Access and Payment of Inpatient Healthcare among the Aged in Ghana: Evidence from the WHO Multi-Country Study

Abstract

Whiles the proportion of older people increases, family systems that provided care is waning; leaving a gap in healthcare. Studies on healthcare for the elderly have focused on general access and utilization, but not inpatient care and payment. From WHO's Study on Global AGEing and Adult Health, we examined access and payment of inpatient services among the elderly in Ghana using logistic regression models. We found that transportation constituted the highest proportion of healthcare cost. Higher proportion of the aged are in the lower wealth quintiles (WQ). Christians and Muslims are more likely to use insurance than other religions. The elderly in poorer WQ are more likely to use non-insurance than the least poor. Finally, people in marital union access non-public healthcare; the poorest are less likely than the least poor to access non-public healthcare. We recommend that policies should aim at making public healthcare centers accessible to the aged.

Keywords: healthcare, access, payment

Background

The proportion of older people is increasing globally, forming 8 percent of the global population (Population Reference Bureau (PRB), 2014). Currently, 36 million people aged 65 years and above account for 3.6% of Africa's population and is estimated to reach 8.3% by 2050. The 2010 Population and Housing Census found people aged 60 years and above to constitute 3.6% of the Ghanaian population (Ghana Statistical Service (GSS), 2012). In Ghana, like most other African countries, care for the aged has traditionally been the responsibility of the family, providing social support to its aged members (Apt & Gricco, 1994; Van der Geest, 2002). There were traditional norms that ensured that the aged are adequately cared for. However, the waning of the extended family system, precipitated by mass migration of the working youthful population and the individualistic lifestyle due to urbanization leaves this responsibility to the elderly themselves since there are no formal institutions or homes for the elderly in Ghana (Kwankye, 2013; Apt, 1993). However, there is limited documentation on how the elderly in Ghana access and pay for inpatient care.

In the midst of the dwindling family support for the aged, chronic non-communicable diseases (CNCDs) that are associated with old age are on the increase in addition to afflicting infectious diseases (Arora, 2015; Brookmeyer & Gray, 2000; Salonen et al., 2008). The global burden of disease 2004 update indicates that, the prevalence of disability increases with age and that more than 46 percent of the population aged 60 years and above have some type of impairment. The elderly in developing countries are the most affected (WHO, 2014; Mathers et al., 2008). Thus, the elderly population are regarded as largest consumers of health care services (Cuc et al., 2010). However, the few studies on the aged have focused on access and utilization of healthcare, but

have not examined the details of inpatient care (Fitzpatrick et al., 2004; Saeed et al., 2012). In this paper we delve into how the aged access and pay for inpatient care by examining the factors that determine their place of care and mode of payment. We also quantify the proportion of expenditure on individual medical costs.

The hospital welfare services report recounts increases in the abandonment of the elderly in the hospitals. Apt, (1993) adds that many elderly people remain in the hospitals following official discharge because their families are reluctant taking them home. Apart from the Day care center provided by HelpAge Ghana which can accommodate a minute proportion of the aged in Accra and a few other places, Ghana does not have old people's home like the developed countries do. As a result, accessible inpatient care is essential. With regards to healthcare utilization, Blanchet et al., (2012) reported that individuals enrolled in the national health insurance scheme (NHIS) are more likely to visit clinics, obtain prescriptions and seek formal health care when sick. This means that the NHIS increased the utilization of healthcare services. Exavery et al., (2011) found in a cross-sectional survey that healthcare utilization was significantly associated with self-rated poor health, presence of medical history of chronic diseases, presence of cognitive impairment, presence of difficulty picking up objects and occupation. Most of these are explanatory variables characteristics of the aged, and therefore gives the indication of the supposed extent of healthcare utilization among the aged. With access and payment being potential limiting factors to utilization, it is imperative to examine the determining factors.

Methods

Data source

We used data from Wave 1 of the WHO's multi-country Study on Global AGEing and Adult Health (SAGE) survey collected in Ghana between 2007 and 2008. The SAGE is a nationally representative study conducted to monitor the health and well-being of adult populations aged 50 years and above in Ghana, South Africa, Mexico, China, India and Russian. A stratified multistage cluster design was used to select respondents for the survey. The SAGE also included a smaller sample of younger adults aged 18 to 49 years for some comparism.

Sample

The sample of this analysis comprised people aged 65 years and above who had accessed inpatient care in the last 12 months preceding the survey.

Measures

The two dependent variables in this study are access and payment. We measured access to healthcare as public or non-public, and payment as insurance and non-insurance. The non-insurance category comprised money from family, self and other sources; they were combined due to the smaller proportions. We tested statistical significance at an alpha level of .05.

Results

After controlling for confounding variables like residence, education, self-reported health status, working status, sex and marital status, we found that urban dwellers are 2.337 times as likely as rural dwellers to pay for inpatient healthcare using non-insurance sources. Also Christians and Muslims are respectively .072 and .062 times as likely as people with other religions to use non-insurance sources. Finally, respondents in the poorer wealth quintile are 7.123 times as likely as those in the least poor to pay for inpatient care using non-insurance sources (Table 1).

