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## Factors Influencing Urban Variations of Household's Utilization of Public Primary Healthcare Facilities in Nakuru Town, Kenya

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### **Abstract:**

*Utilization of public health care (PHC) facilities incorporates three major components including people, service and mode of transport linking them. The difference in components influencing the households' utilization of PHC facilities varies across the world. This paper investigates the factors influencing urban variations of households' utilization of public primary health care facilities. This study was carried out in Nakuru Town. The study adopted mixed method research that involved quantitative and qualitative approaches. These included: a descriptive cross-sectional household survey and a health facility evaluation survey. The results indicate that the major factors influencing households' utilization of public PHC facilities were cost of healthcare services (79.25%), availability of drugs within the public health care facilities (70.5%) and distance to health facility (68.75%). This paper shows that households in Nakuru town utilize public primary health care facilities for their medical services based on the physical conditions, financial conditions, health status and socio-economic characteristics. The paper thus recommends for the County Government of Nakuru to increase the number of public PHCs, improve the supply of essential drugs and also to use mobile clinics to reach the underserved areas within the town.*

**Keywords:** Variations, households, utilization, primary healthcare, primary health care facilities

### **1. Introduction**

People use health care services for many reasons: to cure illnesses and health conditions, to treat accidents and injuries, to prevent or delay future health care problems, to reduce pain, to increase quality of life, and sometimes merely to obtain information about their health status. The distribution of all categories of health care facilities, tend to favour disproportionately the urban centres in sub-Saharan Africa (Vega, 2013). According to Abouzahr & Boerma (2005), the distribution pattern of health facilities reflects the utilization rate between rural and urban areas. This situation is facilitated by the fact that distance is a very important factor in the use of health facilities. Sub-Saharan Africa countries have inequities in access to health facilities which resulted in underutilization of such facilities (Cohen, 2013).

The provision of adequate health services in developing countries is becoming increasingly difficult by the day (WHO, 2014). Rapid population growth, wide spread poverty and lack of financial resources for the provision of health facilities are identified as the key factors responsible for the poor healthcare delivery systems in the developing world (WHO, 2016). Primary healthcare (PHC) service is an important concern for increasingly growing population primarily in developing countries. Cities in developing countries are experiencing unprecedented growth for decades (Ndari *et al.*, 2009). The emergent population is aligned with the increasing demand for healthcare service along with all sorts of other infrastructures and public service provision required to ensure the basic quality of life. As a result, the situation arises when the existing infrastructure and public facility are not able to provide adequate service to the constantly expanding population.

The provision of adequate basic health services in developing countries is becoming increasingly difficult by the day. Rapid population growth, widespread poverty and lack of financial resources for the provision of health facilities / infrastructure are identified as key factors responsible for poor healthcare delivery systems in the developing world (WHO, 2014). In the health sector, much concern has been expressed pertaining to the pattern of distribution of healthcare facilities and level of utilization. According to James and Muchiri, (2009), distributive equity in healthcare facilities indexes accessibility. In other words, access to healthcare facilities is a function of the degree of fairness in spatial distribution of the facilities.

Kenya's public health care system is characterized by lack of enough trained staff, inadequate medical supplies, poor infrastructure and inaccessibility which put off patients who see no reason to move long journeys to seek services from the ill-equipped health facilities (WHO, 2015a). The effectiveness of health care delivery system of a county depends largely on the number and quality of primary healthcare facilities available to respond to current and future health care needs (Duran *et al.*, 2014, Sachs, 2012).

Accessibility in this context has a spatial theme and signifies the ease with which potential healthcare seekers get to health facilities where healthcare services are delivered. The past National Development plans have reflected the problems of equitable distribution of healthcare facilities in the country while regional studies have confirmed the existence of inequality in the distribution healthcare facilities in Kenya (MoH, 2013d). The national health policy aims to achieve health for all Kenyans based on the national philosophy of social justice and equity has clearly enunciated in the Kenya health policy of 2014 – 2030 (MoH, 2014b).

