

FACTORS INFLUENCING UPTAKE AND BARRIERS TO LAGOS STATE HEALTH SCHEME SUBSCRIPTION AMONG RESIDENTS OF AGEGE COMMUNITY: A CROSS-SECTIONAL STUDY.

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Abstract

Background: The Lagos State Health Scheme (LSHS) was introduced to ease the burden of out-of-pocket payment, and to ensure risks and resources are spread over the population, with the healthy and rich helping to pay for the sick and poor, resulting in significant risk protection from huge health expenditure. This study is aimed at determining the factors influencing uptake and barriers to Lagos State Health Scheme subscription among residents of Agege community.

Methods: This was a descriptive cross-sectional study conducted from January to March 2022, among 392 residents of Agege community of Lagos state who are 18yrs and above. Participants were selected using a multi-stage sampling and data was collected using a semi-structured interviewer-administered questionnaire. Data analysis was done using SPSS version 25, with statistical significance level set at $p=0.05$. Ethical approval was obtained from the Institution before the commencement of the study and participants consented to partake in the study.

Results: There were slightly higher numbers of female respondents (51%), with a large proportion of the respondents between the ages of 31 - 50 years (62.2%). Most of the respondents (87%) had a positive perception towards LSHS and the majority of them (84%) were willing to subscribe. However, only 23% of the respondents were found to have enrolled in the scheme. The Chi-square (X^2) test was used and a significant association was found between the respondents' willingness to subscribe and socio-demographic profile like gender, level of education, occupation and income.

Conclusion: This study suggests that factors such as proper awareness, provision of universal basic education, job creation and decent income should be considered veritable tools towards sustaining and increasing the positive attitude of respondents about the Lagos State health scheme. This will in turn increase the subscription to the scheme, which is a necessary requirement for achieving the goal of Universal Health Coverage.

Keywords: Willingness, Barriers, Uptake, Subscription, Health Scheme.

INTRODUCTION

A health insurance scheme refers to a program that covers or shares the expenses associated with healthcare of individuals or refers to a system for the financing of medical expenses by means of contributions or taxes paid into a common fund to pay for all or part of health services specified in an insurance policy or the law.¹

Despite the launch of National Health Insurance Scheme (NHIS) in 2005, it covers less than 10% of the Nigerian population, leaving the most vulnerable populations at the mercy of health care services that are not affordable.² This means the most vulnerable populations in Nigeria are not provided with social and financial risk protection. Poor people constitute about 70% of the Nigerian

population, they lack access to basic health services, which social and financial risk protection should provide, because they cannot afford it.³ As evidenced by the high rate of out-of pocket payments for health care services, poor people financially contribute more to health care than official care and funds programs in Nigeria.⁴ Out of pocket payments for health care services limit the poor from accessing and utilizing basic health care services, hence, the low coverage of basic health services for the poor.⁵

The Lagos State Health Scheme (LSHS) is new and was launched in December 2018. The scheme was established by law and compulsory for residents of the state in order to achieve Universal Health Coverage in line with the goal of the World Health

Organization to ensure that everyone has access to affordable healthcare.⁶

The Lagos State Health Scheme addresses accessibility to quality health care services, financial

protection from huge medical bills, private sector participation, equitable distribution of healthcare cost, efficiency, demand and resource pooling.⁷

In the commercial market, the number of Lagos residents with private health insurance is also unknown, though it is accessible primarily to the wealthy and for some employees largely through employer benefits. In a nationwide poll, about 2% of Nigerians have private health insurance, many of which live in Lagos.⁸

Most Nigerians are unemployed, with residents in the rural areas without adequate access to hospital, water and infrastructure and personnel. Baba and Omotara placed the poor performance of Nigeria's NHIS within the wider context of a fragmented approach to healthcare that involves both federal and state governments, a deterioration in the public health service caused by a 'brain drain' and lack of resources, and the high levels of poverty encountered in Nigeria.⁹ Considering the myriad of challenges bedeviling the NHIS particularly in the area of coverage and the need for health insurance with the ever increasing population of over 23 million people in Lagos state.¹⁰ For better healthcare delivery services, the Lagos State Health Financing Policy was developed in the year 2014 as a tool to articulate strategies to bridge the health financial gaps and develop sustainable health financing directions, with focus on innovative exploration of alternative sources of financing.¹¹ In furtherance to the health financing policy, Lagos State Government enacted the Lagos State Health Scheme Law in May 2015 which established the Lagos State Health Management Agency, the Lagos State Health Scheme and the Lagos State Health Fund, and that law makes health insurance

mandatory for every resident of the state.¹¹ The main objective is to provide quality healthcare services which is accessible and affordable to the residents of Lagos State, and in so doing, reduce, if not eliminate the financial catastrophe that arises from huge medical bills.¹¹

