View metadata, citation and similar papers at core.ac.uk
brought to you by CORE
provided by American Scientific Research Journal for Engineering, Technology, and Sciences...

American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS)
ISSN (Print) 2313-4410, ISSN (Online) 2313-4402
© Global Society of Scientific Research and Researchers
http://asrjetsjournal.org/

Utilization of Healthcare Services by the Elderly Patients at Korle-Bu Teaching Hospital, Accra

Delali Adwoa Wuaku[a*], Reuben K. Esena[b], Patience Aniteye[c], Augustine Adomah-Afari[d]

[a]*P. O. Box NT 706, Newtown, Accra, Ghana*
[b]*University of Ghana, P. O. Box LG 13 Legon, Accra, Ghana*
[c]*University of Ghana Medical School, P. O. Box 4236, Accra, Ghana*
[d]*University of Ghana, P. O. Box LG 13, Legon, Accra, Ghana*
[a]*Email: delwaxs@gmail.com,* [b]*Email: rkesena@gmail.com,* [c]*Email: patienceaniteye@yahoo.co.uk,* [d]*Email: augustineafari@yahoo.co.uk*

Abstract

Objective: The study assessed the association between predisposing, enabling and need factors on utilization of healthcare services by the elderly attending the Korle-Bu Teaching Hospital.

Methods: The study was a descriptive cross-sectional survey using a mixed method approach. Simple random sampling was used to sample three hundred and sixty-one elderly patients from seven (7) Out-Patient Departments in the Korle-Bu Teaching Hospital who responded to a structured questionnaire. Ordinal Logistic Regression was used to determine the association between the predisposing, enabling and need factors of the elderly and variables measuring utilization of healthcare. In the qualitative study, purposive and convenient samplings were used to select 76 elderly persons from the seven Out-Patient Departments of the hospital. Content analysis was used to analyze the voice recorded qualitative interview data and explained using an appropriate theory.

Quantitative findings: The elderly who obtained above secondary school education were 0.49 times less likely to rate accessibility of healthcare on a higher scale compared with the elderly with pre-secondary education (OR=0.49, 95% CL; 0.28-0.85, p=0.11). The elderly who were beneficiaries of NHI were 0.42 times less likely (OR=0.42, 95% CI; 0.18-0.97) to rate accessibility of healthcare services on a higher scale compared with the elderly who were non-beneficiaries (p=0.042).

---

* Corresponding author.

The elderly with multiple chronic conditions were 1.56 times more likely to rate the cost of healthcare on a higher scale compared with the elderly with one chronic condition (OR=1.56, 95% CI=1.04-2.34, p=0.03).

Qualitative findings: The elderly persons described the waiting time as long and stressful. They developed swollen feet and bodily pains due to the long waiting time. They clarified that the diagnostic investigation, medication and consultation fees were expensive, leading to postponement of their subsequent visits and deterioration of their health.

Conclusion: Cost was a determining factor in utilizing healthcare. The study recommends that policy makers should include elderly persons from age 60 years to 69 years in the National Health Insurance exemption policy to enable the majority of them to utilize healthcare. Additionally, there is the need to review visits to the healthcare units to schedule time appointments to reduce the long and stressful waiting time.

Keywords: elderly; healthcare; utilization.

1. Introduction

The gradual aging of the population tends to increase the total number of elderly; and the elderly who are fragile, which in turn requires an offer of care that meets their health needs [1]. As people advance in age, their health and welfare could be a challenge. Sickness is inevitable and forms an integral part of human-life [2, 3]. The prevalence rate of chronic Non-Communicable Diseases (NCDs), neurodegenerative disorders and disability (all forms) are expected to rise among the elderly [4]. An increasing elderly populace poses several impediments to the healthcare system because the health characteristics and complexity of care necessary for the elderly differ from those required for the younger populace, and this populace merits a precise healthcare service system [5, 6]. An effective and well-organized healthcare organization is important for the survival of the elderly; such a healthcare organization can meet the desires of present and future generations of the elderly and support them to age positively [7]. Underutilization of healthcare services is still a main problem of public health sectors in Low Income Countries (LICs) [8]. Issues such as sex, age, schooling, insufficiency, outdated drug use and the journey to healthcare services have been observed to be contributing to inconsistencies in healthcare service utilization [8]. There is an increased need for utilization of healthcare services by the elderly due to the rise in their population leading to elderly related diseases [2]. The 2012 and 2013 annual reports of the Korle-Bu Teaching Hospital (KBTH) in Accra, showed a decrease in the Out-Patient Department (OPD) attendance of the elderly [9]. There was a decline of about 20% in the number of elderly patients who attended the OPDs for the first time in 2013 [9]. At the Greater Accra Regional Hospital, a yearly decrease of 6% in OPD attendance from 2015 to 2016 was recorded [10]. Similarly, at the La General Hospital in Accra, there was a decrease of 3% in the elderly attending OPD from 2015 to 2016 [10]. Decreases in healthcare utilization could be attributed to challenges associated with the healthcare service due to multiple chronic conditions and higher medical costs incurred by the elderly [11].