The principals of social justice and equity and the ideals of freedom and opportunity have been affirmed in Kenya's constitution of 2010 (RoK, 2010). Thus, the national health policy was formulated in context of these national objectives and philosophy. To this end, the primary healthcare is adopted as the means of achieving the national goal of social justice and equity. As defined in Alma-Ata Declaration of 1978, 'primary healthcare ... brings healthcare as close as possible to where people live and work (WHO, 2016).

Nakuru town has 14 Public Healthcare facilities and 107 private healthcare facilities that is lower than the national average density of 24 PHC facilities per 100,000 population (MoH, 2017). However, there are still high incidences of morbidity and mortality. Hence, this study examined factors influencing urban variations of household's utilization of public primary healthcare facilities in Nakuru town.

## 2. Materials and Methods

### 2.1. Study Area

This study was carried out in Nakuru Town, Kenya. The town is located in Nakuru County and lies 0° 15' South of the Equator and between longitudes 36° 04' East of Prime Meridian. It is the capital of Nakuru County (Nakuru County Integrated Development Plan 2018 -2022). Nakuru town is divided into eleven wards including Rhoda, Kaptembwo, Barut, Kapkures, Biashara, Flamingo, Nakuru East, Shabaab, London, Menengai and Kivumbini. According to GoK (2010), Nakuru town had a population of 500,000 people and 30,636 households. From Nakuru County health department's health records, the top 10 diseases in Nakuru town included: upper respiratory tract infection, other diseases of the respiratory system, diarrhoea, diseases of the skin, tonsillitis, ear infections, suspected malaria, eye infections and confirmed malaria. Nakuru Town has different categories of health institutions including a referral hospital, five private hospitals, six health centres, two private nursing homes and over 110 private health clinics (Nakuru County 2019 health records).

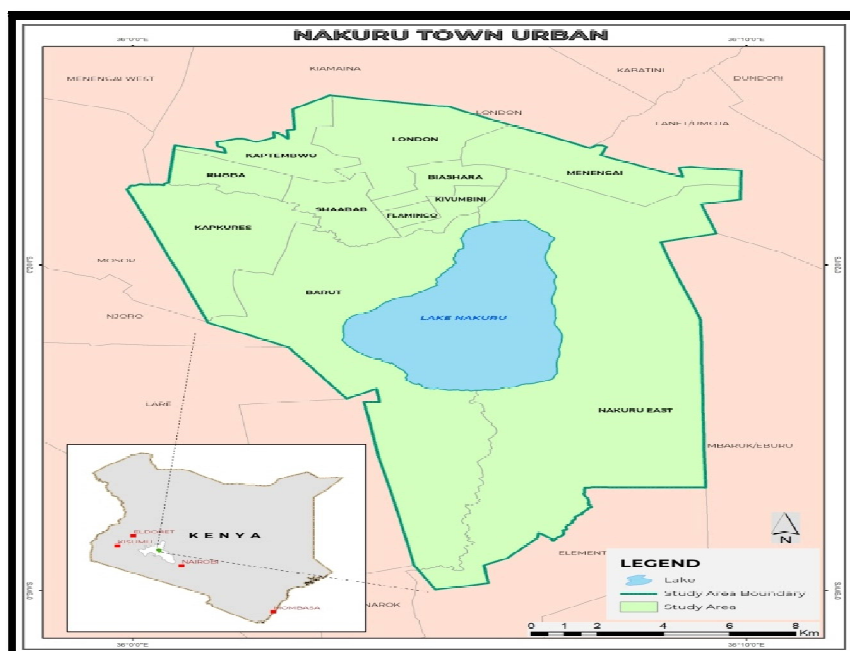


Figure 1: Map of Nakuru Urban Wards  
Scale 1:50,000, Using ILRI Boundary Shape Files: GIS Archaism 10.2.

### 2.2. Methodology

This paper is an extract from a larger study focusing on household access to and utilization of public primary health care facilities in Nakuru Town, Kenya. This paper reports on household-based research which sought to establish level of utilization of public primary health care facilities by residents of Nakuru town, Kenya.

In this study, a mixed research design that involved quantitative and qualitative approach was utilized. A sample of 400 households was randomly selected to provide the basis for data collection. Both primary and secondary data were

collected from among the households, health care personnel and patients. A questionnaire with both closed and open-ended questions was used. Statistical analysis of data was used done using the statistical software (SPSS) version 20.

