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Predictors of Enrolment in Health Insurance: A Study among Self-employed Workers in Ijebu-ode Local Government Area, Ogun State, Nigeria

Ugwu, E. O[1]*, Akinboye, D. O[1], Akinoye, J. I[1], Onayemi, O.O[2]
[1]*Department of Public Health, Babcock University, Ilishan Remo, Nigeria*
[2]*Department of Economics, Olabisi Onabanjo University, Ago-Iwoye, Nigeria*
**Corresponding Author: emmanuel.ugwu94@gmail.com[1]*

Abstract

Background: *Health insurance is a social security mechanism for achieving improved access to healthcare services and at burden reducing cost. In Nigeria, less than 10% of the population has health insurance. The objective of this study was to assess the knowledge, attitude and self-efficacy of self-employed workers regarding enrolment in health insurance.*

Materials and Methods: *This study adopted a cross-sectional survey design among 420 market traders attending Olabisi Onabanjo International Market, Ijebu-ode. Stratified systematic sampling technique was used to collect data analysed and presented as frequency distribution, means and standard deviations and inferential statistics which were statistically tested at 5% level of significance.*

Results: *This study found that enrolment in health insurance among self-employed workers was 9%. The respondents in this study expressed good level of knowledge (9.66±1.94), positive attitude (27.65±5.52), and high health insurance decision self-efficacy (12.22±4.64) towards health insurance. There was a statistically significant relationship between self-efficacy (r=0.158; p=0.003) and enrolment in health insurance among self-employed workers.*

Conclusions: *This study concluded that despite the outcomes of the variable studied, enrolment in health insurance was still low suggesting that there are additional barriers that need to be explored. This study recommended that reinforcing factors and enabling factors that could facilitate or impede the decision of self-employed workers to enrol in health insurance should be explored.*

Keywords: *Enrolment, Health insurance, Health financing, Self-employed workers.*

Introduction

Health insurance is a social security mechanism that improves access to healthcare services at burden reducing cost in households [1]. One of the greatest challenges of global health is the increase inaccessibility to healthcare services by the growing population of developing countries [2]. In a report by World Health Organization it was indicated that developing countries accounted for 93% of global disease burden, with 11% global health spending [3]. The social health insurance has been globally adopted as the system of health financing, to mobilize resources for health, reduce risks, provide equitable healthcare access and deliver better health quality [4]. However, in most African countries, the health insurance initiative has covered only a small proportion of the population [5].

The National Health Insurance Scheme (NHIS) in Nigeria was established under Act 35, of the 1999 constitution, and was built on the framework that would cover both formal and informal sector of the economy. However, less than 10% of the Nigerian population has health insurance [1, 6]. Also, studies have shown that out-of-pocket fees constituted a significant part of illness-related expenditures among workers of the informal sector [7, 8]. Between the periods of 10 years from 2005 to 2015, the proportion of out-of-pocket expenditure in Nigeria ranged from 60% to 72%; higher than the proposed benchmark of 20% [9]. Additionally, only 7% of general government expenditure is allocated to health, as opposed to the required 15% by the Abuja declaration [9].

According to the International Labour Organization the proportion of self-employment

in Nigeria was estimated at 81.29% and self-employed workers were least likely to have social protection and safety nets to guard against economics shocks, which could translate into serious health consequences [10]. In Nigeria, poor knowledge of health insurance abounded among informal sector groups. In a study carried out in Lagos, Osun, and Niger States, the level of knowledge about health insurance was reported to be less than 30% in total [11, 12, 13]. Also, studies have been reported in Edo and Lagos State, of people expressing negative attitude towards health insurance [14, 15, 16, 17]. The plausible explanation for this poor level of knowledge was attributed to the fact that majority of those presently enrolled in the scheme are government workers and therefore, the average citizen would assume that it is probably meant for only formal sector workers [11]. Likewise, the prevalent negative attitude was due to inadequate level of publicity as reported in a research conducted in Lagos [11]. Self-efficacy was reported to be an important predictor of health behaviour, and the stronger an individual's self-efficacy beliefs are, the stronger their intention to act [18].

