Household travel characteristics to healthcare facilities in Ondo State, Nigeria

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Abstract: This study investigated the household travel characteristics of health consumers in Ondo State to the available healthcare facilities. The study uses data collected from 1,181 health consumers from forty-two (42) settlements across the three senatorial districts of the State. The findings revealed that while some of the healthcare patrons travelled below 400 meters to get to the nearest healthcare facility, many of them spent more money on trips to reach their healthcare facilities. This shows that the majority of people are ready to patronize any healthcare facility irrespective of the distance and cost. The further analysis revealed that distance, travel time, cost of transport and travel mode are significant to the utilization of healthcare facilities. To this end, more healthcare facilities should be provided and located closer to people within shortest possible distance, especially in Ondo North and Ondo South senatorial districts.

Keywords: accessibility, distance, healthcare facilities and health consumers

1. Introduction

Health is conceived as a more relative concept by placing a greater emphasis on the interrelationships between the environment and the individual's quality of life. Health is viewed in terms of certain indicators of quality of life, which enables individuals to live happily,

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successfully, fruitfully and creatively (Hoyman, 1962 cited in Egunjobi and Abiodun, 2015). To buttress this view, Corbin and Pangrazi (2001) define health as a 'state of being' and a 'process'. Health as a process involves a lifelong process of becoming aware of choices and making decisions toward a more balanced and fulfilling life, while health, as a state of being, illustrates the quality of being well.

The International Council for Science (ICSU) Plan (2011) refers to health as a concept that extends beyond the absence of a disease, synonymous to the word 'well-being', which encompasses emotional stability, clear thinking, the ability to love, create, embrace change, exercise intuition and experience a continuing sense of spirituality. In sum, it can be deduced that health is a multidimensional concept, with no universally valid construct that is adequate in describing the concept of all societies (Egunjobi and Abiodun, 2015)

Many other scholars have also defined health in various ways, but all of them arrive at the same conclusion. Eme *et al* (2014) describe health as a state whereby one is not troubled by either physical, or spiritual (mental) illness, or by injury of any kind. Bircher (2005) also defines health as a dynamic state of well-being characterized by a physical and mental potential, which satisfies the demands of life commensurate with age, culture, and personal responsibility. Then, Saracchi (1997) puts health as a condition of wellbeing, free of diseases or infirmities, and as a basic and universal human right.

Notwithstanding the varying definition of health, it is evident that a healthy population cannot be achieved without having a good health sector; that is a segment of the government's function which sees to the provision, and management of healthcare facilities in the state. By these, healthcare can be said to mean provision of suitable environment which is aimed at promotion and development of man's full potential. It can also be said to be identification of people's health needs and problems, as well as promoting them with requisite medical care (Owoseni *et al*, 2014).

Health is essential to personal welfare of people and to communities' well-being (Akpomuvie, 2010), and this could be said to be the reason why many countries of the world make every possible effort to develop a quality healthcare system. This is, in turn, because the economic growth which leads to development, depends on the level of availability of healthy work force in the country, being the result of having a good healthcare system (Strauss and Thomas, 1998). The health of citizens directly influences the development of the country. This was evident in the findings of Abrams (1976), who carried out relevant research in Britain, the United States and other advanced

countries of the world, revealing that health and the provision of healthcare facilities are always given higher priority compared to all other aspects of human well-being, including housing, income, social status, education, family life and leisure. This was also corroborated by a WHO report (2005) that poor health and short life span of the third world countries have attributed to the 50% differences in the economic development between third world countries and advanced countries of the world.

Several studies have shown that the geographical distance between two points greatly affects the level of interaction between them (Abler *et al*, 1977 and Olugbamila, 2016). It is assumed that people will visit the closest facility which implies that the distance travelled to get to a healthcare facility is the overriding factor influencing attendance at such a facility (Olugbamila *et al*, 2017 and Olugbamila, 2018), that is the longer the distance between the settlements, the less the patronage pattern of the healthcare facility. This implies that there is a relationship between the origin (settlements) and the destination (healthcare facilities).

The capability or ease of reaching various destinations offering opportunities for the desired activity is regarded as accessibility (Creightney, 1993). Accessibility 'per se' is one of the most frequently used terms and yet little defined in urban and regional studies (Ayeni, 1979). Okafor (1984), in his study of accessibility to general hospitals in rural Bendel, Nigeria, regarded accessibility as a case of getting to the place, while Moseley *et al* (1977) defined accessibility in the light of rural accessibility, which refers to the physical access to employment services and facilities in rural areas. It is the ability of rural residents to get to or be reached by the activities of services/facilities which are relevant to them, as explained by Akinola (1997).

