

The Effects of Socio-Economic Factors on Utilization of Different Healthcare Services among older persons in Ghana

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Abstract

The effect of socio-economic inequality in the use of healthcare services in Ghana is investigated in this paper. The data employed in the study were drawn from the Global Ageing and Adult Health survey conducted in Ghana by SAGE and was based on the design for the World Health Survey (WHS, 2003). The survey was conducted in 2007-2008 and collected data on socio-economic characteristics and other variables of the 5573 individuals interviewed. Generalized logit model was applied in the analysis. The study found that health status is a very strong determinant of the type of healthcare services Ghanaians prefer. It also indicated differential preferences for healthcare services by income levels, level of education, employment status and health insurance status of the aged. Among the aged men and women, income levels and higher education improved access to private health care. Those in informal employment, the self-employed and those in the lower income quintiles preferred traditional and herbal medicine. The aged with health insurance preferred the public health facility. The aged with self-rated moderate and bad health status preferred public health facility. These differences may be due to socio-economic inequities but could also indicate that the existing health facilities are not always used in an optimal way. Improving access to essential health care for the aged through national educational campaigns and social protection measures (expanding the national health insurance to include all the aged – 60 years and above) should be an essential national health policy worth considering. Implementation of the new National Pensions Act will be crucial in reducing the socioeconomic inequalities to primary health care by the aged in Ghana.

Keywords: *Ageing, Older persons, Healthcare Utilization, Generalized Logit, Socio-economic inequities, Ghana.*

Background

The population of the aged is increasing all over the world, which may be explained by relatively improved socio-economic and livelihood conditions favorable for longevity such as increased access to healthcare, improving food security, urbanization and general security (Papadimitriou, 2007). However the situation does not reflect a global uniformity in terms of access to health improving facilities, especially in sub-Sahara Africa, where due to poverty and low policy coverage, the aged is not well catered for as compared to their counterparts in the developed world. The situation of the aged in many developing countries is similar to that of other vulnerable populations. Favourable accessibility to basic social infrastructure and food security challenges are exclusively a stark characteristic of the aged in these countries (Kowal, et al, 2010; Rahman, 2007). It is arguably true that socio-economic condition affects health related quality of life and utilization (Ng, 2010; Dale, 2013). Recent literature has identified

income and production resources as good predictors of quality health ([Somkotra, 2013; Li, 2007). People living on low incomes have been identified as standing higher risk of suffering serious illness and death than those in upper income brackets such that people with reasonably high savings are less prone to predisposing depressive factors.

Evidence from Japan on utilization of healthcare among the elderly indicates that use of dietary practices for therapeutic purposes is greater than that of visiting the physician (Tokuda, 2008). Similarly, the use of physical therapy as an alternative medicine was lower than visiting the physician. The study further established that health utilization was independent of employment status such that regardless of the working condition of the aged, his or her willingness to use alternative health practices instead of visiting an orthodox physician was fixed, except for those in the age group of 70 – 74 years and above.

Social variations and their effect on health utilization are also influenced by geographical spread. In the United States, a study indicated that residents of low-income areas and countries have greatly increased rates of disability and hospital utilization. Also, assessments of the relationship between income and hospital utilization are more valid and pronounced among working-age adults than among the aged. Finally, poverty varies geographically and its spread explains a great deal about geographic variation in health care utilization (Cooper, 2012). A study in Brazil showed that there exists a difference in self-assessed health by marital status on women (Bos, 2007) The results indicated that widows had a 21% chance of better health than married women. It was explained that the drudgery of marital life affects the health situation of married women in old age as compared to their widow counterparts, which also determines the level of utilization of health services among these groups.

In sub-Saharan Africa, the aged population is exposed to antecedent vulnerabilities including poverty, low coverage of health infrastructure and weak social welfare and support institutions. All these and other socio-cultural factors that define the peculiarity of the aged situation in Africa can explain utilization of health and healthcare products. The measurement of these antecedents and their interactions with health and health care utilization are underlying imperatives to designing practical policies for the welfare of the aged population.

