

***Time as a determinant for National Health Insurance Scheme
Subscriber Health Care Utilization.***

Mavis Aggrey, Frank Frimpong Opuni, Bernard Cudjoe Nkum

Introduction:

The Time patients spent in the utilization of health care services could be a fundamental factor that determines clients' subscription to the National Health Insurance Scheme in Ghana. Thus, Health utilization would partly depend on clients' perception about the number of minutes spent in accessing health care other than non-card bearers

Methods:

The study adopted a non-experimental design in eliciting information from involving health clients (18 to 70 years) who accessed health services in the Bantama sub-metro in the Kumasi metropolis. The sample size included 400 clients from ten health facilities. The researcher used interviews and semi-structured questionnaires to collect data and used SPSS version 20 for processing whiles descriptive and inferential statistics was supported with STATA 11.

Results:

Majority of subscribers assessed healthcare with their National Health Insurance (NHI) cards. Respondents 216 (54%) indicated there were delays in seeing a doctor, getting laboratories done, and accessing health care as a whole. Seventy-four percent (74%) of the entire population attributed both NHIS and cash and carry systems as the payment methods associated with delays in health facilities.

Conclusion:

Clients' perceptions about how long they spend in accessing health care influences their utilization of healthcare under the National Health Insurance Scheme. Increased enrolment in the scheme should be supported with provision of efficient services that prevent delays in health care in order to enhance clients' satisfaction.

Key words:

Ghana, Health Insurance, Perception, Satisfaction, Health, Utilization, Time, Care, Client

Citation:

Mavis, Aggrey; Frimpong, Frank Opuni; Nkum, Bernard Codjoe; Time as a determinant for National Health Insurance Scheme subscriber Health care utilization.; (July, 2014); Journal of Social Sciences (COES&RJ-JSS), Vol.3, No.3, pp: 399-407.

Introduction

Health is very vital in human existence. Good health is undoubtedly a vehicle of development¹. Several research works attest to the direct link that exists between good health and overall development. This has raised the concern for countries to consider the health needs of their citizenry as a major priority.

Ghana is not an exception of such countries which have considered health as an integral component in ensuring national progress. The National Health Insurance Scheme which is a form of social protection was put in place in 2003 with the central focus of helping people especially the poor to leap-out of poor health due to the expensiveness of access to health in the country². It was launched to replace the former “cash and carry system” which forced the people to pay money in cash when they needed to see a doctor or to go to a hospital. The Scheme started with a large influx of people registering for it with the aim of accessing health at relatively very low cost. Contrary to the start of the scheme where people registered in large numbers, majority of people are constantly falling-out and those who were prepared to register have now refused to join the scheme. Several systemic barriers have been cited to impinge upon the smooth operation of the scheme.^{3, 4,5,6,7,8,16}. One key factor that seems to play an influential role with regards to the subscription of the scheme and subsequent health care utilization but received little attention is Time.

Review of Related Literature

Perception of waiting time affects service utilization be it positively or negatively⁹. Alatinga and Williams¹⁰ in their study reported that persons uninsured receive medical attention or treatment promptly at the health facilities as compared to the insured. Bassili et al¹¹ in a study in Egypt identified that insured clients had a significantly higher frequency of physical examination, laboratory investigations and diabetes education compared to their uninsured¹². The perception related to the disparity that existed between the insured and uninsured in NHIS was not limited only to quality of medication but also time spent at the facility^{10,11,12}.

Alatinga and William¹⁰ reports that Uninsured clients wait for less than 30 minutes to be attended to by a health provider whereas few of the insured wait for the same time to see a health provider the study revealed. These findings indicated that, the uninsured are given quick services than the insured. However, D. Adei, V.; Osei K. and S.K. Diko presents no disparity in treatment for insured and uninsured as about 82.2% of household heads confirmed their satisfaction with the behaviour of health personnel with only 11.7% expressing disapproval in terms attending to their needs¹³.

The WHO claims and requires a responsive health system to treat all categories of patients equally without discrimination (WHO 2000). Turkson (2009)¹⁴ concludes that majority of patients (83.4%) found the waiting time at health facilities in Komenda-Edina-Eguafo-Abrem (KEEA) District in the Central Region of Ghana to be reasonable. Bruce E, Narh-Bana S, Agyepong posits in their findings in 2008 reports a contrasting finding on the study of the Dangme West indicating shorter waiting times for uninsured compared to their counterparts who were carrying health insurance cards¹⁵. In Burkina Faso¹⁶ insured respondents complained of long waiting times when they access health care services. The reasons for the delay have found expressions in the processes that the insured goes through in terms of documentation. Given their (insured) high attendance

rates, waiting times gets longer. This study examines as to whether time is really a determinant for National Health Insurance Subscriber Health Care Utilization in Ghana.

