Trends of Health Insurance Subscription in Cape Coast, Ghana from 2005 - 2014

Abstract

Background: Even though a major objective of the National Health Insurance Scheme at its inception in 2003, was a universal subscription in five years, the scheme covered only 35 percent of the Ghanaian population, after ten years of its introduction.

Objective: To examine trends of health insurance subscription in Cape Coast, from 2005 to 2014.

Methods: This descriptive study was conducted with data on subscription to the National Health Insurance Scheme from 2005 to 2014. Record review was adopted in extracting all records of insurance subscription from records kept by the scheme. SPSS and Excel were used to process and analyse data collected, which were presented with frequencies and percentages.

Results: Subscription to health insurance increased from six percent of the population of Cape Coast in 2005, to 41 percent in 2014. At the national level, subscription declined from 44 percent in 2005 to 38 percent in 2014. Female subscribers (57.8% in 2007 and 51.3% in 2014) were more than their male counterparts (42.2% in 2007 and 48.7% in 2014). While percentage subscription increased for persons under 18 years and the informal sector from 2005 to 2014, with 31.8 to 45.3 percent and 1.6 to 36.3 percent respectively, it declined for other special groups over the same period; Social Security and National Insurance Trust (SSNIT) pensioners, from 3.7 to 0.5 percent; SSNIT contributors, 20.5 to 7.6 percent; the aged, 7.3 to 5.1 percent; indigents, 4.7 to 0.8 percent; and pregnant women, 5.2 (in 2008), to 4.4 percent. Subscription by exempt groups increased from 47.5 to 56.1 percent.

Conclusion: The study underscores the need for the National Health Insurance Authority to increase subscription by improving advertisement of the scheme. This may be achieved by visiting churches, mosques, schools and market places to recruit unsubscribed residents onto the scheme.

Key words: Trends, health insurance, subscription, special group, exempt group.

Introduction

The world faces challenges in financing health care for its over 1.3 billion poor people. This is mainly due to the fact that many of its poor lack the required access to affordable and effective health care interventions (Lekashingo, 2012). While developed countries such as Canada and Australia have been successful in adequately financing the health needs of their populace by combining both public and private insurance schemes (Dalinjong & Laar, 2013), the cost of financing health care in many developing countries has, however, remained a major social challenge (Carman & Eibner, 2014). Several developing nations, therefore, continuously explore varied avenues of funding their healthcare systems. African countries have implemented various health care policies in efforts to improve upon the health status of their indigenes, with some of the countries including Tanzania, Rwanda, Nigeria and Kenya experimenting with health insurance schemes that combine both private and public financing arrangements (Mensah, 2011).

Health care financing in Ghana started after independence, with a tax-funded system called free health care, which provided healthcare services free of charge to all persons resident in Ghana. This policy progressively became financially unsustainable, with the Ghanaian economic stagnating in the 1970s (Blanchet, Fink & Osei-Akoto, 2012). User fees were, therefore, introduced for hospital services, to offset the financial burden of healthcare on the state, giving rise to cost sharing (Abubakari, 2012). The cost sharing policy also

became financially unsustainable, thereby leading to introduction of full cost recovery (cash and carry), where patients bore the full cost of healthcare at the point of service delivery. The National Health Insurance Scheme (NHIS) subsequently replaced the cash and carry system (Blanchet et al., 2012).

The scheme became operational in 2003 through the National Health Insurance Law (Act 650 of Parliament). Mandatory health insurance, however, had a legal framework in 2004 through the National Health Insurance Regulations (L.I. 1809) (Government of Ghana, 2004; 2003). The NHIS covers about 95 percent of the disease burden of Ghana (Blanchet et al., 2012). The scheme was introduced to ameliorate the adverse impacts of cash and carry especially on the poor (Blanchet et al., 2012). In practice, however, most subscribers to the scheme are people in the upper wealth quintile, as the poor in society are rather less likely to subscribe to the scheme (Kumi-kyereme & Amo-Adjei, 2013).

Subscription to the NHIS has was studied by a number of researchers (Asuming, 2013; Mahama, 2013; Kumi-Kyereme & Amo-Adjei, 2013; Universal Access to Health Care Campaign Coalition, 2013; Abubakari, 2012; Mensah, 2012). Attention was, however, not paid to the trends of NHIS subscription, both at a national level and in the Central Region. Consequently, this study sought to examine the trends of health insurance subscription in the Cape Coast Metropolis. The study was conducted in Cape Coast because, first of all, available data from the National Health Insurance Authority indicated that the Central Region, of which Cape Coast is the capital, recorded the least regional percentage subscription to the scheme for 2010, 2011 and 2012 in Ghana.