Table 1: Results from the binary logistic regression model on statistically significant factors explaining payment of inpatient healthcare

Variables	B	S.E.	Sig.	Exp (B)
Residence				
Urban	0.849	0.548	0.021	2.337
Rural (RC)				
Religion			**0.106**	
Christian	-2.624	1.255	0.037	0.072
Muslim	-2.775	1.396	0.047	0.062
Other (RC)				
Wealth quintile			**0.159**	
Poorest	0.47	0.785	0.549	1.601
Poorer	1.963	0.905	0.03	7.123
Poor	0.176	0.683	0.797	1.192
Less poor	1.08	0.681	0.113	2.944
Least poor (RC)				
Constant	3.22	1.841	0.08	25.027
Model X2=78.191				
Nagelkerke R2=.480				

Source: SAGE wave 1 RC: Reference category

Similarly elderly respondents in marital union are 0.233 times as likely as those not in union to access healthcare from non-public centers. Also, respondents in the poorest WQ are 0.18 times as likely as those the least poor to access healthcare from non-public centers (Table 2).

Table 2: Results from the binary logistic regression model of statistically significant factors explaining inpatient healthcare access

Variables	B	S.E.	Sig.	Exp (B)
Sex				
Male	-1.154	0.664	0.082	0.315
Female (RC)				
Marital Status				

In union	-1.457	0.65	0.025	0.233
Not in union (RC)				
Wealth Quintile			**0.105**	
Poorest	-1.716	0.751	0.022	0.18
Poorer	-0.741	0.726	0.308	0.477
Poor	-0.112	0.594	0.85	0.894
Less poor	-0.891	0.597	0.136	0.41
Least poor (RC)				1.00
Constant	1.788	1.939	0.356	5.977
Model X^2= 21.102, NagelKerke R^2=.185				

Source: SAGE wave 1 RC: Reference category

Summary and Conclusions

Transportation formed the highest proportion of health seeking cost. This could have implications on access and utilization, as it could be because healthcare centers are far from the places of residence of the elderly. Also the elderly in the poorest wealth quintile have higher likelihood of using public health centers than those in the least poor; which could mean that the public health centers are affordable for those with little wealth. It was also interesting to find that the elderly in the poorer wealth quintile are over 7 times as likely as those in the least poor to pay for inpatient care using non-insurance sources. This means that they probably could not afford the insurance premium. Finally Christians and Muslims are more likely to use insurance for healthcare cost compared with the elderly in other religions. This could be because the church and mosque members provide some support in paying insurance premiums. This is consistent with the finding of Al-Kandari, Y. Y. (2011) that respondents with a high degree of religiosity had high social support from their friends and relatives.

References

Al-Kandari, Y. Y. (2011). Religiosity, social support, and health among the elderly in Kuwait. *Journal of Muslim Mental Health*, *6*(1).

Apt, N. A. (1993). Care of the elderly in Ghana: An emerging issue. *Journal of Cross-Cultural Gerontology*, *8*(4), 301-312.

Apt, N. A., & Gricco, M. (1994). Urbanization, caring for elderly people and the changing African family: the challenge to social policy. *International Social Security Review*, *47*(3-4), 111-122.

Arora, S. (2015). Aging and Non-communicable Disease. In *The Transitions of Aging* (pp. 1-23). Springer International Publishing.

Blanchet, N. J., Fink, G., & Osei-Akoto, I. (2012). The effect of Ghana's National Health Insurance Scheme on health care utilisation. *Ghana medical journal*, *46*(2), 76-84.

Brookmeyer, R., & Gray, S. (2000). Methods for projecting the incidence and prevalence of chronic diseases in ageing populations: application to Alzheimer's disease. *Statistics in medicine*, *19*(11-12), 1481-1493.

Cuc, O., Cuc, A., Venter, L., & Pircioaga, M. (2010). Medical and social care of old age persons. *Analele Universităţii din Oradea, Fascicula: Ecotoxicologie, Zootehnie şi Tehnologii de Industrie Alimentară*, 281-292.

Exavery, A., & Klipstein-Grobusch, D. C. (2011) Self-rated health and healthcare utilization among rural elderly Ghanaians in Kassena-Nankana district. Working paper. Presented in Session 59: Trends, patterns, and consequences of non-communicable diseases in Africa. 6th Union for African Population Studies Conference (UAPS). 2011.

Fitzpatrick, A. L., Powe, N. R., Cooper, L. S., Ives, D. G., & Robbins, J. A. (2004). Barriers to health care access among the elderly and who perceives them. *American Journal of Public Health*, *94*(10), 1788-1794.

Mathers, C., Fat, D. M., & Boerma, J. T. (2008). *The global burden of disease: 2004 update*. World Health Organization.

Population Reference Bureau Data sheet, 2014

Saeed, B. I., Oduro, S. D., Ebenezer, A. M. F. E., & Zhao, X. (2012). Determinants of healthcare utilization among the ageing population in Ghana.*Int. J. Bus. Soc. Sci*, *3*(24), 6.

Salonen, P. H., Arola, H., Nygård, C. H., & Huhtala, H. (2008). Long-term associations of stress and chronic diseases in ageing and retired employees.*Psychology, Health and Medicine*, *13*(1), 55-62.

Van der Geest, S. (2002). Respect and reciprocity: Care of elderly people in rural Ghana. *Journal of Cross-Cultural Gerontology*, *17*(1), 3-31.

World Health Organization. (2014). Ghana country assessment report on ageing and health.