The concern of Wach's and Kumagai (1973) is the conception of physical accessibility as a social indicator, while – in general – one thinks of accessibility in terms of ease and cost of movement. Wasch's and Kumagai believed that such a concept is too vague and devoid of goal-orientation to be useful as an operational basis for systematic measurement and comparison of the level of accessibility of particular socio-economic groups within a metropolitan region. They therefore stated that a useful approach to the measurement of physical accessibility is the determination of the number of density of travel opportunities of particular types within certain time, distance or travel-cost ranges from the residential locations inhabited by groups of interest.

Hagerstand (1974) made a distinction between social and physical accessibility. The social accessibility, he says, connotes the ability to pay (as determined by age and income) to pass the

barrier around the supply point the consumer wants to reach, and the physical accessibility as the ability to get the transportation facilities which are needed for reaching the supply points at suitable times. An evaluation of the above definition shows that both Okafor (1984) and Moseley *et al* (1977) are concerned with physical accessibility in contrast to Daly (1975), who refers to it as the ease with which people can reach distant but necessary services. The capacity to overcome space barrier is central to all the definitions, hence, the word 'ease' or ability means that accessibility is a measure of how well a person can reach a place or be reached (Oloruntoba, 1990).

Health is central to community wellbeing, as well as to personal welfare. It has a strong influence on people's earning capacity and it is fundamental to people's ability to enjoy and appreciate all other aspects of life. Aregbeyen (1992) regarded accessibility to health facilities as an individual's or community's ability to obtain healthcare. Therefore, from the spatial perspective, physical accessibility of members of a household to healthcare facilities is of considerable importance. However, one major constraint to accessibility is distance.

The intent of this study is therefore to establish the household characteristics that are significant to the utilization and patronage of healthcare facilities in the study area. This type of study is imperative as it will elucidate factors that influence household accessibility and patronage pattern of healthcare facilities.
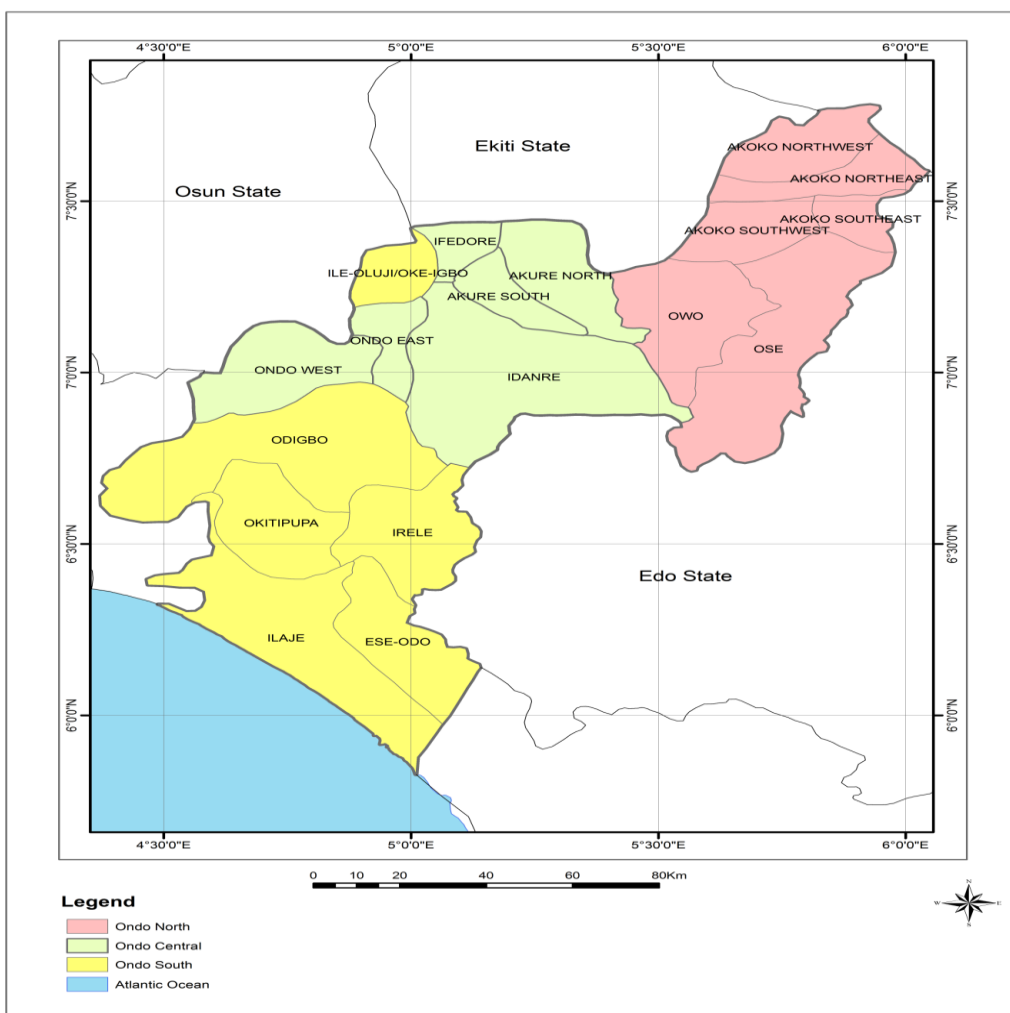
2. The Study Area