Methods

Data and Sample

The study adopted the cross sectional design as well as the mixed sampling technique. The study was conducted amongst health clients (400) who accessed health care services in ten health facilities in the Bantama sub-metro in the Kumasi metropolis. A mixed sampling technique was used. The main tools or instruments used for data collection were questionnaire and interview guide.

Sample Characteristics

The sample considered in the study is made up of clients who are 18-70 years. Those below 18 and above 70 were excluded because they fall within the exemption category of the NHIS. The sample size considered was influenced by the average monthly number (10%) of patients seen at each selected facilities. At the facility, a systematic random sampling was used in selecting the clients from the list of clients. The Confidence Interval was taken as ± 1.96 at 95% Confidence Level.

Measures

The dependent variable in the study is "Health care utilization" and the independent variable is "Time".

Statistical Analysis

The study results were analyzed in both qualitative and quantitative terms. Data was collected from both primary and secondary sources. Tables, graphs and charts were used to ascribe quantitative value to qualitative data to make them amenable to statistical analysis. The responses and findings were converted to percentage scores to serve as units of measurement of results and findings of the study.

The greater the percentage of responses and findings the more it was accepted as the opinion pool of the respondents (clients).

Results:

The results of the study are explained below with their respective tables and figures indicated at the section dubbed "list of tables and figures".

Time spent in accessing healthcare

Table 1.1 presents the summary of delays in accessing health utilization under NHIS. About 4.1% of the respondents said they rarely visit health facility after the introduction of the scheme while about 35% of them indicated that, they visited health facilities whenever they are sick. Majority, 52.1% of the respondents reported that they spent from between 30 minutes and an hour to get their cards after entering the health facility whereas about 33.3% also indicated that they spend less than 30 minutes to be able to get their OPD cards. Again, about 29.4% of the respondents indicated that they spend more than two hours before seeing a physician after acquiring their cards while 38.2% of the respondents indicated they spend from between 30 minutes to an hour.

Majority 62.1% of the respondents indicated that, there are delays to see a physician once you hold the NHIS card. Also, 31.8% of the respondents indicated that, they spend from between an hour to two before they are handed their prescribed drugs from the dispensary while almost 30% of the respondents indicated they spend more than 2 hours to get their drugs. When quizzed about the time spent in a hospital when one has an insurance card, about 40% of the respondents indicated that they spend more than 3 hours to access healthcare once they have their cards.

Sections in health facility where delays occurred

As shown in Figure 1.1, 48% of the respondents attributed long hours spent in the hospital to the time they spend at the laboratory for their laboratory results. Almost 28% of the respondents also attributed the claim to time wastage at the consulting room during patient examination. Only 9% of the respondents cited the record departments for some of the causes of delay at the health facility.

Payment systems associated with delays at the health facility

Figure 1.2 shows the methods of payment systems associated with delays in health facilities. About 5% of the respondents attributed it to NHIS whereas 21% of the respondents also attributed it to cash and carry system. However, 74% of the respondents attributed both NHIS and cash and carry systems as the payment methods associated with delays in health facilities.

Time spent in receiving care under NHIS

Figure 1.3 gives a summary of respondents overall rating of time spent at the health facility. As shown, 40.0% of the respondents opined that they spent too long a time to access health care with their cards. Again, almost 35.1% of the respondents also indicated that they spent a long time to access health care. Only 4.6% of the respondents indicated that they spend short time in accessing healthcare with their cards.

The in-depth-interview also revealed that the delay in acquiring a card at the hospital could be due to insufficient workers, increased workload, conversation among health staffs and long queues. Delay in seeing a doctor could also be due to insufficient doctors, increased workload of doctors and long queues. Majority of the participants in the in-depth interview disclosed that they do not get their laboratory results easily done. One participant disclosed;

‘There is always a long queue here and you have to wait long before you are attended to’. There sometimes some people refuse to do the lab here. I think something must be done about it because it is frustrating’.