2. Theoretical perspective

The healthcare utilization depends on the services provided at the facility by the health professionals. The health

professionals consist of the doctors (consultants, specialists, and general practitioners), nurses, physiotherapists, dieticians, radiologists and laboratory technicians; and the services are those provided by the health professionals at the health facility. The levels of healthcare services provided are primary, secondary and tertiary care. Primary healthcare stops diseases from occurring, secondary healthcare is returning the patient to his or her previous state of health and the tertiary healthcare offers stability for long term permanent diseases such as diabetes mellitus, and cardiovascular diseases. Resources available at the health facility include the size and distribution of both workforce and capital, as well as availability of equipment [12, 13, 14]. The healthcare provided attracts the elderly to utilize the health facility when they evaluate their health status. Additionally, they utilize the healthcare when they have enough resources. The conceptual model developed for the study is based on the Andersen's (1995) healthcare utilization model. First and foremost, the individual elderly person, should observe that the healthcare services provided at the health facility are expedient for their health. Additionally, the individual should have enough resources to enable them to utilize the healthcare services. When the individual assesses their health and observe that there is the need to seek medical assistance, they would utilize the healthcare services at the health facility. At the health facility, the individual utilizes the facility when information and healthcare services are accessible, cost of healthcare is affordable, there is cordial attitude of the health personnel, reasonable time is spent at the facility and physical support is provided by the health personnel. All these may lead to the utilization of healthcare services at the facility by the elderly individual. This is depicted in figure 1.

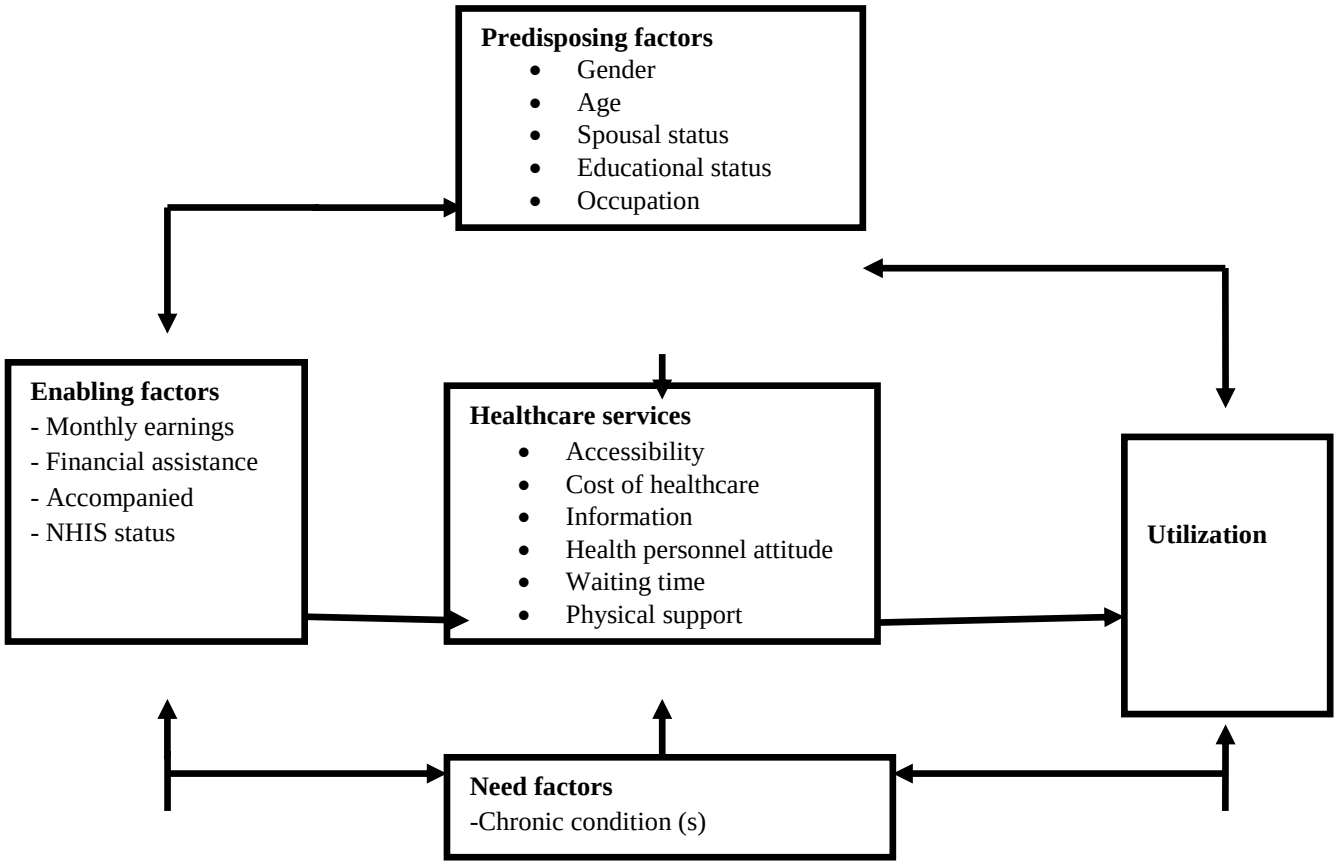

Figure 1: Conceptual Framework of Healthcare utilization, Source: Adapted from Andersen (1995).