### 3. Results and Discussion

#### 3.1. Distance to Health Care Facility as a Factor influencing Household's Utilization of Public Primary Health Care Facilities in Nakuru Town

60.8% of the respondents visited a health care facility because it was near their homes. This was coupled with low price that they pay for health care services. Most of the respondents (66.3%) of the respondents said that they visited facilities of their choice because of low price.

In this study, 42.8% of the respondents live less than two kilometers from the nearest dispensaries and health centres in Nakuru town. It is recommended that healthcare facilities should be located at a distance of 0-4 kilometers (WHO, 2016) to encourage access and utilization of the facilities. In a study done in Nepal by Yadav (2010), it was observed that patients who lived more than two kilometers from health facilities sought alternative health services. On the other hand, Ngugi *et al.*, (2017) found out that majority of the respondents (51.1%) from Rabai and Kaloleni sub-counties in Kenya sought health care services from health care facilities located near their homes. A study done in Olorunda Local Government Area, Nigeria indicated that 26.7% of the respondents cited long distance as hindrance in utilization of Primary health care services (Egbewale *et al.*, 2013).

Further, the study findings are in agreement with WHO (2013) which found out that access and utilization of primary healthcare facilities is low in the developing countries because the distance between the place of residence and the nearest facility is more than the recommended distance of between 0 and 4 kilometers. In addition, KIPPRA (2018) noted that the national average of the nearest health care facility in Kenya was estimated to be at 3 kilometers while the distance across the counties, ranges between 1.4 kilometers to about a high of 52.6 kilometers

The study findings (table 1) imply that the lower the distance between the place of residence of the respondents and the health care facility, the more the likelihood of accessing and utilizing the particular facility when the respondent or his/her family is sick. The chi-square test between distance and number of visits to a health facility of 77.279 at a significance level of  $p = 0.00$  confirmed the finding. This is in agreement with Akin and Hutchison (1999) study finding in Uganda which found out that distance was an important factor in access and utilization of primary healthcare facilities.

Number of Visits	Distance to Health Care Facilities					Total
	<2Km	2-4Km	5-7Km	8-10Km	>11Km	
0	0.0%	0.25%	0.0%	0.0%	0.0%	0.25%
1	6.75%	5%	2.75%	3.5%	3%	21.00%
2	13.25%	3.75%	5.25%	2.5%	3.25%	228.00%
3	14%	5.5%	5%	5.25%	1%	330.75%
4	6.5%	0.5%	3.7%	1.5%	0.25%	412.45%412.45%
>5	2%	1.75%	0.5%	1.5%	0.75%	6.50%
Total	42.80%	17.50%	17.20%	14.20%	8.30%	100.00%

Table 1: Distance to Health Care Facilities and Number of Visits  
N=400,  $X^2=77.279$ ,  $P=0.000$

#### 3.2. Means of Transport as a Factor Influencing Household's Utilization of Public Primary Health Care Facilities in Nakuru Town

From table 2, most of the respondents (40.3%) in this study used public transport as a means to get to the nearest health care facility despite majority of them (42.8%) that they lived less than two kilometers from a health care facility (table 2). Public transport was the most preferred means of accessing primary public health care facilities and used to access the facilities most twice (11.5%). 64.8% of the respondents viewed transportation costs as being within the normal range while 3% of them viewed it as being very expensive. Even though the cost is normal range, it adds to the overall cost of seeking the services. In addition, 15% of the respondents who visited a healthcare facility thrice used public transport and 3.5% of them used their own cars to visit healthcare facility thrice. The relationship between means of transport to the public PHC and the number of household visit was significant at a  $p$  value of 0.002 confidence level. This suggests that household means of transport to the public PHC influenced the number of visits.

Transportation costs and time of travel have been considered to be barriers to access and utilization of primary health care facilities (Islam *et al.*, 2002, Nteta *et al.*, 2010). Evidence indicates that location of health care facilities is another important dimension of the cost of care. For example, the study in Burkina Faso suggested that transport cost account for 28% of the total cost of using hospital services (Ensor and Copper, 2004).