Data and Methods

The study was a descriptive study, which collected data on trends of health insurance subscription in the Cape Coast Metropolis from 2005 to 2014. Using record review, all

records of subscription to the scheme for the nine-year period under review were selected from among records kept by the National Health Insurance Authority (NHIA) in the Cape Coast Metropolis. A checklist was used to collect data from the NHIA offices in the metropolis. The checklist was divided into three sections, based on general trends of subscription from 2005 to 2014, trends based on sex, and trends based on special groups. The research instruments were pretested in the Komenda-Edina-Eguafo-Abrem (KEEA) Municipality. The purpose of pre-testing the research instruments was to test their validity. As such, ambiguous and irrelevant questions were removed and the instruments properly restructured.

Approval was obtained from the national health insurance authority before the study was conducted in their facility. Steps were taken to ensure that data collected from the NHIA were kept confidential. To ensure that data obtained were protected from unauthorised access and hence ensuring confidentiality, hard copies were hidden from sight, while soft copies were locked in a computer application called "drop box".

The percentage coverage of the Ghanaian population and that of the Cape Coast Metropolis was estimated to aid in the data analysis. From 2005 to 2009 and 2011 to 2014, data were not readily available for both the Cape Coast Metropolis and Ghana. Similarly, NHIS data were not made generally accessible at the national level for 2013 and 2014. The Formulae for exponentially estimating population was thus used to estimate these populations. Based on these estimations, the percentage coverage of NHIS at both the national level and in the Cape Coast Metropolis, were calculated for further analysis. The formulae is given as; $P(t) = P_0e^{rt}$. Where; $P(t)$ = the current population, P_0 = Initial population, e = natural log, r = rate of growth, and t =time period (years). Data collected were processed and analysed using Statistical Package for Social Sciences (SPSS) version 21 and Excel 2013 version.

Results

Although the scheme started in 2003, actual subscription started in 2005. For this reason, data on subscription to the NHIS in the Cape Coast Metropolis was collated from 2005 (Table 1). Percentage subscription to the scheme in Cape Coast, increased from six percent in 2005, to 41 percent in 2014. There were, however, variations in the pattern of trends in the various years under review. In 2006 for instance, subscription reduced to 0.05 percent. In 2007 however, it 76 percent. After 2007, total subscription reduced progressively for two years; 44 percent in 2008 and 20 percent in 2009. From 2010, subscription to the scheme increased consistently until it peaked in 2013, where it recorded 46 percent. The year 2014, however, saw a reduction in subscription by recording 41 percent (Table 1). Similar to findings from the Cape Coast Metropolis, Table 1 shows that nationwide subscription to the scheme declined from 44 percent in 2005, to 17.68 percent in 2006. NHIS subscription at the national level, however increased from 36.56 percent in 2007 to 61.96 in 2009. Even though subscription declined in 2010, it increased progressively over the 2010 figure until 2014, when it recorded, 38 percent (Table 1).

According to the Ghana Statistical Service (2012), while females constituted 51.2 percent of the Ghanaian population males constituted 48.8 percent in 2010 (Ghana Statistical Service, 2012). Similarly, in the Cape Coast Metropolis, while males constituted 48.7 percent, while females constituted 51.3 percent in the 2010 population and housing census. (Ghana Statistical Service [GSS], 2013) Based on this premise, the present study was interested in ascertaining, if the same applies to NHIS subscription in the Cape Coast Metropolis. From Table 1, female subscribers were generally more than males in all the years reviewed. In 2007, for instance, while males constituted 42.2 percent, females constituted

52.8 percent; a difference of 15.6 percent. In the last year under review (2014), females recorded 51.3 percent of NHIS subscription, while males constituted 48.7 percent (Table 1).

Table 1: Trends of Health Insurance Subscription

Years	National			Cape Coast				
	Ghana's Population	NHIS subscription	% coverage	Population of Cape Coast	NHIS subscription	% coverage	Male (%)	Female (%)
2005	21430193	1,348,160	44	93247	41,000	6	-	-
2006	21972700	2,521,372	17.68	95609	4,943	0.05	-	-
2007	22528943	6,643,371	36.56	98029	74,897	76	42.2	57.8
2008	23099265	9,914,256	54.66	100510	44,327	44	46.5	53.5
2009	23684026	10,638,119	61.96	103055	20,717	20	37.2	62.8
2010	24658823	8,163,714	34	169894	51,868	31	42.9	57.1
2011	25283064	8,227,823	33	174194	58,632	34	44.9	55.1
2012	25923107	8,885,757	35	178604	70,353	39	37.0	63.0
2013	26579354	9,596,991	36	183126	83,380	46	46.9	53.1
2014	27252214	10,365,154	38	187762	76,247	41	48.7	51.3

Source: NHIA, 2012; 2011; 2010; 2009. - No data was provided by sex, for Ghana, and in 2005 and 2006, for Cape Coast.