Studies have reported that greater self-efficacy was associated with better behavioural and health outcomes [19]. To the knowledge of the author, the influence of self-efficacy on enrolment in health insurance has not been adequately explored. This study explored the predictors of enrolment in health insurance among self-employed workers in Ijebu-ode local government area. The objectives were to assess the level of knowledge, attitude, self-efficacy and enrolment status about health insurance among self-employed workers in Ijebu-ode local government area,

Materials and Methods

This study was carried out in Olabisi Onabanjo International Market, popularly known as "New Market" in Ijebu-ode local government area, Ogun State, Nigeria. The local government has its headquarters at Itoro in the heart of Ijebu-Ode. Ijebu-ode is a town in Ogun State, South-West Nigeria. It is the second largest city in Ogun State after Abeokuta. The local government currently falls under the Ogun East Senatorial District. The People from Ijebu-ode have a reputation of being natural entrepreneurs, with a shrewd business mind-set. The population of Ijebu-ode is in excess of 200,000 people [20]. In Ijebu-ode local government area, an estimated 80% of the population operates as self-employed providers of a wide variety of services, for which over 60% are petty traders [20].

This study adopted a cross-sectional survey design. In this study, 420 market traders attending Olabisi Onabanjo International Market were recruited. Only traders, who owned a shop i.e. physical location in the market, were studied. Market traders without a specific physical space i.e. without a shop (including hawkers), were not recruited. The sampling frame of the shops in this market containing 3394 shops was obtained. Stratified systematic sampling technique was used to select the number of market traders with shops from the 10 shop sections in the market. The shop sections formed the strata. Systematic sampling was used to select the market traders to participate in the study using the sampling fraction of 1:12. Proportional sampling was used to determine the appropriate representation for this study. The index shop for each stratum was selected using simple random sampling by balloting. If a market trader was unavailable in a selected shop, then the immediately preceding shop was selected.

A structured, pre-tested questionnaire was used to collect the data. The questionnaire contained sections on socio-demographic characteristics of respondents, knowledge about health insurance, attitude towards health insurance, health insurance decision self-efficacy, and health insurance enrolment status. Section A addressed the socio-demographic characteristics of the respondents which include age, gender, marital status, highest educational attainment, religion, ethnicity, employment category and average monthly income. Section B addressed knowledge about health insurance. It consisted of 10-items with dichotomous type of response format and 2-items with multiple choice responses. The variable was measured on 15-points rating scale. The answer 'Yes' was computed as one (1) while the answer 'No' was computed as two (2). Likewise, the answer 'True' was computed as one (1) while the answer 'False' was computed as two (2). Section C addressed attitude towards health insurance. It consisted of 11-items with 5 options likert-type response format (strongly agree, agree, neutral, disagree, and strongly disagree). The variable was measured on 44-point rating scale. The scale was coded as follows: SA=1, A=2, N=3, D=4, SD=5.

Section D addressed health insurance decision self-efficacy. It consisted of 6-items with 5 options likert-type response format (strongly agree, agree, neutral, disagree, and strongly disagree). The variable was measured on 24-point rating scale. The scale was coded as follows: SA=1, A=2, N=3, D=4, SD=5.

The instrument was pre-tested among market traders in Ijebu North-East Local Government Area. A consent form was given to the participants to seek their permission to participate in the study. Data was analysed using IBM SPSS version 23, and presented in frequency distribution tables. The level of significance was tested using Pearson's correlation, with *p*-value set at ≤ 0.05. Ethical approval was obtained from Babcock University Health Research and Ethics Committee (BUHREC).

Results

A total of 420 questionnaires were administered to market traders but only 344 were completed representing a return rate of 81.9%. The result showed that, 134 (39%) of the respondents were of age 35-44 years. There were more females, 273 (79.4%) than males and more Christians, 245 (71.2%) than Muslims. Also, 243 (70.6%) of the respondents were predominantly Yoruba's; 227 (66%) were married; 139 (40.4%) had secondary school education and 90 (26.2%) had a monthly income of 50,000-100,000 naira (Table 1).