However, most of the participants opined that the non-insured spend much time at the facility because they have to go through a lot of procedures. Almost all the participants express the likeness for the NHIS with regards to time spent at the health facility. A participant explained;

‘I prefer the NHIS to the cash and carry because with the NHIS you only need your card and you will be attended to at the health facility and it doesn’t involve many procedures so I spend less time’.

Discussions

Decisions of clients to enroll and remain in the scheme are fundamental for the continued sustenance of the scheme. However, success or failure in addressing perceptions has a cumulative effect (positive or negative) on enrolment (Lee et al. 2010)⁹ and therefore the need to have a critical look at how clients perceive health provision as well as service provision of scheme. Healthcare provision in limited poor settings is mostly marked by delays and long waiting times due to inadequate staffing and facilities. This study reported various delays in health provision to clients in the Kumasi metropolis.

Majority of respondents in this study reported that there are delays to see a physician once you hold the NHIS card. This indicates that clients perceive that their long waiting times at the facility are because they hold NHIS cards. About 15% of the clients interviewed spent more than an hour in getting their card and about 54% spend over an hour before seeing a doctor or a medical assistant (Table 1.1). The delays were also reported of laboratories and dispensaries with more than 50% of clients' spending more than an hour in each case and about 30% spending more than two hours in the case of the dispensary. Majority of the clients found the time spent at the facility to be too long. Contrary to these findings, Turkson¹⁴ concludes that majority of patients (83.4%) found the waiting time at health facilities in Komenda-Edina-Eguafo-Abrem (KEEA) District reasonable.

In general, about 40% of the respondents indicated that they spend more than 3 hours to access healthcare once they have the card. More than 70% of the clients also stated that there was no difference between the NHIS and the cash and carry system in terms of waiting time. In the bivariate analysis, client's perception of the speed of service was not significantly different among those who access healthcare with and without the NHIS card. However this study results was inconsistent with the study by Alatinga and Williams¹⁰, which reported that persons uninsured receive medical attention or treatment promptly at the health facilities as compared to the insured. Respondents from that study disclosed that the uninsured clients wait for less than 30 minutes to be attended to by a health provider whereas few of the insured wait for the same time to see a health provider. Again, Bruce E, Narh-Bana S, Agyepong¹⁵ reported in the study of the Dangme West that waiting times were shorter for uninsured compared to their counterparts who were carrying health insurance cards and was further reiterated in a study in Burkina Faso where insured respondents complained of long waiting times when they access health care services. This study provides a contrast with the insured clients having less time to wait before being attended to compared to uninsured clients who had to go through several hospital processes. This contrast is due to the improvements in the health insurance customer service in addition to the high acceptance health care providers are giving to NHIS card holders.

Conclusion

The study has brought to the fore and adds to the surging studies about NHIS client satisfaction with health care accessed. The study presents that there are still delays in accessing health care which was attributed to multiple service factors. There is therefore the need for service providers to improve upon the efficiency of health care delivery under the scheme so as to improve the health status of subscribers in the country.

List of Tables and Figures

This section presents the tables and figures used in the study

List of Tables

Table 1.1: Time spent in accessing health care under NHIS

Variables	Frequency	Percent
How often do you visit health facility after the introduction of the NHIS? (n=392)	0	
?Whenever I am sick	137	35.0
?Weekly	22	5.6
?Once in a month	64	16.3
?Twice in a month	97	24.7
?Once in every three months	31	7.9
?Once a year	25	6.4
?Rarely	16	4.1
Time spent to get card after entering the health facility (n=397)	132	33.3
?<30 minutes	207	52.1
?30mins to 1hr	58	14.6
?>1hr		
Time spent to see Dr, /MA after acquiring your card (n=395)	30	7.6
?<30 minutes	151	38.2
?30mins to 1hr	98	24.8
?1hr – 2hrs	116	29.4
?>2hrs		
Are there any delays before you see the Doctor (n=396)	246	62.1
?Yes	150	37.9
?No		
Time spent to get your prescribed drug from the dispensary (n=258)	47	18.2
?<30 minutes	52	20.2
?30mins to 1hr	82	31.8
?1hr – 2hrs	77	29.8
?>2hrs		
Time spent get your laboratories done (n=251)		
?<30 minutes	29	11.6
?30mins to 1hr	70	27.9
?1hr – 2hrs	111	44.2
?>2hrs	41	16.3
Averagely how long do you spend on a particular day at the hospital under NHIA? (n=393)		
?< 1hr	34	8.7
?1hr – 2hrs	87	22.1
?2hrs – 3 hrs	114	29.0
?>3hrs	158	40.2
How long do you spend in accessing health care from		