The available mean of transport and their cost are important factors in choosing the health facilities to visit (Lodenyo *et al.*, 2016). In Malawi, most of the roads in rural all-weather roads and many do not have bridges, making use in the rainy season even more of a challenge. Thus, animal drawn carts prevailed as the most common mode of transport from home to the primary health facility - normally a health centre due to lack of suitable means of transport (Varela, Young, Mkandawire, Groen, Banza and Viste, 2019). In some areas in Malawi the most used mode of transport is the bicycle ambulance for transferring especially maternity patients from rural health facility to district hospitals (Lungu *et al.*,

2000). Occasionally in Malawi, transportation from primary health facility to secondary or tertiary health facility is provided by public hospital ambulances.

Number of Visits	Means of Transport					Total
	Walking	Motorcycle	Public Transport	Taxi	Own Car	
0	0.0%	0.25%	0.0%	0.0%	0.0%	0.0025%
1	8.25%	5%	6%	0.25%	1.25%	120.75%
2	7%	5.25%	11.5%	2.5%	1.75%	228.00%
3	3.5%	7.5%	15%	1.5%	3.25%	330.75%
4	1.75%	2.3%	4.25%	2.25%	1.5%	412.05%
>5	0.75%	1.5%	3.25%	0.25%	1%	6.75%
Total	21.80%	22.10%	40.30%	7.00%	8.80%	100.00%

Table 2: Means of Transport and Number of Visits  
 $N=400$        $X^2 = 56.560$        $P = .002$

### 3.3. Cost of Health Care and Household's Utilization of Primary Health Care Facilities

Table 3 shows that as the respondents' (male and female) monthly income of most increased from Kshs. 10001 to over Kshs. 100000, the number of the respondents who were of the view that the doctor's fee is expensive reduced. Similar trend in normal doctors' consultation fee were observed on the occupation of the household head, expensive on the respondents' education where there was increasing/decreasing number of respondents according to the household heads occupation, monthly income and education.

In addition, the table (3) shows that most of the respondents ( $n=400$ ) in each category of the socio-economic background were of the opinion that the doctors' consultation fee in public PHC facilities within Nakuru town is expensive. Most of the respondents who were of the opinion that doctors' consultation fee is expensive were female (24.75%), household heads of between 27 and 35 years (18.75%), those earning between Kshs. 10001 and Kshs. 20000 (17.25%), those with secondary education (15.5%), those with formal employment (15.25%), those with between 4 and 7 members within the household (13.75%) and protestant household heads (21.25%).

In 2013, the Ministry of Health removed all user fees including doctors' fee in all public primary health care facilities (WHO, 2017). This was aimed at reducing the cost of accessing health care services in the country and to improve the quality of health care services in public health care facilities. Thus, the findings imply that despite the fact that the government has removed the doctors' consultation fee in addition to subsidizing other medical costs within the public primary health care facilities there are still other charges and fees levied within the public PHC facilities that make the doctors' fee to be expensive.

Characteristic		Opinion on Cost Of Doctor's Fee (%)					Total
		Very Inexpensive	Inexpensive	Expensive	Very Expensive	Normal	
Age of respondent	18-26	0.75	0.5	13.5	1.0	7.25	23.00
	27-35	3.5	1.5	18.75	2.25	17.0	43.00
	36-44	1.25	0.75	6.0	1.5	8.5	18.00
	45-53	1.25	0.25	7.0	1.15	3.75	13.40
	54+	0.25	0.25	1.5	0.1	0.5	2.60
	Total	7.00	3.25	46.75	6.00	37.00	100.00
Monthly Income	Less than 10,000	2.75	1.75	10.75	2.25	7.0	24.50
	10,001-20,0000	3.25	0.5	17.25	1.0	15.75	37.75
	30,001-40,000	1.5	0.0	10.50	1.25	4.5	17.75
	40,001-50,000	0.25	0.25	4.25	0.38	4.25	9.38
	50,001-60,000	0.55	0.75	1.55	0.5	1.25	4.60
	50,001-100,000	0.0	0.0	1.27	0.0	2.0	3.27
	100,000+	0.0	0.0	1.0	0.25	1.5	2.75