The study area, Ondo State, which was created in 1976, is one of the thirty-six (36) states of the Federal Republic of Nigeria. Ondo State is located in the south-western part of the country. The state lies between latitudes 5045' and 7052' North and longitudes 4020' and 6005' East. The state has a surface area of approximately 15.317 square kilometers, which represents 1.66% of the total surface area of Nigeria. It shares the common boundary with Edo and Delta States to the East. In the West the State is bounded by Ogun and Osun States, in the North by Ekiti and Kogi States and to the South by the Birght of Benin and the Atlantic Ocean. Politically, the state is divided into 3 senatorial districts – Ondo North, Ondo Central and Ondo South. The state is further divided administratively into 18 local government areas (LGA), with Ondo North, Central and South having 6 LGAs each (Figure 1). Based on the 1991 population census exercised in Nigeria, the population of the State was 2.25m. By virtue of the 2006 population census, Ondo State had a population of 3.4

million, comprising 1.06 million in Ondo North, 1.24 million in Ondo Central and 1.14 million in Ondo South senatorial districts. The structure of the population is such that about 65% of the population are urban, residing in over 21 major cities and minor towns located within the 18 local government areas of the State.

Ondo State operates a pluralistic healthcare delivery system, with the orthodox and traditional healthcare delivery systems operating alongside each other, with minimal collaboration. Both the private and public sectors provide orthodox healthcare services in private health facilities, of which 75.2% are primary healthcare facilities, 21.0% secondary and 0.4% dental clinics, 1.0% optical centers and 0.8% others (medical laboratories, ART centers and Chest Clinics) (Ondo State Ministry of Health, 2010).

Figure 1. Map of Ondo State in relation to the Three Senatorial Districts

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Source: Ondo State Ministry of Housing and Urban Development, Akure (2015).

3. Methodology

The data for this study were drawn from the primary source, using a structured questionnaire administered to respondents selected from different settlements of the study area. Ondo State was stratified along the existing 3 senatorial districts, of which one (1) LGA was purposively selected from each of the six (6) LGAs that make up each of the senatorial districts. The selected LGAs are Owo, Akure South and Okitipupa from Ondo North, Ondo Central and Ondo South senatorial district, respectively. The LGAs were selected based on the criteria that they are the most urbanized and have more healthcare facilities. The settlements in each of the LGAs were classified into urban and rural, using population size. The study area comprised a total of three hundred and fifty-four (354) settlements. The stratified random sampling technique was employed in selecting 10% of both the urban and rural settlements. All in all, three urban and 39 rural settlements emerged. In the selected settlements, the respondents (health consumers) were the household heads, but where the household head was not available, an adult was sampled. The buildings in each settlement were first listed, of which 1.5% were surveyed; a total of 1,181 household head/adults were contacted.

4. Findings and Discussion

4.1 Socioeconomic characteristics of households

The socio-economic characteristics of the examined included age, gender, marital status, educational level, average monthly income and household size. From the scrutiny of age distribution of the respondents, presented in Table 1, it was evident that 52.0% of the respondents in the study area were young adults (31-55 years). The youth (19-30 years) and adult (55 years and above) respondents accounted for 40.0% and 8.0%, respectively. However, the age distribution of the residents within the senatorial district of Ondo State revealed that young adults were dominant in Ondo Central, youth dominated in Ondo South while young adults and youth dominated Ondo North Senatorial District. This shows that the area has a more active population who require health services for better productivity. The above finding is in agreement with previous studies that age is a determinant factor

in knowledge of availability and patronage of healthcare facilities (Adamu, 2011). Result of one way ANOVA computed also revealed that age distribution varied significantly in the three senatorial districts of Ondo State, with the value of F = 24.416 at the degree of freedom of 2 and significance P-value of 0.000 level.

