequency	Percentage
Sex	Male	48	39.7
	Female	73	60.3
Age	18-25years	17	14.0
	26-35years	28	23.1
	36-45years	43	35.5
	Above 40years	33	27.3
Education Level	None	7	5.8
	Primary	49	40.5
	Secondary	47	38.8

	Tertiary	18	14.9
	Single	15	12.4
Marital Status	Married	87	71.9
	Divorced	16	12.4
	Widow/Widower	4	3.3
	Students	4	3.3
Occupation	Farmer	18	14.9
	Trader	43	35.5
	Civil Servant	21	17.4
	Artisan	32	26.4
	Others	3	2.5
	Less than #10,000	25	20.7
	#10,000-#20,000	45	37.2
Average Monthly Income	#20,001-#30,000	25	20.7
	#30,001-#40,000	15	12.4
	#40,001-#50,000	5	4.1
	Above #50,000	6	5.0
	Household Size	1-5	52
6-10		43	35.5
Above 10		26	21.5
Less than 1years		17	14.0
Duration of Stay	1-5years	41	33.9
	6-10years	44	36.4
	11-15years	9	7.4
	Above 15years	10	8.3
TOTAL		121	100.0

4.2 Healthcare Utilization

An overwhelming percentage (83.5%) of the respondents affirmed that there is no presence of healthcare facilities in the study area, and the only close healthcare facility as affirmed by 77.7% is a government owned Primary Health Center which is located at Igbalu community with a walking distance greater than 1km as revealed by

89.3% and with a traveling time of about 15minutes on bike through a rugged road as shown in Figure 2. Further enquiry revealed that Igbalu Health Center only provides Out-Patients service as complicated cases are been referred to Imota Health Center for further treatment which is 20minutes drive from there. The current state of building assumed to be the proposed structure for Health center in Oko-Iko as shown in Figure 3 is devastating. Patronage of this healthcare can be influenced by its ownership i.e government, as people believe it is the duty of government to provide social services to it's citizens. Alternative health facilities that people of the study area resort to are patent medicine stores for count drugs and the usage of local herbs for treating ailments. Those that have received treatment at this center account for 65.3% of the respondents, of which 60.0% opined that the services received, was satisfactory. Also 51.3% of them did not pay for the treatment received while those that paid reported the price as pocket friendly. More so, 66.9% affirmed that they will be willing to pay for treatment if situation warrants it. Majority of the respondents (89.3%) opined that the provision of healthcare should be done by the government, which is considered as part of dividends of democracy and; 66.1% of them said that it is the sole duty of the state government which is the second tier of government to be the major provider of these facilities.



Figure 2: Rugged untarred road from Oko-Ito Community to Igbalu Community



Figure 3: Picture showing Abandoned uncompleted building proposed for Primary Health Center at Oko-Ito Gberigbe

4.3 Perceived Factor Influencing Usage of Healthcare Facility

Usage of healthcare depends on individuals which can be aided by different factors. A Usage Factor Index (UFI) was calculated to determine the perceived factors influencing the usage of the healthcare facilities. The mean of the UFI was 3.19. From the perception of the residents, ‘quality of staff’ has the highest UFI of 3.84. It was followed by ‘nature of illness’ with UFI of 3.52. ‘Quality service’ and ‘moderate charges’ has the same UFI value of 3.49. This was followed in decreasing order by ‘availability of drugs’ (3.47), ‘hours of opening’ (3.36), ‘personnel experience’ (3.34), ‘waiting time’ (3.25), and ‘hygienic environment’ (3.21). Other UFI has values below the mean. Residents perceived that ‘proximity to home’ has the least UFI of 2.57, followed by ‘good road network’ (2.67), ‘free treatment’ (2.79), ‘had no choice’ (3.00), ‘need of emergency’ (3.02), ‘adequate staff strength’ (3.04), ‘referral’ (3.13), ‘good staff attitude’ (3.14) and ‘well equipped’ (3.16).