The level of knowledge of the respondents about health insurance was mean and standard deviation of (9.66±1.94), with a prevalence of 64.4% (Table 2). Majority of the respondents, 286 (83.1%) agreed to have heard of health insurance; 222 (64.5%) agreed that health insurance involved pooling of prepaid funds allowing for health risk to be shared; 199 (57.8%) believed that insurance was meant to cover only government workers. Relating to the types of health insurance known, 274 (79.7%) cited both government-owned health insurance scheme and private-owned health insurance companies (Table 3).

The level of attitude of respondents towards in health insurance was mean and standard deviation of (27.65 ± 5.52), with a prevalence of 62.8% (Table 2). More than half of the respondents, 198 (57.6%) opined that health insurance scheme was irrelevant, about one-third 142 (41.3%) of the respondents neither agreed nor disagreed that health insurance could succeed in Nigeria. More than half of the respondents, 186 (54.1%) disagreed to health insurance being of advantage to improve access to health services (Table 4).

The level of health insurance decision self-efficacy of respondents was mean and standard deviation of (12.22 ± 4.64), with a prevalence of 50.9% (Table 2). Among the respondents, 105 (30.5%) strongly disagreed to having difficulty understanding information about health insurance, 99 (28.8%) preferred to make decisions about health insurance with the help of someone in their family (Table 5).

The level of enrolment in health insurance among the respondents was mean and standard deviation of (0.1 ± 0.33), with a prevalence of 10% (Table 2). Among the respondents, only 31 (9%) were enrolled in any form of health insurance. The study evaluated the relationship between health insurance decision self-efficacy and enrolment in health insurance among self-employed workers in Ijebu-ode local government area (Table 6). There was a statistically significant relationship between self-efficacy and enrolment in health insurance (r=0.158; *p*=0.003), among self-employed workers in Ijebu-ode local government area. There was no statistically significant relationship between knowledge and enrolment in health insurance (r=0.055; *p*=0.308). There was also no statistically significant relationship between attitude and enrolment in health insurance (r=0.002; *p*=0.967), among self-employed workers in Ijebu-ode local government area.

Discussion

Health Insurance mechanism assures financial protection to individuals and households in the informal sector and constitutes an essential poverty-reduction measure. The low proportion of respondents that were enrolled in any form of health insurance is justified by the fact that less than 10% of the Nigerian population have health insurance [11]. A higher percentage of respondents were females; given that they are believed to be involved in petty trades as compared to males. This is however not tantamount to the predominant male respondents reported in the study carried out in Lagos among artisans [11]. The high proportion of married respondents obtained in the study was similar to studies carried out in Ibadan among market women and in Lagos

among artisans. Similarly, the high percentage of respondents that were Yoruba's was in tandem with studies carried out in Ibadan and Lagos [1, 11].

A high proportion of respondent have heard of health insurance, which is contrary to the low proportion in a study carried out among artisans [11]. The percentage of respondents who agreed that health insurance involved pooling of prepaid funds that allowed health risks to be shared was slightly similar to the studies carried out among artisans. Also, similar result was found among respondents who were of the opinion that health insurance covered only government workers [11]. The level of knowledge about health insurance was good among respondents, contrary to previous studies which was poor [11, 12, 13]. The result of the level of knowledge among respondents could be due to the increase access to health insurance information among self-employed workers. It could also be due to the increased popularity of health maintenance organizations (HMO) in the south-western region. However, it was found that by increasing the level of knowledge, there was little likelihood to increase enrolment in health insurance, as there was no statistically significant relationship between knowledge and enrolment in health insurance.

It is believed that people have attitude towards almost everything (product or services) and these attitudes affect behaviour. More than half of the respondents were of the opinion that health insurance scheme was irrelevant. Similarly, more than half of the respondents disagreed to health insurance being of advantage to improve access to health services. These results were buttressed by previous studies carried out among artisans [11]. The prevalent positive attitude towards health insurance expressed among respondents in this study was contrary to studies reported in Edo and Lagos States [11, 14, 15, 16, 17]. The prevalent negative attitude towards health insurance from previous studies was due to inadequate level of publicity as reported in a research conducted in Lagos [11]. It was found that by increasing the attitude, there was little likelihood to increase enrolment in health insurance, as there was no statistically significant relationship between attitude and enrolment in health insurance.