3. Materials and methods

The study site was the Korle-Bu Teaching Hospital, which covers an area of about 441 acres. The hospital, as of 2012, had over 2,000 beds, 21 clinical and diagnostic units and three "Centres of Excellence" [9]. These three "Centres of Excellence" are: The National Centre for Radiotherapy and Nuclear Medicine, Reconstructive Plastic Surgery and Burns Centre, and National Cardiothoracic Centre**.** Currently, Korle-Bu Teaching Hospital has more than 4,000 medical and paramedical workforce with an average daily turnout of 1,500 clients, about 250 of which are hospitalized [9]. Descriptive cross-sectional survey using sequential explanatory mixed-methods approach was conducted for patients aged 60 years and above from seven OPDs with high attendance of the elderly. The study population was made up of 361 for the quantitative study based on the monthly average Out Patient Department attendance for 2015 and 2016 and 76 for the qualitative study. The data for the quantitative study was by questionnaire administration and qualitative was by use of a semi-structured interview guide. The items focused on utilization of healthcare services. The quantitative and qualitative data were analyzed independently. The raw data was cleaned to check for any errors in coding before analysis was done. Different analytical strategies were used to analyze the quantitative data. Firstly, factor analysis (exploratory and confirmatory) was carried out followed by Generalized Linear Model (GLM), chi-square test, and ordinal logistic regression. Inductive content analysis was used for the qualitative analysis. The data was organized by the use of Nvivo version 11. The findings were triangulated and presented in a narrative form by explanatory quotes from the elderly respondents. The elderly respondents were assured of anonymity and confidentiality in compliance with the ethical issues. Ethical clearance was obtained from Korle-Bu Teaching Hospital Review Board and Korle-Bu Teaching Hospital Scientific and Technical Committee. The reference number KBTH-IRB/00013/2017

4. Quantitative results

4.1 Ordinal logistic regression: association between predisposing, enabling and need factors and cost on utilisation of healthcare services

This section presents results of the ordinal logistic regression indicating the association between predisposing, need factors of the elderly participants and cost on utilization of healthcare services using Odds ratio. Enabling factors were not significantly associated with cost ($p > 0.05$).

- ***Association between predisposing factors and cost on utilization of healthcare services***

The elderly who obtained above secondary school education were 0.53 times less likely to rate cost of utilization of healthcare services on a higher scale compared with the elderly respondents with pre-secondary education (OR=0.53, 95% Cl=0.34-0.84). Adjusting for the effect of other variables, the elderly respondents with secondary education and above were less likely to rate cost of utilization of healthcare services on a higher scale compared with the elderly respondents with pre-secondary education ($p=0.006$). However, gender, age, employment and marital status did not demonstrate any statistical significance at the multivariate level.

- ***Association between need factors and cost on utilization of healthcare services***

Adjusting for other factors, an elderly respondent with multiple chronic conditions (MCCs) was 1.56 times more likely to rate cost on a higher scale compared with the elderly respondents with one chronic condition (OR=1.56, 95% Cl=1.04-2.34). The results revealed that the number of chronic conditions suffered by the elderly persons was the only need factor, which was significantly associated with utilization of healthcare services (p=0.030). The results are shown in Table 1.

Table 1: Ordinal logistic regression: association between predisposing, enabling and need factors and cost on utilisation of healthcare services

			95% Cl for OR		
Factors	Categories	OR	Lower	Upper	P-value
Predisposing factors	Gender				
	Female [Ref]				
	Male	0.89	0.58	1.36	0.588
	Age				
	<70 years [Ref]				
	≥70 years	1.01	0.66	1.53	0.969
	Educational level				
	<Secondary [Ref]				
	≥ Secondary	0.53	0.34	0.83	0.006*
	Employment Status				
	Unemployed [Ref]				
	Employed	0.64	0.38	1.08	0.097
	Marital Status				
	Spouse [Ref]				
	No spouse	1.09	0.70	1.69	0.711
	Monthly Earnings				
Enabling factors	<GHS500.00 [Ref]				
	≥ GHS 500.00	0.90	0.57	1.41	0.644
	Financial Assistance				
	Not Assisted [Ref]				
	Assisted	1.15	0.72	1.83	0.567
	NHI Status				
	Uninsured [Ref]				
	Insured	1.96	0.89	4.34	0.095
	Accompanied				
	Unaccompanied [Ref]				
	Accompanied	1.27	0.84	1.93	0.265
	Chronic disease				
Need factors	One [Ref]				
	Two or more	1.56	1.04	2.34	0.030*
	Frequency of visits				
	Every month [Ref]				
	More than a month	0.70	0.43	1.14	0.155
	OPD attended				
	Primary [Ref]				
	Secondary	1.20	0.72	2.00	0.495
	Tertiary	0.97	0.48	1.95	0.925

Cl: Confidence Interval, *: Significant at 5%, [Ref:] Reference category.