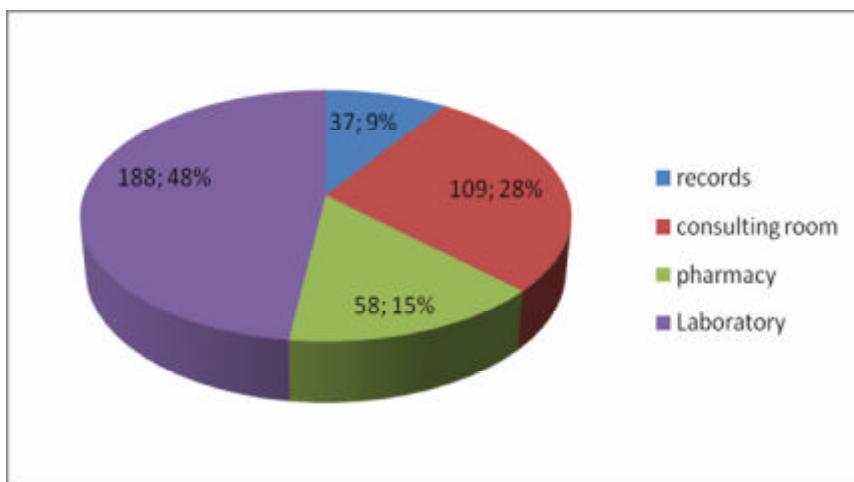
Time as a determinant for National Health Insurance Scheme

the time you enter till the time you leave the health facility (n=394)		
? < 1hr	26	6.6
? 1hr – 2hrs	73	18.5
? 2hrs – 3 hrs	75	19.0
? 3hrs – 4hrs	49	12.4
? >4hrs	171	43.4

Source: Field data, 2013

List of Figures

Figure 1.1: Sections in health facility where delays occurred



Source: Field data, 2013

Figure 1.2: Payment systems associated with delays at the health facility

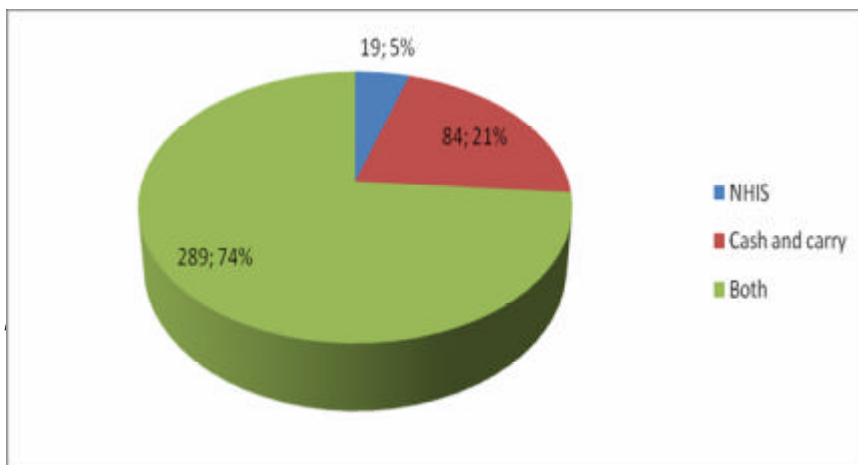
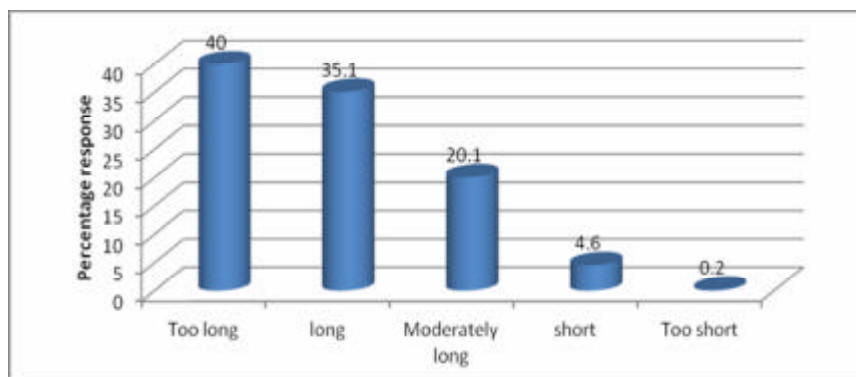