	Total	22.30	9.75	140.07	17.63	110.25	300.00
Characteristic		Opinion on Cost of Doctor's Fee (%)					
		Very Inexpensive	Inexpensive	Expensive	Very Expensive	Normal	Total
Gender	Male	2.75	1.0	22.25	3.25	23.25	52.50
	Female	4.25	2.25	24.75	2.50	18.75	52.50
	Total	7.00	3.25	47.00	5.75	42.00	105.00
Level of Schooling	None	0.5	0.0	2.75	0.75	1.0	5.00
	Primary	0.0	0.75	5.25	0.5	4.25	10.75
	Secondary	3.75	1.75	15.5	2.75	16.5	40.25
	Tertiary	2.0	0.5	12.5	1.25	8.5	24.75
	University	0.75	0.25	10.25	0.25	6.75	18.25
	Total	21.00	9.75	140.25	17.00	121.00	309.00
Occupation	Business	4.0	1.25	17.5	3.0	15.5	41.25
	Jua Kali	1.25	1.5	8.25	1.25	9.75	22.00
	Farming	1.0	0.25	3.75	0.5	4.0	9.75
	Formal Employment	0.25	0.25	15.25	1.0	6.5	23.25
	Other	0.5	0.0	1.75	0.0	1.0	3.75
	Total	49.00	22.75	327	39.75	278.75	718.00
Household size	0-3	3.5	0.75	20.0	2.5	9.75	37.50
	4-7	2.0	1.25	13.75	1.0	12.75	40.75
	8-11	0.25	0.75	2.0	0.0	2.0	15.50
	11+	0.0	0.0	0.25	0.0	0.25	6.25
	Total	103.75	48.25	690	83	582.25	153600.0
Religion	Protestants	1.25	0.5	21.25	1.5	10.75	35.50
	Catholics	3.25	2.0	16.75	2.25	17.25	41.50
	Muslims	1.25	0.5	5.5	0.75	6.55	14.75
	Others	1.25	0.25	3.0	1.25	2.5	8.25
	Total	214.50	99.75	1426.50	171.75	1201.55	3172

Table 3: Percentage Distribution of Respondent's Attitudes on Cost of Doctor's Consultation Fee by Background Characteristics

### 3.4. Total Cost of accessing Healthcare Services in Nakuru Town

In this study, 46.6% of the respondents indicated that doctor's fee was expensive (table 4). On the other hand, 43.3% of them respondent that medication costs were normal range. These expenses coupled with travel cost make total cost of accessing and utilising health care facilities and services to be expensive as indicated by most respondents (42%). High cost of the services has been reported as a reason for non-utilization of primary health care services in a study done by Muhammed *et al.* (2013) in Batsari Local Government, Nigeria. The government allocated 900 million Kenya shillings (US\$ 9 million) for free PHC to be sent to counties to compensate for user fee removal for primary health care facilities (WHO, 2017). PHC facilities also benefit from the 4.3 billion Kenya shillings (US\$ 43 million) set aside for free maternity services, is channeled via the National Hospital Insurance Fund (NHIF) to reimburse facilities for deliveries and perinatal services. This reduced the general cost of health care services in the country.

Cost such as doctor's fees, medication and travel costs can determine the number of times one visits a healthcare facility. These factors may therefore hinder or encourage the level of access and utilisation of public primary health care facilities and services.



Costs	Percentage (%)					Total
	Very Inexpensive	Inexpensive	Expensive	Very Expensive	Normal	
Doctor's fee	7.0%	3.8%	46.6%	5.7%	36.9%	100.00%
Medication	5.3%	4.5%	39.3%	7.1%	43.8%	100.00%
Travel cost	6.0%	3.3%	22.9%	3.0%	64.8%	100.00%
Total cost	6.8%	1.5%	41.9%	9.3%	40.5%	100.00%

Table 4: Total Cost of Accessing Healthcare Services

### 3.5. Cultural and Religious Beliefs as a Factor Influencing Household's Utilization of Primary Health Care Facilities