Given the inefficiencies experienced in the implementation of the National Health Insurance Scheme, it is expected that the populace would be skeptical about the effectiveness of the newly introduced Lagos State Health Scheme, which may in turn determine their attitudes towards subscribing to the scheme.

Awareness and people's perception towards government policies and programs is pertinent towards their successful implementation. Whenever there are negative perception, attitude and knowledge towards these policies and programs, such policies and programs are bound to fail.

Hence, creating awareness of these government programs and activities makes the governed to have positive attitude and perception towards these programs, thus, improving their participation and responsiveness to these programs.

The aim of the study is to determine the barriers and constraints of public owned health scheme (like LSHS) subscription by Nigerians level using Agege community as a case study.

METHODOLOGY

Study Area

Agege community is a suburb and local government area in Ikeja division of Lagos State, Nigeria. Lagos state has a population of over 20million and is the former capital and the economic nerve center of Nigeria. It is a port city that lies in narrowest coastal plain of the Bight of Benin in Southwestern Nigeria. It is located on longitude 2042'E and 3022'E, and latitude 6022'N and 6042'N. It has a land mass of about 3,577 square kilometers, including all water bodies,

lagoons and creeks. The majority of the population are of Yoruba extraction, the predominant tribal group in Southwestern Nigeria, though due to migration, diverse ethnic groups have become resident within Lagos.

Study Design

This study was a population-based, descriptive, and cross-sectional study.

Study Population

The study was conducted among the residents of Agege community. The inclusion criteria were household heads (male or female) and any individuals above 18 years living in Agege community.

While residents below 18 years were excluded.

Sample Size Estimation

The desired sample size for the study was determined using Cochran's formula

$$n = (z^2 pq) / d^2$$

Where

n = minimum sample size,

z = normal standard deviation, constant = 1.96 (95% confidence interval),

p = the estimated willingness prevalence from a related study in Osun State Nigeria,

$12 = 52.2\%$ or 0.522 . $q = (1-p) = 1 - 0.522 = 0.478$, d = the precision, a constant = 0.05 .

Therefore $n = (1.96^2 \times 0.522 \times 0.478) / (0.05)^2$

$n = 0.9585 / 0.0025$ 23; $n = 383.4 = 383$.

Since our minimum sample size = 383.

5% of the minimum sample size was added for incompletely filled questionnaires, giving a total sample size of 402.

Sampling Technique

The sample size was selected using a multi-stage sampling.

Stage 1: four (4) out of the 11 wards area in Agege LGA, housed the major slums in Agege. One was selected out of the four (4) using simple random

technique by balloting.

Stage 2: Out of the 32 major Streets and 6 major roads in the above selection, 8 Streets and 2 roads were selected using the simple random sampling

Stage 3: Out of an average of 800 houses selected on the Streets and roads, systematic random technique was used to select 402 houses with a sample interval of $k = N/n$

Where N = total number of houses in the selected streets and roads

n = Sample size

Hence, $k = 800/402 = 1.99$. Therefore, a sample interval of 2 was used.

Stage 4: One household was chosen from each house by balloting.

Study Instrument and Data Collection

Data was collected using a pre-tested, semi-structured, interviewer-administered questionnaire adapted from a similar study. The interviewer-administered questionnaire consists of 30 items, using close ended questionnaire, which was divided into 3 sections comprising; Socio-demographic profile, Awareness about LSHS, Perception and willingness to subscribe to LSHS.

Data Analysis

Data analysis was done using Statistical Package for Social Sciences (SPSS) version 25. The data was expressed in percentages and was analyzed using descriptive statistics. The Chi-square (X^2) test was used to test the differences between these categorical variables. The statistical significance level was set at p -value < 0.05 at a confidence level of 95%.