The gender distribution of household heads in the study area revealed the dominance of the male gender and this accounted for 52.5%, while the female gender accounted for the remaining 47.2%. The Chi-Square test results (χ^2 = 10.879, p< 0.000) revealed that there existed a significant relationship between the gender of the respondents and the patronage of healthcare facilities. The study findings also revealed that the majority (59.8%) of household heads in the study area were married, while 33.0%, 4.3% and 2.9% of the respondents were single, divorced and widowed, respectively. Examination of the same social attribute in different senatorial districts showed that married household heads were the predominant group in Ondo North and Ondo Central. This group constituted 60.1% and 66.6% in Ondo North and Ondo Central, respectively.

The education level of household members was among the most important characteristics of households because it is associated with many factors that have a significant impact on health-seeking behaviors, reproductive behaviors, use of contraception and children's health status (Olugbamila, 2016). The findings on the educational status of the inhabitants across the three LGAs of the State revealed that the respondents who held at least secondary/technical education accounted for 50.6%, the tertiary level of education (34.0%), whereas the residents with primary and other levels of education accounted for 7.2% and 3.6%, respectively. Finally, the residents that had no formal education accounted for 4.7%. Specifically, the findings revealed a variation in the educational distribution of respondents across the senatorial districts of the study area. A further analysis revealed that variation in the educational level of the respondents across the three senatorial districts was statistically significant (F = 41.913 and p = 0.000).

The income of residents is a measure of wealth and will reflect the ability of a household to make decisions on the type of healthcare facility to patronize. The findings, as presented in Table 1, revealed that low income earners (below ₦20,000.00 per month) made a larger percentage of the respondents, since they accounted for 57.0% of the total number of the respondents, while 36.4% were middle income earners (₦20,000.00 – ₦60,000.00 per month) and only 6.6% of the residents were categorized as high income earners (above ₦60,000.00 per month) in the state. The findings showed also that low income earners dominated Ondo North and Ondo South, while Ondo Central

senatorial district was dominated by middle income earners. A further analysis revealed that variation in the respondents' income across the three senatorial zones was statistically significant. The F-value of 67.508 was significant at 0.000 level.

For the purpose of this study, the household size was categorized into three groups, namely: households with 6 members and below (small), households that comprise between 7 and 10 members (medium) and households with more than 10 members (large). The study revealed that Ondo South had the largest proportion of the respondents with small-sized households and this accounted for 98.8% of the households within the senatorial district, whereas Ondo North and Ondo Central senatorial district with their small-sized households accounted for 74.6% and 30.3%, respectively. Also, the analysis of the households that were of medium size showed that the largest proportions were in the Ondo Central (48.5%); however, 16.7% and 0.8% of the respondents in Ondo North and Ondo South, respectively, came from medium-sized households. Ondo Central had the largest proportion of the respondents with large-sized household (21.2%), while 8.7% and 0.4% accounted for the residents that had large-sized households in Ondo North and Ondo South, respectively.