In this study, most of the respondents who were Protestants (8.25%) and Catholics (19.25%) visited public healthcare facility thrice in six months (table 5). On the other hand, most respondents from Muslims (4.75%) and other faiths (1.25%) had visited the public PHC facilities twice. In addition, the chi-square test results showed that there is no significant relationship between cultural and religious beliefs to access and utilization of public primary healthcare facilities in Nakuru Town ( $p = 0.808$ ). These findings are in agreement with the study done in Nigeria which indicated that 55.2% of the respondents cited cultural beliefs for non-utilization and access to health care services and facilities (Egbewale *et al.*, 2013). This means that cultural and religious factors did not determine one's ability to visit a healthcare facility. This might be because the study was done in an urban area where people are perceived to be more enlightened.

Number of Times Visited A Health Facility in the Last 6 Months	Cultural/Religious Factors (%)					Total
	Protestants	Catholics	Muslims	Other	Total	
0	4.25	8.5	2.45	0.0	15.2	
1	4.5	3.0	2.5	1.0	12	
2	8.0	2.5	4.75	1.25	18.5	
3	8.25	19.25	2.0	1.5	34	
4	3.25	2.0	0.05	0.5	9.8	
>5	3.25	1.0	0.5	0.25	5	
Missing	4.0	5.25	2.0	4.25	15.5	
Total	35.5	41.5	14.25	8.75	100	

Table 5: Percentage Distribution of Respondents Showing Cultural/Religious and Number of Visits to the Public Health Care Facilities  
 $N=400$        $X^2=28.527$        $P=0.808$

### 3.6. Quality of Services Offered at the Public Primary Health Care Facilities

Table 6 shows that most of the respondent ranked health education as highest as being excellent (18.5%) service offered at public primary health care facilities. On the other hand, most of the respondents ranked treatment of ailments be the worst (12.6%) health care service offered at the public primary health care facilities. 73.5% of the respondents responded that they chose specific health care facilities because of better health care services provided. This study contradicts KIPPRA (2018) findings that the availability of the essential equipment and drugs at public primary health care facilities in Kenya were rate as the services brought satisfaction and attracted citizens to the facilities.

Service	Ratings				Total
	Excellent	Good	Fair	Bad	
Health Education	18.5%	45.25%	29.75%	6.5%	100.00%
HIV Screening	14.4%	48.2%	31.3%	6.0%	100.00%
Immunization	14.1%	41.9%	36.1%	7.8%	99.90%
Infant and childcare	13.9%	42.9%	31.8%	11.3%	299.90%
Delivery care	13.1%	40.4%	35.9%	6.1%	95.50%
Malaria treatment	12.4%	45.5%	32.8%	9.4%	100.10%
Antenatal	11.6%	37.4%	40.7%	5.8%	795.40%
Counsel patients	11.4%	41.9%	33.6%	8.6%	95.50%
Postnatal care	10.6%	40.4%	38.4%	6.3%	1686.30%
Treat ailments	10.6%	36.1%	36.4%	12.6%	95.70%
Nutritional care	10.4%	40.9%	38.1%	10.6%	100.00%
Diagnosis	10.4%	38.9%	37.1%	7.8%	94.20%
Prescribe treatment	10.4%	42.7%	35.9%	7.1%	3662.50%

Referral	9.6%	40.4%	36.6%	9.1%	95.70%
TB Diagnosis	8.6%	41.4%	41.2%	8.8%	100.00%
Dispense drugs	7.8%	38.4%	40.2%	9.1%	95.50%

Table 6: Rating of Services Offered  
N=400

### 3.7. Health Care Insurance Cover as a Factor Influencing Household's Utilization of Primary Health Care Facilities

From table 7, most of the respondents within ages 27 – 35 years (22.25%), earning monthly income of between kshs 10,001 and kshs. 20,0000 (22.25%), female (28.25%), those carrying out business activities (23.5%) and protestant (22.75%) in the categories of socio-economic backgrounds (n = 400) have no health insurance cover. However, most of the respondents with tertiary education (15.25%) and with household size of between 0 and 3 members have insurance cover within the categories respectively.