Ethical Considerations

Ethical committee approval was obtained before the commencement of the study from the Health Ethics and Research Committee of Lagos State University Teaching Hospital. The approval was obtained on 15th October 2021 with a reference

number LREC/06/10/1689. Written informed consent was obtained from each participant using voluntarily signed consent forms. No participant was coerced in any way to participate in this study, which was at no cost to them.

RESULT

The study population consists of three hundred and ninety-two (392) residents of Agege community above 18years selected using the multi-stage sampling technique. There were slightly higher numbers of female respondents (51%) than male (49%), and most of the respondents (62.2%) were between the ages of 31 - 50 years with a mean age of 39.20±3.25 years. Most of the respondents (81.1%) obtained at least a secondary school leaving certificate, with slightly more than a third (36.7%) earning between ₦21,000 – 40,000 in a month (Table 1).

The awareness about LSHS is shown in Table 2, which might serve as a barrier and constraints towards the uptake of the scheme. A large proportion of the respondents (76.5%) had heard about Lagos State Health Scheme (LSHS), and more than half of them (56.7%) got their information from the radio. A good proportion of the respondents (56.7%) were aware that they could register through the Wellness Ambassador, and less than one quarter (21.3%) knew they could register through an enrolment officer in different Local Government Areas in Lagos. The majority of the respondents (66.7%) knew the scheme is not restricted to certain citizens in Lagos and slightly more than half (53.4%) of them do not know that the Lagos State Government contributes to the scheme. Most of the respondents knew the scheme helps pool resources from both rich and poor and a large proportion of them knew they could pick any hospital of their choice (88.0%). More than half of the respondents (56.0%) claimed to be aware of the different benefit plan of the LSHS, while almost

same numbers of respondents were aware of the individual plan (55.3%), almost half of them (49.3%) think the family plan includes children above 18years, but most (61.3%) still knew it is inclusive of children below 18years. More than half of the respondents (56.0%) did not know the actual price for the individual package, while only 46.0% of the respondents knew the price for the family package. The overall level of awareness was rated and only 29.1% of the respondents were found to have good overall awareness.

Table 3 shows that although, slightly more than half of the respondents (53.15%) believe preferential treatment will be given to the rich over the poor by health care provider under the scheme, a large proportion of them (≥88.3%) still have positive perception about the different benefits of the scheme if properly implemented, and the majority of the respondents think the prices for the different packages are not expensive (77.6%). Only a few (28%) of the respondents had already subscribed to the scheme, but a large proportion of them (84%) were willing to subscribe. A large proportion of the respondents (87%) had an overall positive perception towards the scheme.

Significant association between willingness to subscribe to LSHS and socio-demographic profile of respondents was shown in Table 4.

TABLE 1: SOCIO-DEMOGRAPHIC PROFILE OF RESPONDENTS

Variables	Frequency (n=392)	Percentage (%)
Gender		
Male	192	49.0
Female	200	51.0
Age group (years)		
18 – 20	18	4.6
21 – 30	86	21.9
31 – 40	118	30.1
41 – 50	126	32.1
Above 50	44	11.2
Mean ± SD	39.20±3.25	
Level of Education		
No formal Education	26	6.6
Primary	48	12.2
Secondary	168	42.9
Tertiary	150	38.3
Occupation		
Artisan	110	28.1
Trader	118	30.1
Civil Servant	82	20.9
Private Employee	55	14.0
Others	27	6.9
Income per month		
Less than 21,000	82	20.9
21,000 - 40,000	144	36.7
41,000 - 60,000	96	24.5
61,000 - 80,000	16	4.1
81,000 and above	54	13.8