Table 1. Socio-economic characteristics of residents

Attributes	Ondo North	Ondo Central	Ondo South	Total
Age Distribution				
19 – 30 Years	164(43.4)	160(29.0)	49(59.1)	473(40.0)
31 – 55 Years	170(45.0)	351(63.7)	93(36.9)	614(52.0)
Above 55 Years	44(11.6)	40(7.3)	10(4.0)	94(8.0)
Total	378(32.0)	551(46.7)	252(21.3)	1181(100.0)
Gender				
Male	200(52.9)	234(42.5)	127(50.4)	561(47.5)
Female	178(47.1)	317(57.5)	125(49.6)	620(52.5)
Total	378(32.0)	551(46.7)	252(21.3)	1181(100.0)
Marital Status				
Single	121(32.0)	134(24.3)	135(53.6)	390(33.0)
Married	227(60.0)	367(66.6)	112(44.4)	706(59.8)
Separated/Divorced	9(2.4)	40(7.3)	2(0.8)	51(4.3)
Widowed	21(5.6)	10(1.8)	3(1.2)	34(2.9)
Total	378(32.0)	551(46.7)	252(21.3)	1181(100.0)
Educational Level				
No formal education	37(9.8)	12(2.2)	7(2.8)	56(4.7)
Primary	48(12.7)	25(4.5)	12(4.8)	85(7.2)
Secondary/Technical	196(51.9)	269(48.8)	91(36.1)	597(50.6)
Tertiary	89(23.5)	221(40.1)	132(52.4)	401(34.0)
Others	8(2.1)	24(4.4)	10(4.0)	42(3.6)
Total	378(32.0)	551(46.7)	252(21.3)	1181(100.0)
Average Monthly Income				
Below ₦ 20,000 (LI)	281(74.3)	168(30.5)	224(88.9)	73(57.0)
₦20,000 - ₦ 60,000 (MI)	78(20.6)	329(59.7)	23(9.1)	430(36.4)
Above ₦ 60,000 (HI)	19(5.0)	54(9.8)	5(2.0)	78(6.6)
Total	378(32.0)	551(46.7)	252(21.3)	1181(100.0)
Household Size				
Small	282(74.6)	167(30.3)	249(98.8)	698(56.1)
Medium	63(16.7)	267(48.5)	2(0.8)	332(28.1)
Large	33(8.7)	117(21.2)	1(0.4)	151(12.8)
Total	378(32.0)	551(46.7)	252(21.3)	1181(100.0)

Source: authors' own elaboration

4.2 Proximity to healthcare facility centers

Proximity to healthcare facilities, to a large extent, determines the degree of patronage by residents of a particular locality because the longer the distance travelled to get to a healthcare facility, the lower the level of patronage of such a healthcare facility (Olujimi, 2006). The average distance covered by health consumers to the nearest healthcare facility in the three senatorial

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districts of Ondo State was placed into one of the three groups, being: below 400m (5 minutes' walk) – short distance, 401-800m (10 minutes' walk) – normal distance, and 801 - 1200m (20 minutes' walk) – long distance (Halden *et al*, 2000). Therefore any facility that is centrally located shall draw consumers from the immediate surrounding unless political and ethnic frictions compelled otherwise (Morill and Erickson, 1969 cited in Olujimi, 2007). From the analysis in Table 2, a larger percentage of the respondents covered below 400 meters to the nearest healthcare facilities, accounting for 86.5%, 81.3% and 98.0% of the respondents in Ondo North, Central and South senatorial districts, respectively. Also, the residents who covered distances of between 401 and 800 meters accounted for 3.4% in Ondo Central and 1.2 % in Ondo South. The remaining 13.5%, 15.2% and 1.5% of the population in Ondo North, Central and South senatorial districts, respectively, covered distances of between 801 and 1200 meters to the nearest healthcare facilities. This shows that the commuting distances to healthcare facilities is within the World Health Organization recommended distance of a maximum radius of 60 kilometers for an intermediate hospital (WHO 2000).

The results of the analysis presented above are in perfect agreement with the distance decay function which states that interaction between two locales declines as the distance increases. The implication is that healthcare facilities located near people's abodes will enjoy higher volume/level of patronage.

Table 2: Distance of healthcare facilities from home

Senatorial District	Distance			
	Below 400m	401 to 800m	801 to 1200m	Total
Ondo North	327 (86.5%)	-	51 (13.5%)	**378 (32.0)**
Ondo Central	448 (81.3%)	19 (3.4%)	84 (15.2%)	**551 (46.7)**
Ondo South	247 (98.0%)	2 (0.8%)	3 (1.2%)	**252 (21.3)**
Total	**1022 (86.5%)**	**21 (1.8%)**	**138 (11.7%)**	**1181 (100.0)**

Source: authors' own elaboration

4.3 Effects of distance on residents

Distance is a paramount factor in the choice and utilization of any social service center (Adeyinka, 2006) and with regard to healthcare facilities, Bryant (1978 cited in Olugbamila 2016) stated that "distance is a critical factor in the interplay of health resources and needs." With regard

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to Ondo State, the result of the investigation carried out on the effect of distance covered by health consumers to healthcare facilities is presented in Table 3. The result showed that out of the total residents surveyed, 258 (13.7%) complained of death of a family member as a result of the distance covered to the nearest healthcare facilities, while 11.2% of the respondents were of the opinion that they lost interest as a result of the distance. The table further shows that residents with prolonged sickness accounted for 10.2%, those that sought for an alternative facility - 16.1%, adequate effective care - 5.4%, waste of time - 13.5%. Others were those who spent more money as a result of the distance (18.3%) and repeated visits (11.5%). It could be deduced from the table that those who spent more money on trips to healthcare facilities as a result of the distance took larger percentage of the respondents, which could be due to referral cases, as well as the fact that patrons of higher economic status travel further for healthcare services than patrons of lower economic status.