The socio-cultural context

In Ghana, traditional medicine practices are a significant part of the Primary Health Care system. The entire body of traditional medicines encapsulates the totality of herbal, spiritual, manual and exercise techniques aimed at treating, diagnosing and preventing diseases or maintaining well-being [Abdullahi, 2011; MOH, 2005). It has been estimated that about 80% of the population of Ghana relies on herbal preparation for Primary Health Care as a result of affordability, easy access and cultural beliefs (MOH, 2005).

The country's healthcare system can be classified into four main categories. The first category involves public health facilities managed by the Ministry of Health (MOH) including teaching hospitals, regional and district hospitals, clinics, and health posts. The second and third categories include private-for-profit and private not – for – profit biomedicines which are manned by doctors, midwives and pharmacists. The last category is made up of traditional medicine practitioners who practised as established or itinerant entities throughout the country. In terms of personnel capacity, it is estimated that there is a ratio of 1:200 Traditional Medicine Practitioners per capita compared to 1:20,000 medical doctors (Abdullahi, 2011).

Studies as well as policies on health and healthcare utilization in Ghana have predominantly focused on gender, rich-poor and rural-urban gaps (Arthur, 2012; Salisu, and Prinz, 2009;

Odeyemi, and Nixon, 2013). This might have been informed by the spread and inequities in accessibility to healthcare due to infrastructural deficits inherent to the health care system. It has been estimated that the average Ghanaian needs to travel a distance of 16 kilometers to the nearby hospital for healthcare services. Whilst those in the urban centers have a more favourable average distance of five (5) kilometers, others in the poor and deprived rural regions need to traverse further distances on poor road infrastructure to access health services (*Odeyemi, and Nixon, 2013*). Financial accessibility is one underlying phenomenon influencing choices of health utilization in the country (*Yarney, 2013*). Rich households are more likely to utilize modern hospital facilities for healthcare as compared to poor households who are likely to use herbal medicines and self-medication. The choice of herbal medicines is influenced by factors such as affordability and convenience as compared to orthodox medicine which are not readily available in many localities especially in rural settings. In effect, a person in a rural community has a higher likelihood of using traditional medicines as compared to their urban counterparts. Out-of-pocket payment system that was introduced as part of the Structural Adjustment Programme in the 1980s was a major hindrance to healthcare utilization.

The introduction of the National Health Insurance Scheme in the middle of the last decade sought to bridge the accessibility gaps in terms of affordability; however a lot more needs to be done to meet the objective of improved access. The scheme is credited for bringing some improvements to the health indices of the country in terms of life expectancy, infant mortality, under-5 year mortality, and has lowered the burden of major diseases (*Yarney, 2013*). On the whole, research space on healthcare utilization has not given much attention to the aged population in Ghana. This may be due to the overwhelming majority of the population being youthful and a weak policy focus on the aged. Culturally, children have the singular responsibilities of taking care of their parents in old age and their behavioural patterns in relation to health may influence choices of health utilization of aged parents, especially if the parents are economically not empowered.

This study is situated within the context of explaining factors that influence utilization of health and healthcare products among the aged population of Ghana. It seeks to analyze socio-economic and intrinsic cultural values and how they affect the spans and depth of health utilization in Ghana to fill yawning gaps in geriatric literature as well as influence policy formulation on the aged.

Material and Methods

Sampling Procedures

The data employed in this study were drawn from the World Health Organization Global Ageing and Adult Health (SAGE). This study seeks to explore the use of different health facilities among the ageing Ghanaian Men and Women in relation to socio-economic factors. It also aims at addressing the gap in reliable data and scientific knowledge on ageing and health in low – and middle –income countries. SAGE is a longitudinal study with nationally representative samples of persons aged 50+ years in Ghana with a smaller sample of adults aged 18-49 years. Instruments are compatible with other large high-income country longitudinal ageing studies. Wave 1 was conducted during 2007-2008. In this study, 5573 respondents made up of (2824) men and (2749) women were considered. SAGE is a longitudinal study with nationally representative samples of persons aged 50+ years in Ghana, with comparison samples of younger adults aged 18–49 years in Ghana. The main aim is to generate valid, reliable and comparable information on a range of health and well-being outcomes of public health importance, in adult and older adult populations. The face-to-face interview was conducted in Ghana (2007–08).