TABLE 2: AWARENESS ABOUT LSHS

Variables		Frequency (n = 392)	Percentage (%)
Have you heard about LSHS	Yes	300	76.5
	No	92	23.5
		(n = 300)	
Source of information (multiple choice)	Radio	170	56.7
	Television	44	14.7
	Social Media	36	12.0
	Wellness Ambassador	94	31.3
	Friends & Family	42	14.0
I can subscribe LSHS through (multiple choice)	Wellness Ambassador	152	50.7
	Hospital	124	41.3
	Enrolment Officer LGA	64	21.3
	Supermarket	4	1.3
	Pharmacy	14	4.7
LSHS restricted to certain citizens	Yes	48	16.0
	No	200	66.7
	Don't know	52	17.3
Lagos State Government contributes to LSHS	Yes	140	46.7
	No	20	6.7
	Don't know	140	46.7
LSHS pools resources rich and poor	Yes	211	70.3
	No	42	14.0
	Don't know	47	15.7
I am a walk-in-pick hospital my choice	Yes	264	88.0
	No	10	3.3
	Don't know	26	8.7
I am aware of the different benefits	Yes	168	56.0
	No	80	26.7
	Don't know	52	17.3
The different beneficiaries include (multiple choice)	Individual	166	55.3
	Couples & friends	30	10.0
	Family (both father and children above 18 yrs)	148	49.3
	Family (both father and children below 18 yrs)	184	61.3
	Boyfriend & Girlfriend	22	7.3
The amount an individual pays	Correct	132	44.0
	Wrong	140	46.7
	Don't know	28	9.3
The amount a family pays	Correct	138	46.0
	Wrong	128	42.7
	Don't know	34	11.3

TABLE 3: PERCEPTION ABOUT LSHS

Variables		Frequency (n=392)	Percentage (%)
LSHS will improve quality health care in Lagos	Agree	374	95.4
	Disagree	10	2.6
	Neutral	8	2.0
LSHS will protect family from financial burden and medical debt	Agree	368	93.9
	Disagree	12	3.1
	Neutral	12	3.1
LSHS should improve efficiency in health care delivery	Agree	346	88.3
	Disagree	28	7.1
	Neutral	18	4.6
Cost of health care services will still be high even with LSHS	Agree	54	13.8
	Disagree	246	62.8
	Neutral	92	23.5
Preferential treatment will be given to high income earners	Agree	208	53.1
	Disagree	120	30.6
	Neutral	64	16.3
LSHS will improve early presentation of Symptoms to clinics	Agree	358	91.3
	Disagree	16	4.1
	Neutral	18	4.6
The subscription packages for LSHS are too expensive	Agree	70	17.9
	Disagree	304	77.6
	Neutral	18	4.6
I have subscribed to LSHS	Yes	110	28.0
	No	282	72.0
I am willing to subscribe to LSHS	Yes	329	84.2
	No	35	8.9
	Don't know	27	6.9

TABLE 4: ASSOCIATION BETWEEN WILLINGNESS TO SUBSCRIBE TO LSHS AND SOCIO-DEMOGRAPHIC PROFILE OF RESPONDENTS

Variable	Willingness to Subscribe to LSHS				X ²	Df	P-value
	Yes n (%)	No n (%)	Don't know n (%)	Total n (%)			
Gender					12.021	4	0.017
Male	148 (86.0)	10 (5.8)	14 (8.1)	172 (100)			
Female	138 (81.2)	22 (12.9)	10 (5.9)	170 (100)			
Level of Education					33.655	6	0.000
No formal Education	24 (92.3)	2 (7.7)	0 (0.0)	26 (100)			
Primary	26 (65.0)	10 (25.0)	4 (10.0)	40 (100)			
Secondary	136 (91.9)	10 (6.8)	2 (1.3)	148 (100)			
Tertiary	100 (78.1)	10 (7.8)	18 (14.0)	128 (100)			
Occupation					33.748	8	0.000
Civil servant	60 (83.3)	6 (8.3)	6 (8.3)	72 (100)			
Artisan	92 (92.0)	6 (6.0)	2 (2.0)	100 (100)			
Trader	84 (82.3)	16 (15.7)	2 (2.0)	102 (100)			
Private Employee	32 (76.2)	2 (4.8)	8 (19.0)	42 (100)			
Others	18 (69.2)	2 (7.7)	6 (23.0)	26 (100)			
Income					25.450	8	0.001
Less than 21,0000	68 (85.0)	6 (7.5)	6 (7.5)	80(100)			
21,000 - 40,000	96 (85.7)	16 (14.3)	0 (0.0)	112 (100)			
41,000 - 60,000	70 (83.3)	4 (4.8)	10 (11.9)	84 (100)			
61,000 - 80,000	16 (100.0)	0 (0.0)	0 (0.0)	16 (100)			
> 80,000	36 (72.0)	6 (12.0)	8 (16.0)	50 (100)			