Moreover, patrons show willingness to travel further distance for various goods and services as the number of such items available at various location sources increases (intervening opportunity) (Abler et al, 1977; Adeyinka, 2006). The above result is in agreement with the concept of range of goods of the Central Place Theory, which is the average minimum distance that prospective consumers are ready to cover in order to consume a good or service irrespective of time wasted and cost.

Table 3. Effects of distance covered on residents

| Senatorial District	Effects								
	Death of a family member	Loss of interest in visit	Prolonged sickness	Seeking an alternative facility	Adequate and effective care	Waste of time	Spend more money	Repeated visit	**Total**
Ondo North	80 (15.8%)	52 (10.3%)	32 (6.3%)	88 (17.4%)	14 (2.8%)	106 (20.9%)	85 (16.8%)	50 (9.9%)	**507 (26.9)**
Ondo Central	146 (13.2%)	141 (12.8%)	127 (11.5%)	165 (14.9%)	57 (5.2%)	111 (10.1%)	204 (18.5%)	152 (13.8%)	**1103 (58.5)**
Ondo South	32 (11.6%)	19 (6.9%)	34 (12.4%)	51 (18.5%)	31 (11.3%)	37 (13.5%)	56 (20.4%)	15 (5.5)	**275 (14.6)**
Total	**258 (13.7%)**	**212 (11.2%)**	**193 (10.2%)**	**304 (16.1%)**	**102 (5.4%)**	**254 (13.5%)**	**345 (18.3%)**	**217 (11.5%)**	**1885 (100.0)**

*Note *   The total exceeded the number of questionnaires administered because of multiple responses.*

Source: authors' own elaboration

4.4   Means of transport to healthcare facilities

Presented in Figure 2 is the information on the of means of transport used by health consumers to reach their healthcare facility locations. The figure revealed that most of the respondents used motorcycles, which accounted for 42.1%, 36,2% and 59.4% in Ondo North, Ondo Central and Ondo South, respectively. Furthermore, 18.8%, 31.5% and 2.4% of the examined in the three senatorial districts, respectively, used public transport to get to healthcare facilities. Those who travelled in private cars accounted for 11.4% in Ondo North, 24.2% in Ondo Central and 17.9% in Ondo South. The means of transport which was the least frequently chosen by the residents was the bicycle, accounting for 0.8%, 0.9% and 7.6% in the senatorial districts, respectively, while the remaining 27.0%, 7.3% and 12.7% in Ondo North, Central and South, respectively, went on foot. It is deduced from the findings that about 82% of the residents rely on one mode of transport or another to satisfy their transportation needs to reach healthcare facilities. Also the fact that about 15% of the population depend on their legs to get to healthcare facilities implies that distances between residences and healthcare facilities are relatively short.