4.2 Ordinal logistic regression: association between predisposing, enabling and need factors and accessibility on utilisation of healthcare services

Ordinal logistic regression showing the association between the predisposing, enabling and need factors of the elderly and accessibility on utilization of healthcare services using Odds ratio.

- ***Association between predisposing factors and accessibility on utilization of healthcare services***

The elderly respondents who obtained above secondary school education were 0.49 times less likely to rate accessibility on a higher scale compared with the elderly respondents with pre-secondary education (OR= 0.49, 95% Cl 0.28-0.85). Adjusting for other variables, education was the only variable among the predisposing factors that was significantly associated with accessibility and utilization of healthcare services (p = 0.11). The results indicated that accessibility was less of an association with the elderly with above secondary education.

- ***Association between enabling factors and accessibility on utilization of healthcare services***

In the case of enabling factors, elderly respondents who were accompanied to the health facility were 1.86 times more likely to rate accessibility on a higher scale than the elderly respondents who visited the hospital by themselves (OR = 1.86, 95% Cl; 1.13 – 3.08). The elderly who were accompanied to the facility were significantly associated with accessibility (p = 0.016). Additionally, elderly respondents who were beneficiaries of national health insurance (NHI) were 0.42 times less likely to rate accessibility on a higher scale compared with the elderly who were non beneficiaries of NHI (OR=0.42, 95% Cl; 0.18-0.97). Being a beneficiary of NHI was significantly associated with accessibility (p=0.042). The implication of the results was that accessibility had more association with the elderly respondents who were accompanied to the facility. In the case of elderly respondents who were beneficiaries of NHI, the association between accessibility and utilization of healthcare services was less of a problem.

- ***Association between need factors and accessibility on utilization of healthcare services***

The elderly respondents who were diagnosed with MCCs were 1.75 times more likely to rate accessibility on a higher scale compared with the elderly respondents who were diagnosed with one chronic disease (OR = 1.75, 95% Cl 1.08 – 2.84). Adjusting for other variables, MCCs was the only variable that was significantly associated with accessibility (p = 0.024) among the need factors. Table 2 illustrates the results of the ordinal logistic regression showing the adjusted relationship between the predisposing, enabling and need factors of the elderly participants and accessibility on utilization of healthcare services.

Table 2: Ordinal logistic regression: association between predisposing, enabling and need factors and accessibility on utilization of healthcare services

			95% Cl for OR		
Factors	Categories	OR	Lower	Upper	P-value
Predisposing factors	Gender				
	Female [Ref]				
	Male	1.08	0.65	1.79	0.774
	Age				
	<70 years [Ref]				
	≥70 years	0.89	0.54	1.47	0.659
	Educational Level				
	< Secondary [Ref]				
	≥ Secondary	0.49	0.28	0.85	0.011*
	Employment Status				
	Unemployed [Ref]				
	Employed	0.76	0.41	1.42	0.390
	Marital Status				
	Spouse [Ref]				
	No spouse	1.08	0.65	0.81	0.758
	Monthly Earnings				
	<GHS500.00 [Ref]				
	≥GHS500.00	0.58	0.33	1.00	0.052
Enabling factors	Financial Assistance				
	Not Assisted [Ref]				
	Assisted	1.27	0.71	2.29	0.418
	NHI Status				
	Uninsured [Ref]				
	Insured	0.42	0.18	0.97	**0.042***
	Accompanied				
	Unaccompanied [Ref]				
	Accompanied	1.86	1.13	3.08	**0.016***
	Chronic Disease				
	One [Ref]				
	Two or more	1.75	1.08	2.84	**0.024***
Need factors	Frequency of Visits				
	Every Month [Ref]				
	More than a month	1.13	0.64	2.03	0.67
	OPD Attended				
	Primary [Ref]				
	Secondary	1.56	0.83	2.91	0.168
	Tertiary	1.14	0.47	2.77	0.766

Cl: Confidence Interval *: Significant at 5%, [Ref:] Reference category.

5. Qualitative findings

The interviews were centered on the factors (predisposing, enabling and need) influencing utilization of healthcare services. The study engaged 76 elderly persons who participated in the in-depth interviews from the seven OPDs in Korle-Bu Teaching Hospital.

5.1 Predisposing factors influencing utilization of healthcare services

The findings were described under the themes and sub-themes that emerged under the predisposing factors.

These were bodily pains and long stressful waiting time.