Trends of health insurance subscription were examined by Special Groups (Table 2). Special groups according to NHIS classification, comprise, SSNIT pensioners, SSNIT contributors, persons under eighteen years of age, pregnant women, the aged who are 70 years and above, indigents, as well as those engaged at the informal sector. Percentage subscription generally increased for persons under 18 years and the informal sector from 2005 to 2014, with 31.8 to 45.3 percent and 1.6 to 36.3 percent respectively. It however, declined for other special groups over the same period; SSNIT pensioners (from 3.7% to 0.5%), SSNIT contributors (from 20.5% to 7.6%), the aged (from 7.3% to 5.1%), indigents, (from 4.7% to 0.8%) and pregnant women (from 5.2% in 2007 to 4.4%).

There were, however, variations in the yearly trends of the various special groups. For instance, about four percent of subscribers in 2005, were SSNIT pensioners, which remained virtually the same in the following year (Table 2). In 2007, the percentage of SSNIT pensioners increased marginally to four percent before reducing to 0.9 and 0.1 percent, in 2008 and 2009 respectively. Percentage subscription for SSNIT pensioners again remained stable for 2010 and 2011 before declining again in 2012 (0.5) and 2013 (0.4). Subscription for SSNIT contributors declined to 18.9 percent in 2006 before rising again to 21.5 percent in 2007. In the last two years under review, subscription to the scheme among the group, reduced to 10.9 percent and 7.6 percent respectively (Table 2). The share of persons under eighteen years in 2006 was 35 percent, which increased to 36.1 percent in 2010 and to 45.3 in 2014. In 2008, 5.2 percent of subscribers to the NHIS were recorded to be pregnant women. This increased to 19.6 percent the following year.

Subscription of pregnant women on the scheme remained relatively stable for the rest of the years, even though reductions were recorded after the highest percentage subscription of 19.6 percent, was recorded in 2009. Even though subscription of the aged onto the scheme generally declined from 2005 to 2014, the special group recorded fairly stable figures ranging

from 7.3 in 2005, to 6.4 percent in 2009, and to 5.1 percent in 2014. Percentage subscription for the indigent declined persistently from 2006 to 2008 with 3.4 percent, 3.0 percent and 2.4 percent respectively. This got worse, as only 0.02 percent of NHIS subscription was recorded by the group from 2009 to 2011. The group's subscription however increased with 2.8 percent in 2012 and 10.6 percent in 2013. The last year under review, however recorded only 0.8 percent.

An exempt group is a group that is excluded from paying the yearly premium or any other contribution before enjoying benefits from the scheme. SSNIT pensioners, persons who are seventy years and above, children under the age of eighteen years and pregnant women, constitute exemptions on the NHIS (Universal Access to Health Care Campaign Coalition, 2013). Trends of health insurance subscription were analysed for exempt groups on the NHIS. The share of exempt groups in the transcription to health insurance, generally increased from 47.5 percent in 2005 to 56.1 percent in 2014. Some of the years under review however deviated from this general trend of increase. While some of the years such as 2013, experienced very high subscription rates, others such as 2006, recorded extremely low figures (Table 2). The fact that exempt groups cover 56.1 percent of subscription to the scheme, means that only 44 percent of subscribers either pay yearly premiums, or get deductions made (SSNIT contributors) from their remuneration before enjoying benefits from the scheme.

Table 2: Trends of Health Insurance Subscription by Special Groups

Special Group	Years (%)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
SSNIT Pensioners	3.7	3.9	4.0	0.9	0.1	1.1	1.0	0.5	0.4	0.5
SSNIT contributors	20.5	18.9	21.5	14.4	6.2	10.1	14.6	16.8	10.9	7.6
Persons under 18 years	31.8	35.0	32.2	35.6	26.5	36.1	42.0	41.1	40.5	45.3
Pregnant women	-	-	-	5.2	19.6	8.7	7.0	6.0	4.8	4.4
Aged 70 years and above	7.3	5.9	5.7	3.5	6.4	5.2	7.5	5.0	4.7	5.1
Indigents	4.7	3.4	3.0	2.4	0.005	0.008	0.007	2.8	10.6	0.8
Informal sector	1.6	3.7	20.3	28.1	41.2	38.8	27.9	27.8	28.1	36.3
Non-special groups	30.4	29.2	13.3	13.9	-	-		-	-	-
Total subscription	100	100	100	100	100	100	100	100	100	100

Source: National Health Insurance Authority, Cape Coast Metropolis, 2015; Field work, 2015,

Note: No data was provided for pregnant women from 2005 to 2007.