Figure 2. Means of transport to reach health facilities
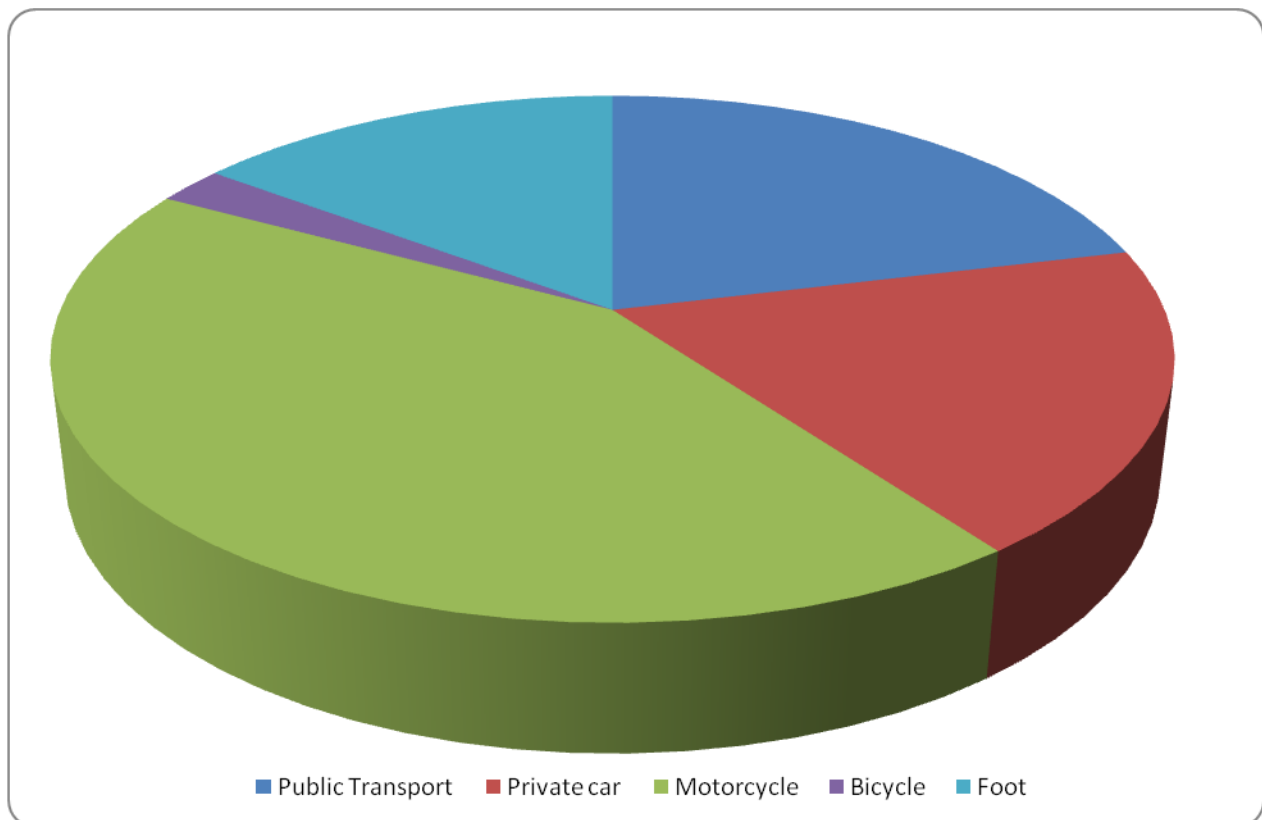
Source: authors' own elaboration

4.5 Cost of Treatment

The study also investigated residents' views on the cost of treatment in healthcare facility centers. According to Chandra and Eric (2000) cited in Adeyinka (2013), the physical location of health services relative to some other factors, such as location of residence, transport cost, condition of roads and many other logistic difficulties are linked with utilization of medical services. It is revealed in Table 4 that 42.1% of the residents in Ondo North, 36.2% of the residents in Ondo Central and 59.4% of the residents in Ondo South rated the cost of treatment in the three senatorial districts to be moderate. The residents who rated the cost of treatment to be very high in Ondo North, Ondo Central and Ondo South accounted for 18.8%, 31.5% and 2.4%, respectively. The table further shows that 27.0% of the residents in Ondo North, 7.3% of the residents in Ondo Central and 12.7% of those residing in Ondo South rated the cost of treatment to be very low.

Table 4. Cost of treatment

Senatorial district	Cost of treatment					
	Very high	High	Moderate	Low	Very low	**Total**
Ondo North	71 (18.8%)	43 (11.4%)	159 (42.1%)	3 (0.8%)	102 (27.0%)	**378 (32.0)**
Ondo Central	173 (31.5%)	133 (24.2%)	199 (36.2%)	5 (0.9%)	40 (7.3%)	**551 (46.7)**
Ondo South	6 (2.4%)	45 (17.9%)	149 (59.4%)	19 (7.6%)	32 (12.7%)	**252 (21.3)**
Total	**250 (21.2%)**	**221 (18.7%)**	**507 (43.0%)**	**27 (2.3%)**	**174 (14.8%)**	**1181 (100.0)**

Source: authors' own elaboration

Table 5 reveals the result of the Analysis of Variance (ANOVA) test computed on household's travel characteristics to healthcare facilities in the study area. Following the rule that if the calculated value of F is equal or greater than the table value of F at the specified alpha level, we say that our calculated F is statistically significant and we therefore conclude that the observed differences between the samples could have arisen by chance. If, on the other hand, the calculated F value is less than the table value of F at the specified alpha level, the value is not statistically significant, we therefore conclude that the observed differences between the samples could have

arisen by chance. The ANOVA result revealed that there is a significant difference on the distance travelled (F=20.237 at the degree of freedom of 2 and significant at p=.000), travel time (F=6.360 at the degree of freedom of 2 and significant at p=.002), cost of transport (F=7.812 at the degree of freedom of 2 and significant at p=.000) and the transport means (F=65.505 at degree of freedom of 2 and significant at p=.000). This explains that the household travel characteristics to healthcare facilities differ significantly in the different senatorial districts of the state.