Bodily pains

A question was asked to elicit how the elderly persons perceived the influence of predisposing factors on the utilization of healthcare services. One factor that related to that was bodily pains. The elderly interviewees explained that they experienced bodily pains and swollen feet due to sitting for long hours at the same place. Most of these elderly persons were fragile, weak and their adipose tissues had worn out leading to the described bodily pains and swollen feet. In addition, the seats provided at the OPDs were not comfortable, which worsened the situation in which they found themselves:

"*I arrived at the units as early as 2.30am. My feet get swollen and I experience severe backache for sitting for hours on these uncomfortable seats"* **(IDI F_7 75 years).**

"The waiting time is very long... I arrived at the unit at 4.00am. I experience waist pains for sitting for very long hours" **(IDI M_2 65 years).** The revelation was that the elderly persons were suffering from musculoskeletal pain as a result of sitting on uncomfortable seats for long hours.

Long stressful waiting time

Another sub-theme, which emerged under the predisposing factors, was the long stressful waiting time. The KBTH serves patients from all over the country as well as those from neighboring countries. Patients who reported for adult healthcare services were many, including younger age groups of 15 years and above. However, there were no preferences for persons aged 60 years and above. There was no electronic appointment system in place such that different times could be allotted to the patients. This means that for each appointment, patients would have to report very early so that they could leave the hospital early as well. Unfortunately, the hospital's OPDs did not start operating until 8.00am. Patients were seen according to who reported first. Thus, in the event that a patient arrived early, they might not be attended to until 8.00am. When this happens, the patients would assume that the waiting time was too long if it were between two and four hours. However, for patients who reported late, the waiting hours could be very lengthy between two and six hours. The elderly interviewees in the study described the waiting time as long and stressful because they arrived at the OPDs very early in the morning whilst the doctors started consultation from 8.00am. Some of these elderly persons reported as early as 3.00 am because they might be commuting from outside the Greater Accra Region. Others who resided in the Greater Accra Region preferred to report very early to be seen early. This situation could lead to a long stressful waiting time. In an attempt to find out how the waiting time influenced utilization of healthcare services, a question was put before the interviewees. The waiting time to see the doctors was seen as very long:

"The waiting time is long, tiring, and stressful... I was at the unit as early as 3am... I met about eight to ten people already here. I take taxi (drop-in) that is expensive to come early... It is 8.30am, the doctors have not yet arrived at the unit" **(IDI F_{10}78 years).**

5.2 Enabling factors influencing utilization of healthcare services

The sub-themes relating to the enabling factors included exorbitant diagnostic fees, expensive medication and costly consultation fees. The enabling factors are the resources available to individuals, which make healthcare services accessible. The elderly persons explained that they were on retirement and their monthly income was not sufficient to cater for their basic needs. This situation made it very difficult for them to pay for their consultation fees, medications, and to perform diagnostic investigations. The interviewees stated that they were not on any pension scheme, which had made life unbearable for them. Some of them depended on their children, relatives and churches for financial support. The few that claimed that they were still working also experienced difficulties in paying for the hospital fees.

Exorbitant diagnostic investigation fees

The interviewees clarified that although the diagnostic investigations were partially covered by the NHI, investigations with exorbitant fees were not covered by the NHI. This prevented them from performing these diagnostic investigations, leading to deterioration of their state of health. In addition, the exorbitant diagnostic investigation fees (about GHS 500.00) prevented them from attending subsequent visits to the units. This led to the postponement of their follow-up visits to the units. They chose to stay at home:

"Hmm, well the laboratory investigations fees are very exorbitant, now that I am not working, the doctor asked me to come last year but because of monetary problem, I had to wait for my daughter to get money to perform the test before I could come... So, I have to explain to the doctor the reasons why I am now coming… So, when the diagnostic investigations are costly for me, I delay in performing the investigations and coming to the clinic" **(IDI F_{20} 68 years).**

The clue from the analysis was that even though some of the costs relating to diagnostic investigation were covered under the NHI, there were few that the elderly persons had to pay personally / out of pocket.

Expensive medication cost

Persons diagnosed with Non Communicable Diseases (NCDs) need to take their medication consistently because non-communicable diseases (NCDs) such as hypertension, diabetes, cardiovascular diseases are not curable, but are controllable. All the interviewees who were diagnosed with NCDs expressed difficulties regarding the expensive cost of medication (above GHS 200.00) as a result of partial coverage on medication by the NHI. This situation led to the delay or defaulting of interviewees in reporting back for check-ups. This reportedly resulted in the deterioration of their health and influenced utilization of healthcare:

"I am on a pension scheme so I receive pension money every month... This pension money is too small to pay all the costs of healthcare services, which makes life very uncomfortable... Every now and then the costs of drugs are going high, in fact, it is very difficult to come to the unit and not be able to buy the drugs" **(IDI F_4 80 years).**

The observation was that the elderly persons were willing to access healthcare services but the high cost of medications not covered by NHI was serving as a challenge.