Multistage cluster sampling strategies were used where households were classified into one of two mutually exclusive categories:

1. All persons aged 50 years and older were selected from households classified as ‘50+ households’; and
2. One person aged 18–49 years were selected from a household classified as an ‘18–49 household’.

Household enumerations were carried out in the final sampling units. One household questionnaire was completed per household where a household informant and individual respondent need not be the same individual. One individual was selected from 18–49 households, whereas for 50+ households all individuals aged 50+ were invited to complete the individual interview. Proxy respondents were identified for selected individuals who were unable to complete the interview. Household-level analysis weights and person-level analysis weights were calculated for each country, which included sample selection and a post-stratification factor. Post stratification correction techniques used the most recent population estimates provided by the Ghana Statistical Service. A standardized survey instrument, set of methods, interviewer training and translation protocols are used in all SAGE countries.

International standards were used to harmonize education levels and occupations.

Measures of healthcare services

Information of where most frequently respondent received healthcare over the last 3 years was elicited in one question. The respondents were asked “Think about healthcare you needed in the last 3 years, where did you go most often when you felt sick or needed to consult someone about your health?”

Socio-economic measures

The measures were age (50-59 (adults) and 60yrs and above (Elderly)), and gender. Enabling measures were assessed in terms of education, job employment, insurance, health status and income. Education was recorded as *college/university completed, high school completed, secondary school completed, primary school completed, less than primary school completed and no formal education*. Job employment was categorized into four groups: public, private, self-employed and informal employment. Public sector includes employees of state, or municipal governments and their agencies, parastatal enterprises, and semi-autonomous institutions such as social security institutions that are owned by the government or institutions like religious schools if the staff is paid by the government. Private sector includes any employees not working for the government and not self-employed. Self-employed includes those who earn their livelihood directly from their own trade or business rather than as an employee of another. Informal employment could mean employment in the informal economy or informal employment. Informal economy refers to the general market income category wherein certain types of income and the means of their generation are “unregulated by the institutions of society, in a legal and social environment in which similar activities are regulated.” Jobs in the informal economy are characteristically without benefits such as health insurance, sick leave, paid vacations or pensions. Insurance status was recorded as respondents who have health insurance coverage. Self-rated health status indicates how Ghanaians rated their health state by using a five-point scale ranging from “very good” to “very bad” coded as a categorical variable that ranges from 1 equals “very good” to 5 equals “very bad” . Income level was divided into five categories: Income Quintile; *Q1 (lowest) through Q5 (highest)* . Wealth or income Quintiles

were derived from the household ownership of durable goods, dwelling characteristics (type of floors, wells and cooking stove), and access to services (improved water, sanitation and cooking fuel) for a total of 21 assets. A two-step random effects probit model was used to generate the Quintiles.

Analytical strategy

A generalization of the logistic regression model was applied in the analysis to examine where adult and elderly Ghanaians visited most to receive their healthcare services. Analyses of the association of healthcare services with socioeconomic factors were carried out separately for women and men by means of multinomial logistic regression analysis. Odds ratios (OR) and their respective standard errors were also computed. Firstly, no variable was adjusted for age (age-unadjusted model). Secondly, each variable in the analysis was adjusted for age (age-adjusted model).

For a response with five unordered options (private, charity, traditional, pharmacy and other health services), where public facility was considered reference category due to the highest frequency of reception, the multinomial logistic regression estimates the effects of socioeconomic variables on the different healthcare services with unordered response categories. Stata SE (version 12.1) was used for analysis.

Results

Data Description

Table 1 presents the descriptive statistics of the data used in the current study. It shows the total number and row percentage for characteristics of interest. After careful grouping of each factor into categories with meaningful sample sizes, additional model analyses were performed. The total number of observations for this study was 5573 distributed as shown. Most of the people prefer to visit public health services (44.39%) and the healthcare service with the least attraction was traditional (2.21%). More than 50% were elderly and (48.84%) were adults. At least half of the respondents were uneducated (50.35%) and those who completed tertiary education and hoping to get jobs could only manage (3.39%). The distribution of the respondents was slightly in favour of men (50.67%). Almost two-thirds of the respondents had no insurance (63.59%) and four-fifths (81.63%) of the employment category was resident in the self-employed group. The highest self-rated health was fairly distributed between Good (38.58%) and Moderate (38.69%) health status respectively. There was an income gradient found for healthcare services