Table 5: Analysis of variance (ANOVA) of household travel characteristics to healthcare facilities

Variable	Value	Sum of squares	Df	Mean of square	F	Sig
Distance	Between groups	16.552	2	8.276	20.237	.000
	Within groups	481.758	1178	.409		
	Total	498.310	1180			
Travel time	Between groups	2.520	2	1.260	6.360	.002
	Within groups	43.190	218	.198		
	Total	45.710	220			
Cost of transport	Between groups	8.423	2	4.212	7.812	.000
	Within groups	635.091	1178	.539		
	Total	643.514	1180			
Transport mode	Between groups	184.681	2	92.340	65.505	.000
	Within groups	1657.779	1176	1.410		
	Total	1842.460	1178			

Source: authors' own elaboration

5. Conclusion and Recommendations

The study revealed that the farther the distance between the settlements, the weaker the patronage pattern of a health care facility. This implies that there is a relationship between the place of abode (settlements) and the destination (healthcare facilities). The deduction is that people prefer to utilize healthcare facilities that are nearer to them than those that are far off. This agrees perfectly with the concept of distance decay function which states that the volume of interaction between two points in space decreases as the distance between the two points increases.

Regarding the proximity of healthcare facilities to the place of abode of residents, 86.5% of the people surveyed travel below 400m to get to the nearest healthcare facilities, which shows that

many of the patrons cover shorter distances to obtain health services. The effect of the distance on the residents shows that 18.3% of the people spend more money on trips to healthcare facilities, which reveals further that the majority of them are ready to patronize any healthcare facility irrespective of the distance and cost. This is a confirmation of the conception of goods range of the Central Place Theory. Because of the proximity of the healthcare facilities to the place of abode of residents, most of them use motorcycles as a means of transport to healthcare location and this accounts for 42.10% of the total response. The Analysis of Variance of household travel characteristics to healthcare facilities shows that distance, travel time, cost of transport and travel mode are significant to the choice of healthcare facilities. To this end, more healthcare facilities ought to be provided and located closer to residents within the shortest possible distance, especially in Ondo North and Ondo South senatorial districts. Efforts should be made to ensure equity in the distribution of public healthcare facilities across the three senatorial districts of Ondo State and this should take into consideration the location of the existing healthcare facilities and apply the planning standard so as to promote equitable distribution of healthcare facilities. Moreover, in order to achieve the objective of the National Health Policy, provision of adequate healthcare facilities in rural areas of the State is necessary, since accessibility is regarded as a very fundamental issue in patronage of healthcare facilities. Also the number of facilities provided should be proportional to the population size of the area.

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Charakterystyka gospodarstwa domowego w kontekście dostępności placówek służby zdrowia w stanie Ondo w Nigerii

Streszczenie

W toku przeprowadzonego badania uzyskano charakterystykę gospodarstw domowych ze względu na dostępność placówek opieki zdrowotnej dla konsumentów zdrowia w stanie Ondo. W badaniu wykorzystano dane zebrane od 1181 mieszkańców z 42 (42) osiedli w trzech senackich okręgach stanowych. Ustalenia wykazały, że chociaż niektórzy klienci opieki medycznej mieszkają w odległości poniżej 400 metrów od najbliższego zakładu opieki zdrowotnej, wielu z nich wydaje więcej pieniędzy na wyjazdy do takich placówek. Pokazało to, że większość osób jest gotowa na to, aby pozostawać klientem danej placówki opieki zdrowotnej, niezależnie od odległości i kosztów ponoszonych na dotarcie do niej. Dalsza analiza wykazała, że odległość, czas podróży, koszt transportu i tryb podróży mają duże znaczenie dla wykorzystania placówek opieki zdrowotnej. W tym celu należy zapewnić więcej placówek opieki zdrowotnej, które powinny znajdować się bliżej mieszkańców, tak aby można było dotrzeć do nich w jak najkrótszym czasie, szczególnie w dzielnicach Ondo North i Ondo South.

Słowa kluczowe: dostępność, odległość, placówki służby zdrowia i konsumenci zdrowia.