Discussion

Health insurance subscription declined from 2005 to 2006. This reduction may mean that most of the people who subscribed to the scheme in the previous year, got disoriented or dissatisfied with services rendered to them as NHIS subscribers, or that the processes involved in subscribing to the scheme and utilising health care services with their membership, was too cumbersome for them due to long queues and prolonged waiting time, both at the points of subscription and utilisation of health care services. This assertion confirms argument by Mulupi et al. (2013) that the NHIS is associated with delays in accessing healthcare due to long queues and that subscription to health insurance may result in confrontations with health care providers. As such, the people decided not to subscribe to the scheme the following year.

Subscription to the scheme declined for 2008 and 2009. This decline may be due to the fact that people could not afford the cost of subscribing to the scheme. This is consistent with argument by Boateng and Awunyor-Vitor (2013) that some people usually consider the cost/premium for subscribing the NHIS as too costly/expensive and this serves as a barrier to their subscription to the scheme. The NHIA (2012) in 2010, introduced a new methodology for calculating the subscriber base, which led to reductions in the number of subscribers on the scheme, resulting in a -23 percent change in subscriber base (NHIA, 2012). The decline in subscription however, did not have any influence on the figures for the Cape Coast Metropolis, which rather experienced an upward trend of 150.4 percent change over the 2009 figure.

In September 2010, the NHIA conducted a special registration exercise with the aim of increasing the NHIS subscriber base. This initiative targeted mainly the vulnerable and poor in all communities and at large congregation centres including markets, mosques and churches. The special registration exercise was carried out all over the country, enabling

people who were already subscribed to the NHIS to renew their subscription and new members to register. This, therefore, might have accounted for the progressive increase in the active subscriber base of the NHIS from 2010 to 2013 in the Cape Coast Metropolis.

Female subscribers were more than their male counterparts in all nine years reviewed. Aside the trends on sex confirming the existence of more females than males in Ghana and in the Cape Coast Metropolis (Ghana Statistical service, 2012), the data may also mean that females utilise health care services more than males and as such, decided to subscribe to the scheme to ease economic burden on them in trying to access health care. This confirms argument by Australian Bureau of Statistics (2011) that females are more likely than males, to use health care services. Subscription for SSNIT pensioners declined in 2008 and 2009. This decline may be attributed to barriers confronting subscription to the scheme, which include long queues and unsatisfactory NHIS services scheme (Mulupi et al., 2013; Jehu-Appiah et al., 2012).

Subscription to the scheme, by pregnant women, declined persistently from 2010 to 2014. This decline may be due to the fact that the women encountered challenges – such as long queues and waiting times – in subscribing to the scheme and could therefore not subscribe (Nguyen et al., 2011). Subscription to the scheme by indigents, declined continuously from 2006 to 2011. These trend may mean that after being informed that subscription was free for them in 2005, which influenced them to subscribe, many of the indigents got dissatisfied with NHIS related services and therefore decided not to renew their membership. This may be coupled with the fact that after 2005, strategies including public education (NHIA, 2015), meant to make the people aware that they could subscribe to the NHIS free of any charges, either declined, or were non-existent. According to the NHIA (2005), “the inadequate coverage could be attributed to the difficulty in identifying them (indigents)” (p. 32). Majority of NHIS subscribers constituted exemptions on the scheme.

Thus, they were exempted from paying any monies at all; premium or monthly deductions from salaries. The implication therefore, is that only a few people who subscribe to the scheme, actually contribute towards its financing. The NHIA (2012) summed this up in noting that "financial sustainability of the scheme remains a big challenge to management given the increasing demand for health insurance (for SSNIT pensioners, indigents, pregnant women and persons under 18 years) and its consequential increase in health care service utilisation" (p. 39).

Conclusion

The study underscores the need for more informal sector workers to be encouraged to subscribe to the scheme, through special registration exercises, organised by the NHIA, to offset the high percentage of exempt groups on the scheme, so as to improve the economic viability of the insurance. Coverage of the NHIS, both at the national level, and in the Cape Coast Metropolis, was low. Churches, Mosques, schools, market places and other public places, should also be used as points of interest, for the NHIA to advertise the scheme, so as to cover more Ghanaians.

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