DISCUSSION

Lagos State Health Scheme (LSHS) as a prototype of public owned health scheme is designed to meet the health needs of Lagos residents by providing them an option to be able to receive healthcare without having to pay at the point of receiving care.¹³ In this study there was a slightly higher number of female respondents (51%) than male respondents (49%). This is contrary to a similar study performed in Katsina, North Western Nigeria, where there were more male respondents (82.8%), than female (17.2%) which is typical of the Hausa community where females are less outgoing and engaging.¹⁴

The majority of the respondents were between the ages of 31-50years (62.2%), which is a good reflection of the active age group and most of them obtained at least a secondary school leaving certificate (81.1%). They were predominantly traders (29.6%) and artisan (27%) with monthly income range of between 21,000 – 40,000 (36.7%) and 41,000 – 60,000 (24.5%).

A good percentage of the respondents (76.5%) had heard about Lagos State Health Scheme (LSHS), which agrees with a similar study about Community Based Health Insurance (CBHI) were 75.5% of respondents in a cross-sectional study in Olowora community were aware of the CBHI.¹³

Less than a third (29.1%) of the respondents had good awareness, while 37.2% had fair and 33.7% had poor awareness about LSHS. This is probably due to inadequate community sensitization about the health scheme within the communities. This is contrary to the result in the study where 49.5% of the respondents in Olowora community had good knowledge about community health insurance.¹³ This might imply that given the long duration of operation of the pioneer CBHI in Olowora, the community members might have become familiar with the scheme due to the emphasis placed on awareness campaigns in Olowora at that time. In

another study done in the North Central zone of Nigeria, 71% of the respondents had good knowledge.¹⁵ This may be due to the fact that the majority of the participants in that study were educated up to tertiary level of education, while in this study only slightly more than a third (38.3%) of the respondents had received tertiary education.

It was also observed that the majority of the respondents (87%) had a positive perception about the LSHS, and as such 83.6% of those that were not on the scheme were willing to subscribe. Similarly, in a study done in Osun state, a high proportion (82.4%) were willing to enroll.¹⁷

There was a statistically significant association between willingness to subscribe and socio-demographic profile of the respondents like gender, level of education, occupation and income.

The willingness to subscribe to the scheme was also found to be significantly associated with gender, with more males i.e., 148 out of 172 (86.0%) willing to subscribe compare to 138 of 170 (81.2%) of the female. This is consistent with the findings in a study in India¹⁷ and Rural Tanzania¹⁸, where it was found that male household heads were more willing to purchase and pay for health insurance than female household heads.

Garba, Harun, and Salihu (2015) found a correlation between socioeconomic status and willingness to pay for CBHIS among the rural dwellers in Sokoto, Northwestern Nigeria.¹⁹

Onwujekwe, Uzochukwu, and Kirigia, (2011) investigated the basis for effective CBHIS in Southeastern Nigeria and found that in addition to Income levels of the people, the premium for the scheme should be affordable to the people.²⁰ they also found a positive correlation between socioeconomic status, altruism and willingness to pay for CBHIS and opined that the poor have to depend on the altruistic contributions from the affluent in the community to be able to enroll in CBHIS, as they may not afford the full premium.

This is what the Lagos State Health Scheme set out to achieve if properly implemented, by pooling resources from the wealthy and healthy to cater for the poor and vulnerable Lagos residents.

Limitation: The study is conducted in a local setting of Agege community which might not be a good representative of other areas in Lagos and Nigeria.

CONCLUSION

The study showed that although a large proportion of the respondents had heard about LSHS, but only a few had a good awareness about the scheme and how they could subscribe to the scheme. Subscription to the scheme was very low amongst respondent, though majority of the respondents have positive perception about the scheme and were willing to subscribe. Some of the factors affecting uptake and barriers identified were socio-demographic profile like level of education, occupation and income. Hence, ensuring proper awareness, provision of universal basic education, job creation and decent income will help in sustaining and increasing the positive attitude of respondents about the health scheme. This will in turn increase the subscription to the scheme, which is a necessary requirement for achieving the goal of Universal Health Coverage.

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