Figure 1.3: Time spent in receiving care under NHIS



References

1. WHO report 2000. Health needs and Development; Evidence, lessons and Recommendations for action as accessed @ url on the 7th February, 2014.
2. National Health Insurance Scheme, www.nhis.gov.gh
3. Buor, D. 2004. Gender And The Utilisation Of Health Services In The Ashanti Region, Ghana. *Health Policy*, 69, 375-388.
4. De Allegri, M., Kouyaté, B., Becher, H., Gbangou, A., Pokhrel, S., Sanon, M. & Sauerborn, R. 2006b. Understanding Enrolment In Community Health Insurance In Sub-Saharan Africa: A Population-Based Case-Control Study In Rural Burkina Faso. *Bulletin Of The World Health Organization*, 84, 852-858.
5. Sinha, T., Ranson, M. K., Chatterjee, M., Acharya, A. & Mills, A. J. 2006. Barriers To Accessing Benefits In A Community-Based Insurance Scheme: Lessons Learnt From Sewa Insurance, Gujarat. *Health Policy And Planning*, 21, 132-142.
6. Kamuzora, P. & Gilson, L. 2007. Factors Influencing Implementation Of The Community Health Fund In Tanzania. *Health Policy And Planning*, 22, 95-102.
7. Ndiaye, P., Soors, W. & Criel, B. 2007. Editorial: A View From Beneath: Community Health Insurance In Africa. *Tropical Medicine & International Health*, 12, 157-161
8. Asante, F., & Aikins, M. 2008. Does the NHIS cover the poor? . Accra: Ghana: Danida / Institute of Statistical Social and Economic Research (ISSER).
9. Lee, C. H. ,Cheng, C. L., Kao, Y. H. Y., Lin, S. J., & Lai, M. L. 2011. Validation Of The National Health Insurance Research Database With Ischemic Stroke Cases In Taiwan. *Pharmacoepidemiology And Drug Safety*, 20, 236-242.
10. Alatinga, K. A. & Williams, J. J. 2012. Does Membership In Mutual Health Insurance Guarantee Quality Health Care? Some Evidence From Ghana. *European Journal Of Business And Social Sciences*, 1, 103-118
11. Bassili, A., Dye, C., Bierrenbach, A., Broekmans, J., Chadha, V., Glaziou, P., Gopi, P., Hosseini, M., Kim, S. & Manissero, D. 2008. Measuring Tuberculosis Burden, Trends, And The Impact Of Control Programmes. *The Lancet Infectious Diseases*, 8, 233-243.
12. Devadasan, N., Criel, B., Van Damme, W., Lefevre, P., Manoharan, S. & Van Der Stuyft, P.

2011. Community Health Insurance Schemes & Patient Satisfaction-Evidence From India.
The Indian Journal Of Medical Research, 133, 40.

13. D. Adei, V. Osei Kwadwo and S.K. Diko 2012. An Assessment of the Kwabre District Mutual Health Insurance Scheme in Ghana. *Current Research Journal of Social Sciences* 4(5): 372-382

14. Turkson, P.K. (2009). *Perceived Quality of Healthcare Delivery in a Rural District of Ghana*. *Ghana Medical Journal*, 43 (2):65-70

15. Bruce, E., Narh-Bana, S. & Agyepong, I. 2008. Community Satisfaction, Equity In Coverage And Implications For Sustainability Of The Dangme West Health Insurance Scheme.
Ghana Dutch Collaboration for Health Research And Development.

16. De Allegri, M., Sanon, M. & Sauerborn, R. 2006a. "To Enrol Or Not To Enrol?": A Qualitative Investigation Of Demand For Health Insurance In Rural West Africa. *Social Science & Medicine*, 62, 1520-1527

About the Authors

Mavis Aggrey

School of Medical Sciences, Department of Community Health,
Kwame Nkrumah University of Science and Technology Kumasi, Ghana.
Tel: +233 (0)269445677
mavisaggrey@gmail.com

Frank Frimpong Opuni

Marketing Department, Accra Polytechnic School of Business and Management
Accra Ghana
Tel: +233271061481
opunifrank@yahoo.co.uk

Bernard Cudjoe Nkum

Department of Medicine, Komfo Anokye Teaching Hospital
Kumasi, Ghana
Tel: +233209017647
bcnkum@yahoo.co.uk

XX