Table 1: Descriptive Statistics for the Healthcare Utilization

Variable	Total	Percentage
<i>Healthcare facility</i>		
Private	569	10.21
Public	2474	44.39
Traditional	123	2.21
Charity	202	3.62
Pharmacy	713	12.79
Others	1492	26.77
<i>Education</i>		
None	2806	50.35

Primary	1291	23.17
Secondary	1287	23.09
Tertiary	189	3.39
Gender		
Male	2824	50.67
Female	2749	49.33
Insurance		
No	3544	63.59
Yes	2029	36.41
Age category	2722	48.84
Adult	2851	51.16
Elderly		

Table 2:

Variable	Total	Percentage
Employment		
Public	469	8.42
Private	207	3.71
self-employed	4549	81.63
informal employment	348	6.24
Health Status		
Very good	374	6.71
Good	2150	38.58
Moderate	2156	38.69
Bad	730	13.10
Very Bad	163	2.92
Income		
Quintile1	1081	19.40
Quintile2	1100	19.74
Quintile3	1104	19.81
Quintile4	1127	20.22
Quintile5	1161	20.83

Table 3

Age –adjusted(except age category) odds ratios (OR) from multinomial logistic regression and their standard errors (SE) for Healthcare Utilization by socioeconomic indicators among men

Variables	Private	Charity	Traditional	Pharmacy	Others	(Se)
Age Category						
50-60	1	1	1	1	1	
60 and more	1.097 (0.163)	1.058 (0.266)	1.199 (0.359)	0.665*** (0.151)	0.800* (0.126)	
Income						
Quintile1	1	1	1	1	1	
Quintile2	2.205** (0.354)	0.731 (0.532)	1.133 (0.606)	1.124 (0.260)	0.946 (0.213)	
Quintile3	2.622*** (0.317)	1.200 (0.454)	1.725** (0.412)	0.946 (0.261)	0.888 (0.237)	
Quintile4	2.232*** (0.303)	0.912 (0.381)	0.898 (0.395)	0.627* (0.265)	0.735 (0.223)	
Quintile5	4.604*** (0.296)	0.426* (0.478)	0.237** (0.614)	0.369** (0.269)	0,701 (0.231)	
Education						
Not educated	1	1	1	1	1	
Primary	1.276 (0.224)	0.709 (0.489)	0.899 (0.344)	0.787 (0.189)	0.801 (0.174)	
Secondary	2.075*** (0.236)	1.742 (0.368)	0.925 (0.387)	1.105 (0.186)	1.033 (0.160)	
Tertiary	1.909* (0.396)	1.870 (0.694)	0.549 (0.747)	0.371** (0.454)	0.387*** (0.333)	
Insurance						
No	1	1	1	1	1	
Yes	0.856 (0.192)	2.602*** (0.314)	0.445*** (0.302)	0.397*** (0.184)	0.568*** (0.129)	
Employment						
Public	1	1	1	1	1	
Private	1.837* (0.364)	0.858 (0.629)	0.986 (0.897)	1.621 (0.314)	1.348 (0.338))	
Self-employed	1.502 (0.265)	0.978 (0.417)	2.502* (0.484)	2.521*** (0.251)	2.306*** (0.188)	
Informal	0.831 (0.540)	2.776* (0.558)	1.608 (0.749)	2.232** (0.376)	2.032*** (0.271)	
Health Status						
Very good	1		1	1	1	
Good	1.461 (0.435)	0.806 (0.701)	0.437 (0.636)	0.284*** (0.268)	0.833 (0.281)	

Moderate	1.318 (0.423)	0.972 (0.699)	0.552 (0.665)	0.242*** (0.285)	0.570** (0.271)
Bad	0.909 (0.488)	2.149 (0.715)	0.913 (0.753)	0.376*** (0.307)	0.383*** (0.332)
Very bad	0.869 (0.899)	2.921 (0.956)	0.322 (1.186)	0.203*** (0.611)	0.918 (0.483)

Note: ***, ** and * indicates 1%, 5% and 10% significance level respectively

Table 4: Age –adjusted(except age category) odds ratios (OR) from multinomial logistic regression and their standard errors (SE) for Healthcare Utilization by socioeconomic indicators among women