Costly consultation fees

There is the need to continually visit the hospital for reviews to know the state of one's health. The doctors mostly request that patients report for reviews, the regularity of which depends on the state of health of the patients. The reviews could range from monthly to every three months. In addition, since NCDs are not curable, the elderly need to honor their reviews to be in good health. The interviewees argued that the consultation fee had an influence on their ability to honor the reviews. They explained that, although they were beneficiaries of NHI, they still had to pay for consultation fees depending on which OPD they utilized. The consultation fees ranged from GHS 5.00 to GHS 25.00. The elderly claimed that the NHI did not cover the consultation fees for some OPDs, so they tended to pay GHS 40.00 to GHS 80.00. These circumstances led to default in reviews:

"*At this OPD, money is used to access the services… If I do not have money, I cannot access anything, even as a beneficiary of NHI, I have to pay consultation fee of GHS20.00 and if my insurance expired, then I have to pay consultation fee of GHS45.00. So, without money, I cannot access the healthcare services […] I cannot come to see the doctor if I do not have money to pay my consultation fee"* **(IDI F_{16} 65 years).**

The issue was that the cost of consultation fees, among others, was serving as a challenge to the elderly persons utilizing the OPD services.

5.3 Need factors influencing utilization of healthcare services

Most of the elderly persons were diagnosed with various NCDs by doctors at the KBTH. These elderly persons sought professional assistance when they experienced signs and symptoms of the disease conditions such as pain, headache, palpitations, insomnia, difficulties in walking and forgetfulness, among others. The elderly interviewees in this current study were diagnosed with at least one chronic condition. This warranted follow-ups to check their state of health to ensure good health. The elderly persons were frail and might be experiencing some complications and disabilities that limited their activities. However, they attended the same OPDs with other age groups. Additionally, majority of the elderly did not reside in the environs of KBTH but journeyed from other places in the Greater Accra and other regions. This situation led to waking up early to report timely, expensive transport fares, and due to their frailty, the OPD procedures were too cumbersome for them. The sub-theme, which emerged under the need factors have been presented below.

Cumbersome procedures

At the various OPDs in KBTH, there were procedures the patients had to go through before seeing the doctors: collection of folders from the records section; going to the mobile bank to pay consultation fee; making of photocopies of NHI particulars to be given to the NHI personnel; before seeing the nurses to check blood pressure, temperature, pulse and respiration. The patients would then wait for the doctors to report before been attended to. This situation was putting stress on the elderly persons because of their age and state of health. They

were getting worried about the cumbersome procedures they had to go through before seeing the doctors:

"I find it very difficult walking to the OPD. The process at the OPD is very cumbersome even with my children with me. I have to go to the insurance personnel, to make some photo-copies, to the nurses and others. The movement around the OPD is a real challenge for me. The cost of transport fare to the unit and the cost of the healthcare services are also a challenge for me" **(IDI F_3 65 years).**

"My place of residence is very far from the hospital. I have to change transport twice and this increases the cost of transport fares. At the facility too, the NHI procedure is very cumbersome and tiring for an elderly person like me. I walk from one place to another, I have to go here and there, which makes me very exhausted. At my age and I am not feeling well the procedures worsen my health. In addition, I wait for a long time to see the doctor leading to bodily pains" **(IDI F_{37} 76 years).**

6. Discussion

Our study revealed that, the elderly persons who attended KBTH had to pay exorbitant fees to utilize the healthcare services. The elderly persons who received monthly earnings less than GHS 500.00 viewed cost as an influence on utilization of healthcare services compared to the elderly persons who received monthly earnings more than GHS 500.00 (χ^2 = 7.23; p = 0.026). Majority of the elderly persons viewed cost of healthcare services as not aiding in the utilization of healthcare services. Elderly persons in China with a better financial situation were more likely to use the healthcare services because they were able to afford the cost of the services [15]. Also [16] argued that, the wealthy elderly patients in China were more likely to utilize OPD services than the under privileged elderly patients basically, because the wealthy elderly patients do not encounter much financial constraints compared with the less, under privileged elderly patients[16]. Similar issues had been documented in support of this current study in terms of the cost of healthcare services in Ghana and Nigeria [2, 17]. These studies indicated that, the elderly patients encountered difficulties in paying for their healthcare services. For instance, they had a problem with the payment of their medications since they did not have money or enough money. The issue with cost of healthcare services was a challenge to the elderly patients who were not financially sound. They encountered barriers in utilizing the healthcare services. Some of these barriers are; postponement of their review dates, not able to perform some diagnostic investigations and buy their medication. This situations deteriorate their state of health leading to more complications of their health. In relation to the predisposing factors, our study discovered that almost all the elderly persons in this study were either on pension scheme or not working. The pension money was not sufficient to pay for their healthcare expenditures since the health insurance did not have full coverage on the healthcare services. The elderly persons specified that the expensive diagnostic investigations and medications were not covered by the NHI. In addition, they had to pay some fees for consultation, although they were beneficiaries of the NHI. They depended on monies from their children, relatives, friends and the churches they attended. These sources of monies were not reliable since they may also have some financial challenges. According to [12] the individual should have enough resources to enable them use the healthcare facility. The resources of the elderly were not adequate for them to utilize the healthcare services wholly in this current study. This situation the elderly in this study found themselves in agrees with [12] as they were not able to utilize the healthcare services due to