Table 2: Residents’ Perception on Utilization of Healthcare Facility

Reasons	Rating					F	SWV	UFI	x̄	(x - x̄)	(x - x̄) ²
	5	4	3	2	1						
Quality of staff	130	248	63	18	6	121	465	3.84	0.65	0.42	
Nature of illness	140	180	60	36	10	121	426	3.52	0.33	0.11	
Quality of service	105	180	102	28	7	121	422	3.49	0.30	0.09	
Moderate charges	75	180	96	40	4	121	422	3.49	0.30	0.09	
Availability of drugs	60	200	102	42	16	121	420	3.47	0.28	0.08	
Hours of Opening	75	188	105	30	9	121	407	3.36	0.17	0.03	
Personnel Experience	125	136	87	46	10	121	404	3.34	0.15	0.02	
Waiting time	90	160	84	48	11	121	393	3.25	0.06	0.00	
Hygienic Environment	40	244	57	30	18	121	389	3.21	0.02	0.00	
Well equipped	65	140	123	44	10	121	382	3.16	-0.03	0.00	
Good staff attitude	45	176	123	18	18	121	380	3.14	-0.05	0.00	
Referral	75	92	159	46	7	121	379	3.13	-0.06	0.00	
Adequate staff strength	80	144	72	54	18	121	368	3.04	-0.15	0.02	
Need of emergency	90	120	102	50	4	121	366	3.02	-0.17	0.03	
Had no choice	100	96	96	52	19	121	363	3.00	-0.10	0.04	
Free treatment	85	64	96	74	19	121	338	2.79	-0.40	0.16	
Good road network	30	112	99	56	26	121	323	2.67	-0.52	0.27	
Proximity to home	95	68	42	70	36	121	311	2.57	-0.62	0.38	
									3.19		
Total								57.49	1.73		

4.4 Satisfactory Level of Services provided

Proficiency of different services provided by the healthcare facility was measured using respondents’ perception. To that end, a Service Proficiency Index (SPI) was calculated for a set of service variables. The

mean of the SPI was 3.21. ‘Maternity service’ has highest SPI of 3.98 with a deviation of 0.77 from the mean, while ‘family planning’ and ‘antenatal care’ has SPI of 3.94 and 3.79 respectively. ‘Child immunization’ has SPI of 3.76, ‘laboratory test’ (3.33), ‘HIV/AIDS treatment and care’ (3.27), ‘growth monitoring’ (3.23) and ‘24-hours emergency care’ (3.22). Other services like ‘x-ray service’ has SPI of 3.18, ‘pharmaceutical service’ (2.99), ‘theatre for minor operation’ (2.90), ‘rehabilitation service’ (2.71), ‘geriatric service’ (2.45) and ‘psychiatric care’ (2.24) which are all lower than the mean SPI of the study area. This revealed that the healthcare facility in the study area does not provide these services or their provision is poor.

Table 3: Respondents Perception on Satisfactory Level of Service Provided.

Services	Rating					F	SWV	SPI	\bar{x}	$(x - \bar{x})$	$(x - \bar{x})^2$	
	5	4	3	2	1							
Maternity service	185	240	39	16	1	121	481	3.98	3.21	0.77	0.59	
Family Planning	250	160	51	4	12	121	477	3.94	3.21	0.73	0.53	
Antenatal care	165	196	66	28	3	121	458	3.79	3.21	0.58	0.34	
Child immunization	240	140	42	18	15	121	455	3.76	3.21	0.55	0.30	
Laboratory tests	115	176	63	32	17	121	403	3.33	3.21	0.12	0.01	
HIV/AIDS treatment and care	85	160	102	38	11	121	396	3.27	3.21	0.06	0.00	
Growth monitoring	95	144	114	20	18	121	391	3.23	3.21	0.02	0.00	
24-hours emergency care	100	96	141	46	7	121	390	3.22	3.21	0.01	0.00	
X-ray service	100	132	105	30	18	121	385	3.18	3.21	-0.03	0.00	
Pharmaceutical service	105	88	108	38	23	121	362	2.99	3.21	-0.22	0.05	
Theater service for minor operation	110	96	81	32	32	121	351	2.90	3.21	-0.31	0.10	
Rehabilitation service	35	112	99	58	24	121	328	2.71	3.21	-0.50	0.25	
Geriatric service	45	60	114	36	41	121	296	2.45	3.21	-0.76	0.58	
Psychiatric care	20	64	96	44	47	121	271	2.24	3.21	-0.97	0.94	
Total								44.99				3.69

4.5 Efficiency of Healthcare Facilities

Health facilities cannot exist in isolation; some components aid its functionality. Perception of the respondents was also used to measure the Facilities Efficiency Index (FEI) and adequacy of these components. The mean of the FEI was 3.32. The health facility is well ventilated as perceived by the respondents with the highest FEI of 3.72 with deviation of 0.40 from the mean. Other facilities in descending order are ‘electricity’ (3.71), ‘parking space’ (3.52), ‘proper disposal of medical waste’ (3.45), and the ‘illumination of the building’ is good with FEI of 3.36. ‘Ambulance’ has the least FEI of 2.74 with negative deviation of -0.58, this facility is very important irrespective of the level of the health sector. Other facilities below the mean are ‘wheel chair’ (2.97), ‘water supply’ (3.16), ‘hospital bed’ (3.24) and ‘waiting room’ (3.31).