Variables	Private	Charity	Traditional	Pharmacy	Others
Age Category					
50-60	1	1	1	1	1
60 and more	1.123 (0.189)	1.455* (0.222)	1.800 (0.557)	1.021 (0.160)	0.755** (0.118)
Income					
Quintile1	1	1	1	1	1
Quintile2	1.260 (0.280)	1.611 (0.337)	0.448* (0.460)	0.798 (0.217)	0.915 (0.173)
Quintile3	0.940 (0.264)	1.302* (0.331)	0.839 (0.527)	0.389*** (0.247)	0.661** (0.172)
Quintile4	1.437 (0.279)	0.798 (0.446)	0.268** (0.548)	0.355*** (0.256)	0.578*** (0.184)
Quintile5	2.094*** (0.248)	1.883 (0.412)	0.339*** (1.046)	0.339*** (0.287)	0.667** (0.189)
Education					
Not educated	1	1	1	1	1
Primary	1.520** (0.210)	1.045 (0.289)	0.854 (0.396)	0.800 (0.207)	0.699** (0.162)
Secondary	1.351 (0.222)	1.219 (0.339)	0.793 (1.044)	0.412*** (0.253)	0.663** (0.178)
Tertiary	1.639 (0.530)	2.231 (0.657)	3.171*** (0.313)	0.491 (0.831)	1.174 (0.475)
Insurance					
No	1	1	1	1	1

Yes	0.787	2.213***	0.433**	0.268***	0.653***
(0.180)	1	(0.237)	(0.411)	(0.188)	(0.123)
Employment	1.133	1	1	1	1
<i>Public</i>	(0.635)	0.759	1.039	3.115	0.584
<i>Private</i>	0.918	(0.721)	(0.332)	(0.699)	(0.762)
<i>Self-employed</i>	(0.343)	0.622	199884.8***	3.318**	3.103**
<i>Informal</i>	0.521	(0.355)	(0.288)	(0.575)	(0.387)
	(0.500)	1.139	1391009.1***	2.256	1.199
		(0.457)	(0.560)	(0.635)	(0.477)
Health Status					
Very good	1	1	1	1	1
Good	2.316	1.001	0.064	0.764	0.614
	(0.611)	(1.050)	(0.861)	(0.461)	(0.405)
Moderate	1.845	1.554	0.082***	0.532	0.381**
	(0.615)	(1.045)	(0.804)	(0.451)	(0.387)
Bad	2.228	1.853	0.227***	0.756	0.429**
Very bad	(0.665)	(1.060)	(0.823)	(0.505)	(0.423)
	2.134	0.369**	0.187*	0.700	0.833
	(0.785)	(0.417)	(1.068)	(0.554)	(0.493)

Note: ***, ** and * indicates 1%, 5% and 10% significance level respectively

Among men, the elderly were less likely to utilize the pharmacy services instead of public services as compared to their adult counterparts. Also, men in the second income quintile category were more likely to use private facility against public facility as compared to those in the least income quintile (Table 3). Again, private health facility users showed very strong association with both income and education. The odds for men beside lowest income bracket (Q1) to use private health facility instead of public facility were at least double more likely as the same odds for those in the lowest income bracket (Q1). Also, among men who completed secondary education similar characteristic was exhibited as compared to their non-educated counterparts. In charity facility usage against public facility, insurance users were shown to have an urge over non-insurance users. Ageing men in the middle and highest income brackets (Q3 and Q5) were also more likely to utilize traditional treatment against public facility than those in the lowest income bracket(Q1). However, insurance users were less likely as compared to non-insurance users in the utilization of traditional against public facility. Pharmacy usage was associated with all studied variables. Elderly men were less likely to use pharmacy against public facility as compared to their adult counterparts. Those who completed tertiary education were less likely to use pharmacy against public facility as compared to non-educated men. Similarly, men in the highest income bracket (Q5) were less likely to attend pharmacy against public facility than their counterparts in the lowest income bracket (Q1). Non-insurance users make more use of pharmacy against public facility than insurance holders.