Self-efficacy was reported to be an important predictor of health behaviour, and the stronger an individual's self-efficacy, the stronger their intention to act [18]. It was found that by increasing the health insurance decision self-efficacy there was the likelihood to increase enrolment in health insurance. This is because there was a statistically significant relationship between self-efficacy and enrolment in health insurance. Health insurance decision self-efficacy among individuals in the informal sector has been inadequately explored. In this study, less than half of the respondent reported to having difficulty understanding information about their insurance, which was contrary to the studies carried out among older adults on self-efficacy in insurance decision making, where half of patients were reported to have difficulty understanding information about their insurance [19]. Although, studies have reported that greater self-efficacy was associated with better behavioural and health outcomes [19], but in this study greater self-efficacy was associated with low enrolment in health insurance.

Conclusion

This study assessed the knowledge, attitude and self-efficacy of self-employed workers towards health insurance. The study revealed that self-employed workers in Ijebu-ode local government area generally had good level of knowledge about health insurance, positive attitude towards enrolling in health insurance, high health insurance decision self-efficacy. Despite the outcomes of the variable studied, enrolment in health insurance was still low. This suggests that there are barriers that need to be explored, contributing to the low level of enrolment in health insurance in the informal sector. Further research is needed to assess reinforcing and enabling factors that could facilitate or impede the decision to enrol in health insurance. There is therefore an urgent need to promote uptake and utilization of health insurance, to ensure that the healthcare needs of the informal sector operators are catered for

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Figures and Tables

Table 1. Frequency Distribution of Socio-Demographic Characteristics

Variables	Respondents in this study N=344	
	Frequency (N)	Percent (%)
Age;		
• Less than 25 years	9	2.6
• 25 – 34 years	96	27.9
• 35 – 44 years	134	39.0
• 45 – 55 years	85	24.7
• Above 55 years	20	5.8
Gender;		
• Male	71	20.6
• Female	273	79.4
Educational attainment;		
• No formal education	11	3.2
• Primary	4	1.2
• Secondary	139	40.4
• Tertiary	119	34.6
• Above Tertiary	71	20.6
Religion;		
• Christianity	245	71.2
• Islam	99	28.8
Ethnicity;		
• Yoruba	243	70.6
• Igbo	95	27.6
• Hausa	4	1.2
• Others (Igala)	1	0.3
• Others (Fulani)	1	0.3
Marital status;		
• Single	41	11.9
• Married	227	66.0
• Divorced	4	1.2
• Separated	44	12.8
• Widowed	28	8.1
Average Monthly Income (naira);		
• Less than 50,000	84	24.4
• 50,000 – 100,000	90	26.2
• 101,000 – 150,000	73	21.2
• 151,000 – 200,000	42	12.2
• 201,000 – 250,000	15	4.4
• Above 250,000	40	11.6

Table 2. Descriptive Statistics of Research Variables

Variables	Respondents in this study N=344 Mean ± S. D
A) Level of knowledge about health insurance measured on 15-points reference scale	9.66 ± 1.94
B) Attitude towards enrolling in health insurance measured on 44-points reference scale	27.65 ± 5.52
C) Level of health insurance decision self-efficacy measured on 24-points reference scale	12.22 ± 4.64
D) Health insurance enrolment status	0.1 ± 0.33

Table 3. Knowledge of respondents about health insurance

	KNOWLEDGE	Frequency (%) Yes	 No
1	Have you heard of health insurance?	286 (83.1)	52 (15.1)
		True	**False**
2	Health insurance is a social tool that limits access to health services.	183 (53.2)	161 (46.8)
3	Health insurance is a type of coverage that involves pooling of prepaid funds that allows health risk to be shared.	222 (64.5)	122 (35.5)
4	Health insurance involves daily contribution for health services.	133 (38.7)	211 (61.3)
5	What are the types of health insurance available to Nigerians?		
	a) Government-owned health insurance scheme 45 (13.1)		
	b) Private-owned health insurance companies 15 (4.3)		
	c) Both a and b 274 (79.7)		
	d) None of the above 10 (2.9)		
		True	**False**
6	Health insurance pools contributions for only health needs.	285 (82.8)	59 (17.2)
7	In health insurance, other contributor's money takes care of my health needs.	175 (51.9)	169 (48.1)
8	The advantages of health insurance include;		
	a) Ensures every Nigerian have access to good health service 52 (15.2) b) Ensures inequity in distribution of health services delivery 29 (8.4)		
	c) Protects family against financial hardship 40 (11.6)		
	d) All of the above 120 (34.9)		
	e) Both a and c 103 (29.9)		
		True	**False**
9	Health insurance covers hospital care in a standard ward for an unlimited stay per year.	102 (29.7)	242 (70.3)
10	Health insurance covers maternity care for up to 4 live births for every insured contributor.	251 (73.0)	93 (27.0)
11	Consultation with specialists, preventive care immunization and family planning, ante-natal and post-natal care are covered by health insurance.	209 (60.8)	135 (39.2)
12	The National Health Insurance Scheme (NHIS) is meant to cover only government workers.	199 (57.8)	145 (42.2)