financial constraint since they were no more working, and depended on their pension monies or on their children who had other responsibilities. The enabling factor refers to the "means" of the elderly person having available resources for themselves for the utilization of healthcare services [12, 13]. These include capital specific to their family, for instance, income [12, 13]. In our study the elderly persons were financially handicapped to perform diagnostic investigations, buy their medications and pay for their consultation fees to see the doctors. Another concern expressed by the elderly persons with less income in the current study was the burden of the cost of healthcare services. This was confirmed by [18] who found that the elderly persons living in Belgium within the lower socio-economic status (SES) groups had worse self-assessed health. This may be due to financial constraints related to healthcare costs leading to poor healthcare service utilization. The elderly persons were not able to utilize the healthcare because of financial challenges which led to poor health assessment related to deterioration of their health. This situation was consistent in our study. The elderly patients who were financially constrained had poor self-assessed health which was associated with unstable health status. Our study observed that, healthcare costs had an influence on how the elderly persons utilized healthcare services. Healthcare cost is thus, the determining factor as to which healthcare facility the elderly persons would utilize, and if the cost was not affordable, they would not patronize the health facility. From the theoretical perspective, the individual should have enough resources (enabling factors) to allow them have access to the healthcare services. The individual not having enough resources (monies) led to barriers to the utilization of healthcare services [12, 13]. Our study indicated in the qualitative findings that, the elderly persons experienced long stressful waiting time and bodily pains while waiting to see the doctors. The Korle-Bu Teaching Hospital OPDs did not have an electronic appointment system to allot different times to the elderly persons. The doctors started consultation at 8.00 am. In the event that elderly persons arrived early, they were not attended to until 8.00 am. When this occurred, the elderly persons assumed that the waiting time was too long. In addition, the elderly persons experienced bodily pains and swelling of the feet as a result of sitting for long periods at the same place. Moreover, they had a higher risk of experiencing bodily pains and swelling of feet because of aging. Majority of the elderly interviewees (81.4%) in the study experienced long stressful waiting time. The elderly who attended the various OPDs were influenced by the waiting time in utilizing the healthcare services (χ^2=15.64; p=0.004). Studies conducted in Nigeria and Ghana specified similar findings that the elderly experienced long waiting time to see the doctors [2, 17, 19]. The long waiting time for the elderly persons to see their doctor could be inadequate number of doctors to see the elderly patients. The elderly patients' numbers outweighed the doctors who attended to them. Additionally, it was observed that the time spent with an elderly patient was extended due to their complaints. The extensive period of time spent with a patient leads to long waiting time for the other patients. Most hospitals in Ghana do not have electronic appointment system to allot different times for patients for review. The elderly Ghanaians are mindful with time related to their health so they report very early to seek healthcare services. Unfortunately, with the review date system which is first come first served basis, leads to long waiting time to see the doctor associated with swelling of feet and bodily pains experienced by the elderly patients.

7. Conclusion

Our study assessed the association between predisposing, enabling and need factors and utilization of healthcare services by the elderly utilizing Korle-Bu Teaching Hospital. From the study we concluded that, cost was a

determining factor in utilizing healthcare by the elderly patients at the Korle-Bu Teaching Hospital. The cost of healthcare services should be waived for the elderly person 60 years and above on services that the NHI does not cover for the elderly to enhance utilization of healthcare services. Our results revealed that utilization of healthcare services was associated with long waiting time. This situation was related to bodily pains and swelling of feet. The policy on hospital visitation to see the doctor at the KBTH is associated with challenges encountered by the elderly patients. Review of the hospital visitation policy would reduce the challenges the elderly encountered at the health facility.

8. Recommendations

Based on the findings from our study, the following recommendations are made;

8.1 Policy Makers at Ministry of Health, Ghana Health Services

Elderly persons less than 70 years also encountered more barriers with the influence of cost on utilization of healthcare services. This situation calls for the policy on NHI exemption for the elderly 70 years and above to be reviewed to include age 60 years and above. This will enable the elderly persons aged 60 years and above to utilize healthcare services without much difficulties. In Ghana, there is no policy for elderly persons. The aging bill for the elderly persons should be formulated by policy makers to enable the elderly to age gracefully.

8.2 Management and Health Facility

Our study revealed that, the elderly persons spent long stressful time waiting for the doctors. The Chief Executive Officer and management should revisit the review dates by using "appointment time" to reduce the waiting time. The OPDs are made up of all age groups. The OPD patients see the doctors on the basis of first come, first served. The elderly persons were not given any preferences in seeing the doctors. The CEO of the hospital could provide geriatric unit (an area on the ground floor) solely for the elderly to be seen by the doctors to prevent long stressful waiting time and difficulties in accessing healthcare services.