Table 4: Residents' Perception on Efficiency of Facilities.

Facilities	Rating					F	SWV	FEI	x̄	(x - x̄)	(x - x̄) ²
	5	4	3	2	1						
Cross Ventilation	105	232	90	22	1	121	450	3.72		0.40	0.16
Electricity	115	260	54	10	10	121	449	3.71		0.39	0.15
Parking space	115	196	78	28	9	121	426	3.52		0.20	0.04
Waste disposal	110	204	69	18	16	121	417	3.45		0.13	0.02
Lightning	85	164	120	28	9	121	406	3.36		0.04	0.00
Waiting room	110	148	102	30	11	121	401	3.31		-0.01	0.00
Hospital bed	55	144	156	30	7	121	392	3.24		-0.08	0.00
Water supply	75	144	105	46	12	121	382	3.16		-0.16	0.03
Wheel chair	55	132	99	58	15	121	359	2.97		-0.35	0.12
Ambulance	100	76	66	60	30	121	332	2.74	3.32	-0.58	0.33
Total								33.18			0.85



Figure 4: Untidy environment at Igbalu Primary Health Center, in Ikorodu Local Government of Lagos state.

5. Recommendation

1. The community leaders, traditional and religious leaders should come together, meet the relevant authority and healthcare leaders at the state level to advocate for the need of a healthcare facility in the community.

2. Social groups such as churches, mosques, schools and market squares should be used as a tool to reach out to bulk of the community members so as to sensitize and educate them on first aid treatment in the case of an emergency.
3. Implementation of policies that would enable easy access to health information and services should be enacted by the policy makers.
4. Non-Governmental Organizations, the Government, Private Organizations, religious bodies and other stakeholders should be reached out to in order to build a health facility that would serve as an alternative to travelling long distances for health purpose except in the case of an emergency.
5. Community members should be made to come to a consensus that they are the largest stakeholder of their health and ensure that they play their role effectively on the accessibility of healthcare in the community.
6. Government should facilitate demographic records of the community members and utilize it to adequately plan for their health care needs.
7. Governments should not only provide ambulances for emergencies and referrals but should also emulate the use of mobile clinics to facilitate rapid and comprehensive response to health need of its citizens.
8. Government, community members and other stakeholders should partner with the appropriate agency for roads in Nigeria and ensure all roads that lead to health facilities should be in a good state of repair and be made accessible for easy navigation of citizens.

6. Conclusion

The discussion concerning the accessibility of healthcare spans beyond the constraints of health care services provided in rural versus urban areas. There are numerous factors that contribute to the functionality of healthcare institutions. Based on the derived data from interviews, questionnaires and direct observation of the Oko-Ito Gberigbe community, it was determined that individual income was a contributing factor to determining health care accessibility and usage. By outlining the social determinants of health pertaining to the demographics of the population that was studied, it was observed that gender, age and occupation were crucial in regards to utilization of health facilities. In addition, the closest health facility was greater than 1km from the boundaries of the town and has poor accessibility due to poor infrastructure. The implementation of universal healthcare services funded by the government may improve the utilization of healthcare facilities since the citizens may not be burdened by expensive healthcare costs which lead to delayed treatment and preventable morbidities. The respondents also may not regress to the use of herbal medications and supplements that may be affordable as compared to medical treatment but not as effective in treating acute crisis. The quality of the staff and healthcare team was also deemed as impactful to health utilization while proximity to the home was not held in high regard. The respondents were willing to travel far distances in order to receive the best level of care with consideration also given to the degree of illness to be treated; chronic or acute. Maternity services were also ranked to have the highest level of customer satisfaction in this study sample. When considering the efficiency of the health facility, the presence of electricity and ventilation were ranked to be of importance to the respondents. However, there is decreased efficiency when it came to ambulatory services, water supply system and amount of available hospital beds. Health is an important and vital component of a nation.

The more financial investments in adequate health services and facilities in both urban and rural communities that are efficient in delivering medical care sustains the health of the citizens. This can also impact the life expectancy rate of a country and decrease preventable mortality which in turn can impact the economy of a nation. Despite the shortage of medical professionals, adequate health care institutions can facilitate the delivery of health care services in resource poor areas. Based on the data gathered and observations throughout the study, the respondents emphasized the concept that health is truly one of the most powerful assets a nation can have.

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