Table 4. Attitude of respondents towards health insurance

		Frequency (%)				
	Attitude	**SA**	**A**	**N**	**D**	**SD**
1	Health insurance scheme is relevant in Nigeria	2 (0.6)	29 (8.4)	112 (32.6)	198 (57.6)	3 (0.9)
2	Health insurance can succeed in Nigeria	29 (8.4)	36 (10.5)	142 (41.3)	128 (37.2)	9 (2.6)
3	The level of publicity about health insurance is adequate	91 (26.5)	93 (27.0)	62 (18.0)	15 (4.4)	83 (24.1)
4	Health insurance scheme is a preferable form of payment for medical expenses	45 (13.1)	43 (12.5)	116 (33.7)	110 (32.0)	30 (8.7)
5	I can contribute without feeling financial hardship	53 (15.4)	63 (18.3)	112 (32.6)	75 (21.8)	41 (11.9)
6	Health insurance is of advantage to improve access to health services	13 (3.8)	20 (5.8)	97 (28.2)	186 (54.1)	28 (8.1)
7	Health insurance helps to access care without paying at point of service	54 (15.7)	56 (16.3)	102 (29.7)	106 (30.8)	26 (7.6)
8	Enrolling in health insurance can improve my health status	79 (23.0)	45 (13.1)	92 (26.7)	98 (28.5)	30 (8.7)
9	Health insurance is cheap	85 (24.7)	84 (24.4)	77 (22.4)	27 (7.8)	71 (20.6)
10	Health insurance allows pooling of contribution for healthcare service	73 (21.2)	58 (16.9)	109 (31.7)	85 (24.7)	19 (5.5)
11	Other contributor's money can take care of my health needs	89 (25.9)	54 (15.7)	98 (28.5)	67 (19.5)	36 (10.5)

Table 5. Health insurance decision self-efficacy of respondents

		Frequency (%)				
	Self-efficacy	**SA**	**A**	**N**	**D**	**SD**
1	I have difficulty understanding information about my health insurance	98 (28.5)	38 (11.0)	89 (25.9)	14 (4.1)	105 (30.5)
2	I would prefer to make decisions about my health insurance with the help of someone in my family	99 (28.8)	62 (18.0)	60 (17.4)	25 (7.3)	98 (28.5)
3	I am confident that I can contribute into the insurance scheme without feeling financial hardship	80 (23.3)	63 (18.3)	114 (33.1)	47 (13.7)	40 (11.6)
4	The decision to enrol in health insurance is beyond my control	82 (23.8)	51 (14.8)	107 (31.1)	37 (10.8)	67 (19.5)
5	I have no doubt about my ability to enrol in health insurance	53 (15.4)	52 (15.1)	117 (34.0)	82 (23.8)	40 (11.6)
6	It is completely up to me if I want to enrol in health insurance	21 (6.1)	35 (10.2)	116 (33.7)	135 (39.2)	37 (10.8)

Table 6. Correlation between knowledge, attitude, self-efficacy, and enrolment in health insurance

	Respondents in this study N=344	
	Enrolment in Health Insurance	
	Pearson Correlation	Sig.
A) Knowledge about health insurance measured on 15-points reference scale	.055	.308
B) Attitude towards health insurance measured on 44-points reference scale	.002	.967
C) Health Insurance Decision self-efficacy measured on 24-points reference scale	.158**	.003

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