Self-employed and informal employee men preferred pharmacy attendance against public facility than men in the public sector. Interestingly, men whose self-rated health was very bad, bad, moderate and good rather preferred public facility to pharmacy as compared to those whose

health status were very good. The usage of other healthcare services was equally associated with all studied variables except age and income. Men who completed tertiary education preferred public facility to other health facilities as compared to their non-educated counterparts. Also, those who used insurance preferred public facility against other health facilities as compared to their counterparts without insurance. In the same vein, men whose self-rated health were bad and moderate also preferred public facility to other facilities as compared to their counterparts whose health status was very good. However, self-employed and informal employee men preferred other facilities against public facilities in relation to public sector men.

In similar to men, women in the highest income bracket (Q5) preferred private to public facilities unlike their counterparts in the lowest income quintile (Q1). In private facility usage against public facility, women who completed primary education had an urge over non-educated women. This is in sharp contrast to men which was not significant. Like men, women who used insurance preferred charity run to public facility in relation to non-insurance users. Unlike men, women whose subjective health were very bad preferred public facility against charity run as compared to those whose health status were very good. Among women, traditional health attendants were statistically significantly associated with all studied variables except age. Men who completed tertiary education preferred traditional healing to public facility use as compared to their non-educated counterparts. Self-employed and informal employee women preferred traditional healing against public facility treatment as compared to public sector women. However, women who have insurance, in higher income brackets (Q4 and Q5) or have bad or moderate health status would prefer public facility treatment to traditional healing as compared to women without insurance or in lowest income bracket or women whose health status are very good respectively. Among women, pharmacy usage was statistically associated with all studied variables except age and health status. Women who had secondary education, being in the middle and upper income levels or being insured preferred public facility to pharmacy as compared to non-educated, or lowest income level or uninsured counterparts. However, women who were self-employed preferred pharmacy use against public facility as compared to public sector employees. Finally among women, other health services usage were associated with all studied variables. Women with primary and secondary education, insured or in middle and upper class income quintiles or have bad and moderate health status or elderly rather prefer public facility to other health services as compared to non-educated or uninsured or in the lowest income bracket or have very good health status or adult group. However, self-employed women preferred other health services against public services as compared to public sector women.

Discussion

Among men, the elderly prefer attending public health facilities to attending pharmacy stores for treatment as compared to their adult counterparts. In contrast to men, elderly women prefer public facilities against other health services for treatment as compared to their adult counterparts. In support of the above, evidence from Japan on utilization of healthcare among the elderly indicates that those in the 70-74 years age bracket prefer orthodox (public facility) to alternative health practices (Tokuda, et al 2008). This could also be corroborated by (Papadimitriou, 2007) that showed the population of the aged increasing all over the world which may be explained by relatively improved socio-economic and livelihood conditions favourable for longevity such as increased access to healthcare, improving food security, urbanization and general security. Among men, various levels of income impacted greatly on private health services against public, whereas among women only the highest income level did as compared to lowest income level.

Men in the middle income class preferred traditional healing against public health services as compared to their counterparts in the lowest income bracket whereas in the upper class of men and women, the reverse is the case. Interestingly, women in the middle to upper levels of income rather preferred public health services against pharmacy usage as compared to the lowest income bracket. However, it only occurred in the highest income level for men. Again, women in the middle to upper classes of income preferred public health services to other health services as compared to their lowest income counterparts. The situation in men did not exist because they were statistically insignificant. This is in clear support of past literature that socio-economic condition affects health related quality of life and utilization (Ng, 2010; Dale, et al, 2013). Recent literature has identified income and production resources as good predictors of quality health (Somkotra, 2013; Li 2007). People living on low incomes have been identified as standing higher risk of suffering serious illness and death than those in upper income brackets such that people with reasonably high savings are less prone to predisposing depressive factors. In a related development, financial accessibility is one underlying phenomenon influencing choices of health utilization in the country (Yarney, 2013).

Men who completed secondary education preferred private health services against public as compared to non-educated. However, it was women who had primary education that preferred private health services against public services as compared to non-educated. Women who completed tertiary education favored traditional healing against public services as compared to non-educated. It did not exist in men because it was not significant. Men who had tertiary education rather preferred pharmacy services to public services as compared to non-educated. In the case of women, it was rather those who completed secondary education that showed similar preference. Again, women who had only primary education preferred public services to other health services as compared to non-educated counterparts. It is rather tertiary that showed similar characteristics.