This study finding concurs with the study done by Kazungu and Barasa (2017) which found out that the number of Kenyans with health insurance cover is very low. The study found out that NHIF is the main health insurer in Kenya, covering 16% of Kenyans, whereas the 32 private health insurers collectively cover a mere 1% of the Kenyan population. This implies that insurance cover is not a major factor that determine household access to health care facilities in Nakuru town.

Characteristic		Percentage		
		Has Health Insurance	No Health Insurance	Total
Household Head	Age of			
	18-26	10.5	12.5	23.00
	27-35	20.75	22.25	43.00
	36-44	9.75	8.25	18.00
	45-53	5.75	7.5	13.25
	54+	2.0	0.75	2.75
	Total	48.75	51.25	100.0
Monthly Income	Less than 10,000	5.75	18.75	24.5
	10,001-20,0000	15.5	22.25	37.75
	30,001-40,000	9.5	6.5	16.00
	40,001-50,000	8.5	2.0	10.50
	50,001-60,000	3.25	1.5	4.75
	50,001-100,000	3.25	0.25	3.50
	100,000+	2.75	0.25	3.00
	Total	146	154	300.0
Gender	Male	24.75	22.75	47.5
	Female	24.0	28.5	52.50
	Total	340.75	359.25	700.0
Level of Schooling	None	1.75	4.5	6.25
	Primary	5.25	5.5	10.75
	Secondary	16.5	13.75	30.25
	Tertiary	25.25	9.25	34.5
	University	9.75	8.5	18.25
	Total	740	760	1500.0
Occupation	Business	17.75	23.5	41.25
	Jua Kali	12.25	9.75	22.00
	Farming	5.5	4.25	9.75
	Formal Employment	12.5	11.25	23.75
	Other	0.5	2.75	3.25
	Total	1528.5	1571.5	3100.0
Religion	Protestants	12.75	22.75	35.5
	Catholics	21.5	20.25	41.75
	Muslims	9.5	4.75	14.25
	Others	4.75	3.75	8.5
	Total	3105.5	3194.5	6300.00

Table 7: Percentage Distribution of Household Heads with Health Insurance Cover by Background Characteristics

## 4. Conclusion and Recommendation

The cost of healthcare services (79.25%) was the most factor that influence the reason for choosing healthcare facility visited followed by availability of drugs within the public health care facilities (70.5%) and distance to health facility (68.75%). There was a relationship between means of transport to the public PHC and the number of household

visit was significant at a  $p$  value of 0.002 confidence level. In addition, the results of the analysis between number of visits and the cost of doctors' fee, cost of medication, travel costs, total cost of accessing public health care facilities and cultural and religious beliefs showed that there was no relationship ( $p = 0.609$ ,  $p = 0.074$ ,  $p = 0.279$ ,  $p=0.182$  and  $p = 0.808$  respectively).

The factors that influence access to and utilization of primary healthcare facilities include gender, age, average monthly income and type of facility attended by respondents. This indicates that the sick people in Nakuru town access and utilize public primary health care facilities for their medical services based on the physical conditions, financial conditions, culture, his or her health status and socio-economic characteristics.

The County Government of Nakuru should increase distribution of essential drugs including malaria drugs and anti-biotics and ensure that they are available in the health facilities. In addition, the County Government should employ more staff including nurses and clinical officers at the health centre and dispensaries to improve patient staff ratio which is currently below the recommended ratio by WHO.

The County Government of Nakuru should use mobile clinics to reach the underserved wards especially those with no public primary health care facilities such as Kaptembwo, Flamingo and Kivumbini.

The County Government of Nakuru should reduce the cost of seeking public PHC services by providing free laboratory testing services, free essential drugs and subsidize other drugs especially to the vulnerable groups such as pregnant mothers, children and old people. This will encourage more access and utilization of public PHC facilities in Nakuru town

## 5. Acknowledgement

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## 6. Abbreviations

- KIPPRA - Kenya Institute for Public Policy Research and Analysis
- MoH – Ministry of Health
- NHIF – National Hospital Insurance Fund
- PHC – Primary Health care
- RoK - Republic of Kenya
- WHO – World Health Organization

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