8.3 Social Support Strengthening

Currently, the elderly and yet-to-be elderly should make provision for healthcare towards their old age to enable them to access healthcare services without challenges. Families should provide financial and physical support for the elderly.

9. Limitation of the Study

The study did not include the elderly persons 60 years and above who were on admission, this could narrow the findings. In addition, elderly persons who utilized the private hospital OPDs were not involved. Furthermore, another limitation was funding to increase the scope of the study. However, these limitations did not affect the overall findings of the study.

Acknowledgements

Special thanks goes to the Chief Executive Officer of Korle-Bu Teaching Hospital, the elderly patients, research assistance and Mr. Anthony Ansah.

References

[1]. J. A. M. Lubenow, A. J. R. Barrêto, N. J. de Almeida, and S. A. Oliveira, "Access for the Elderly to Primary Health Care Services: an Integrative Review," International Archives of Medicine, vol. 9, no. 1, pp. 1-13, 2016.

[2]. J. Agbogidi and C. Azodo, "Experiences of the Elderly Utilizing Healthcare Services in Edo State " The Internet Journal of Geriatrics and Gerontology, vol. 5 (2), pp. 1-6, 2009.

[3]. G. Agrawal and P. Arokiasamy, "Morbidity prevalence and health care utilization among older adults in India," Journal of Applied Gerontology, vol. 29, no. 2, pp. 155-179, 2010.

[4]. Ghana Statistical Service, "2010 Population & Housing Census Report, the elderly in Ghana," July 2013 2013.

[5]. J. R. Beard et al., "The world report on ageing and health: a policy framework for healthy ageing," Lancet, vol. 387, no. 2145-54, 2016.

[6]. L. K. Chen, "Towards elder-friendly outpatient services," Journal of the Chinese Medical Association, vol. 75, no. 12, pp. 617-8, Dec 2012.

[7]. B. I. I. Saeed, M. Louis, E. N. Aidoo, N. N. Nsowah-Nuamah, A. E. Yawson, and X. Zhao, "Socio-economic inequalities and healthcare utilization in Ghana," International Journal of Business and Social Research, vol. 3, no. 1, pp. 54-63, 2013.

[8]. S. Krishnaswamy et al., "Factors Contributing to Utilization of Health Care Services in Malaysia: A Population-Based Study," Asia-Pacific Journal of Public Health, vol. 21, no. 4, pp. 442-450, 2009.

[9]. Korle-Bu Teaching Hospital, "2016 Annual Report," 2016.

[10]. M. o. H. Ghana Health Service, "Ghana Health Service Annual Report,",2016.

[11]. T. Lehnert et al., "Review: Health Care Utilization and Costs of Elderly Persons with Multiple Chronic Conditions," Medical Care Research and Review, vol. 68, no. 4, pp. 387-420, Aug 2011.

[12]. R. M. Andersen, "Revisiting the Behavioral Model and Access to Medical Care: Does It Matter?," Journal of health and social behavior, vol. 36, pp. 1-10, 1995.

[13]. R. Andersen and J. F. Newman, "Societal and individual determinants of medical care utilization in the United States," The Milbank Quarterly, vol. 83, no. 4, pp. 1-28, 2005.

[14]. D. P. Rebhan, "Health care utilization: understanding and Applying Theories and Models of Health care Seeking Behavior ", W. R. University, Ed., ed, 2008, p. 19.

[15]. C. H. Gong, K. Hal, and H. Xiaojun, "Factors predicting health services use among older people in China: An analysis of the China Health and Retirement longitudinal study," BMC Health Services Research, vol. 16, no. 63, 2016.

[16]. D. Lixia, X. Liu, T. Zhang, and Y. Wu, "Health care utilization in elderly people with cardiovascular disease in China," International Journal for Equity in Health, vol. 14, no. 59, 2015.

[17]. I. Y. Addo and I. A. Gyamfuah, "Determinants of Healthcare facilities and Services Utilisation among

the Aged: Evidence from Yamoransa in Ghana," American Scientific Research Journal for Engineering, Technology and Sciences (ASRJETS), vol. 8 (1), no. 42-55, 2014.

[18]. S. Hoeck, G. Frabcois, J. Van der Heyden, and G. Van Hal, "Healthcare utilisation among the Belgian elderly in relation to their socio-economic status," Health Policy vol. 99, no. 174-182, 2011.

[19]. O. N. Chukwudi, I. M. Uyilewhoma, E. J. Ebi, O. O. Kalu, and E. E. Iyamba, "Determinants of Health Services Utilization among the Elderly in Calabar Municipality, Cross River State, Nigeria," European Journal of Preventive Medicine, vol. 3(5), no. 129-136, 2015.