Insurance holders preferred public health services to traditional healing as compared to non-insurance holders. Again, insurance holders preferred public health services to all the healthcare services except charity run as compared to their respective reference groups. This conforms with existing literature that postulates that out-of-pocket payment system that was introduced as part of the Structural Adjustment Programme was a major hindrance to healthcare utilization. The introduction of the National Health Insurance Scheme in the middle of the last decade sought to bridge the financial accessibility gaps; however, a lot more needs to be done to meet the objective of improved access. The scheme had been associated with some improvements to the health indices of the country in terms of life expectancy, infant mortality, under-5 year mortality, and lowered burden of major diseases (Yarney, 2013).

The use of traditional, pharmacy and other health services were statistically associated with employment status among women. Past study rather established that health utilization was independent of employment status such that regardless of the working condition of the aged, his or her willingness to use alternative health practices instead of orthodox physician was fixed. However, in this study, among men, they were only significant in both pharmacy and other health services. Self-employed males and females preferred pharmacy and other health services against public facilities as compared to public sector male and female. However, among women, traditional health service was an added advantage in terms of preference to public facility.

Informal employees also preferred pharmacy and other health services to public health services in relation to public employees among men. In contrast to men, among women, employees preferred traditional healing to public health services in relation to public employees. This

agrees completely with what pertains in Ghana. Traditional medicine practices are a significant part of the Primary Health Care system. The entire body of traditional medicine encompasses the totality of herbal, spiritual, manual and exercise techniques aimed at treating, diagnosing and preventing diseases or maintaining well-being [Bos 2007, MOH, 2005]. It has been estimated that about 80% of the population of Ghana relies on herbal preparation for Primary Health Care as a result of affordability, easy access and cultural beliefs [MOH, 2005]. Also, the choice of herbal medicines is influenced by factors such as affordability and convenience as compared to orthodox medicine which are not readily available in many localities, especially in rural settings. In effect, a person in a rural community has a higher likelihood of using traditional medicines as compared to their urban counterparts. This goes to confirm the estimated ratio of 1:200 Traditional Medicine Practitioners per capita compared to 1:20,000 medical doctors (Bos 2007).

Among ageing men, the various levels of health status preferred public health services to pharmacy services as compared to those whose status are very good. This supports the claim in sub-Saharan Africa, where the aged population is exposed to antecedent vulnerabilities including poverty, low coverage of health infrastructure and weak social welfare and support institutions. All these and other socio-cultural factors that define the peculiarity of the aged situation in Africa can explain utilization of health and healthcare products. The measurement of these antecedents and their interactions with health and healthcare utilization are underlying imperatives to designing practical policies for the welfare of the aged population.

Moderate and bad health status levels also preferred public facility against other health services in relation to very good health state. In contrast to men, women health status (very bad) preferred public service against charity as compared to very good health status. Also, moderate and bad health status preferred both traditional healing and public against other health services in relation to very good health status. This contrasts evidence from Japan on utilization of healthcare among the elderly that indicates the use of dietary practices for therapeutic purposes is greater than that of visiting the physician (Tokuda et al, 2008).

Self-rated health status by the aged was a subjective assessment and did not consider measured health states. Also, in this analysis, not all the factors influencing the health of the aged such as, marital status, physical exercise and cultural issues were considered. The SAGE survey however, does provide information on these characteristics of the aged

Conclusion

The socioeconomic status of the aged Ghanaian has been demonstrated to influence health utilization and preferred health care system. The study indicated differential preferences for healthcare services by income levels, level of education, employment status and health insurance status of the aged. Among the aged men and women, income levels and higher education improved access to private health care. Those in informal employment, the self-employed and those in the lower income quintiles preferred traditional and herbal medicine. The aged with health insurance preferred the public health facility. The aged with self-rated moderate and bad health status preferred public health facility.

Improving access to essential health care for the aged through social protection measures (expanding the national health insurance to include all the aged – 60 years and above and not only those in the formal sectors) should be an essential national health policy worth considering. Improving pensions for the elderly through the implementation of the reformed National Pensions Act will be crucial in reducing the socioeconomic inequalities to primary health care by the aged in Ghana.

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