

Evaluation of the Public Health Financing and National Health Insurance Scheme Policy in Nigeria

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ABSTRACT

The inevitability of good healthcare system in national development depends on every government's commitment in ensuring proper healthcare services to its populace. However, extant literature have focused on the effects of health care system financing without factoring the significance of its insurance scheme components. This study therefore evaluated the effect of public health financing on national health insurance scheme (NHIS) policy in Nigeria. Multistage (clustered and incident) sampling technique was employed to select the sample size of 399 individuals from a population of 113,853 residents of Ogbomoso North Local Government area. Primary data were collected using structured questionnaire which was administered on sampled respondents. Variables included income, education, settlement of patients' bills, patient patronage, occupation, religion, and years of registration. Chi-square was used to assess the significance of public health financing on NHIS. Multiple regression analysis was used to analyze the effect of socio-cultural characteristics on NHIS adoption. The results showed that NHIS don't settle their patients' bill on time (42.9%). Also, patients' patronage was low (10%) in most of NHIS accredited hospitals (57.1%). The analysis showed that public health financing had effect on NHIS ($\chi^2 = 14.000$; $p = 0.007$). It was also revealed that socio-cultural characteristics such as education, income and sex had significant effect on NHIS adoption ($R^2 = 0.624$, $F\text{-ratio} = 15.344$; $p = 0.001$). This study concluded that public health financing had effect on NHIS and that adoption of NHIS hinged on the socio-cultural characteristics. This study recommended that government should increase the awareness of NHIS so that larger population can benefit from it. Also, NHIS should ensure prompt payment of NHIS patients' medical bills to encourage health facilities providers.

Keywords:- Public health financing, National Health Insurance Scheme

INTRODUCTION

The inevitability of good healthcare system in national development depends on every government's commitment in ensuring proper healthcare services to its populace. This includes a country like Nigeria since it attained political independence in 1960 [3]. In other words, the basic function of governments in Nigeria (federal, state and local government) is to provide quality and

effective health care services to its citizens. This is because the health of people in the country directly affects the development of the country, and Nigeria, being the largest black African country with a population of over 180million would not care less about this germane issue as it is often said that a healthy nation is a wealthy nation. The huge amount involved in health care system and health care delivery has further

emphasized the need for government's involvement, while private involvement is quite limited. Over the years Nigerian government has done a lot in ensuring adequate funding of health care to ensure its availability and accessibility to everyone within the nation. However, this seems not to have solved the supposed problem or at best had only catered for an insignificant percentage of the challenges facing the health sector.

This therefore calls for a strategic mode of financing which entails a combined effort of both the private and government institutions to ensure a healthy society. As a critical developmental component like food, shelter and clothing, the health sector requires adequate funding so as to balance the accessibility gap between the rich and the poor. The way a nation finances its health care delivery system could be a clear tool in providing the premium placed on its citizens' health. The World Health Organization (WHO) defined health in its broader sense in 1948 constitution as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity". Consequently, the function of government in financing health care system of its nation calls for a sustainable proactive war against outbreak of disease, cure and control of it, and post-disease control mechanisms to cushion the effect left by a ravaging disease.

Financing health care sector in Nigeria is still encountered with enormous challenges that must be conquered if quality and effective health care services are to be provided to the people. The wellbeing of people in country directly affects the development of the country. For the health care services to be efficient and effective, it must be adequately financed, and the resources must be adequately used with the avoidance of fraud and corruption. Therefore as part of

the several policies. The federal government introduced the National Health Insurance Scheme (NHIS) on June 6, 2005, because it considered funding health so demanding due to regressing economy, constant shortage of qualified and competent health workers, shortage of drugs and other health infrastructures. Likewise, the introduction of the scheme was to ensure good and qualitative access to health care services such that it could reduce household out-of-pocket health expenditure.

A cursory look at the Nigerian health care system over the years has revealed a noticeable unequal access to health care delivery in the nation, a situation determined by the alarming economic difference between the rich and the poor or the social political strata in the country, this and several other challenges have necessitated the need for unalloyed government intervention through thorough funding and decisive reforms. To address the in-balance in the access to health care between the poor and the rich the Nigeria Health Insurance Scheme was introduced by the Nigerian government. However, the scheme has not been adopted by a large percentage of the Nigeria populace. In the same vein, other major sources of health care financing is derived from a free market economic system through the private sector, and external funding by international donors like the World Bank, World Health Organization (WHO), International Monetary Funds (IMF) and many other multi-lateral donor agencies. Voluntary organizations are not left out in this category. So considering the expected role of NHIS in the face of all these challenges facing public health care financing in Nigeria, there is need to consider the extent of acceptability and the effectiveness of the scheme so far including the allocations available for its operation.

Past researches on this study area focused on the deteriorating state of Nigeria health system (Uche and Uche 2014), the impact of government expenditure on health (Mathias, Dickon and Bisong 2013), access to health insurance and quality of primary health care in Nigeria (Eugheme, Agada, Oyibo and Ugwu 2014) and level of awareness of the Nigeria Health Insurance Scheme (NHIS) (Chibuke 2013). None of these attempted to relate the effect of socio-cultural character on NHIS adoption nor did they assess the effectiveness of public health financing on NHIS. This study therefore examined the effect of socio-cultural character on NHIS adoption and the effectiveness of public health financing on NHIS

OBJECTIVE OF THE STUDY

Against the identified gap, this work aimed at examining the effectiveness of public health financing on NHIS in Ogbomoso North local government and to evaluate the effect of socio-cultural character of users on NHIS adoption in Ogbomoso North local government. H_{01} : Public health financing has no effect on NHIS service in Ogbomoso North local government. H_{02} : Adoption of NHIS has no significant effect on the socio-cultural character of users in Ogbomoso North local government.

LITERATURE REVIEW

Health

It is believed that health and education are the two important prerequisites for human capital development, and have been demonstrated to be the basis of individual's economic productivity. Health is the bedrock to job productivity, the capacity to study in school, to grow intellectually, physically and emotionally. As with economic wellbeing of individual households, good health is an important input into poverty alleviation, economic growth and economic development at the scale of the nation. So improving financing to the health sector has become a

major topic of discourse among health economist. This is because whatever investment made into health sector either directly or indirectly dictates the wealth of individuals which in turn culminates to the wealth of a nation.

It is important to examine the general definition of health especially owing to fact of how it affects the economic situation of Nigeria. The Concise Oxford English Dictionary, 12th Edition, defined health as a state of being free from illness or injury. Human health does not merely connote the absence of ailments and disease. It encompasses the proper physical, mental and social functioning of human being. Health is termed as the level of functional and metabolic efficiency of a living organism.

Health Care System in Nigeria

It is only when the people are healthy that any reasonable development can take place therefore to provide quality and effective health care services to its citizens became One of the basic functions of government.

It is essential to note that in most countries the system for delivering health services is complex and Nigeria is not exempted in this respect. Amidst the health system, there are different types of health care equipment, different type of providers, and various services being provided.

However what is common in all health care systems is the fact that there are people who are in need of health services, people who provide health services and people who manage or supervise the provision of health services. It also implies that, some health practices or services if not well managed could be more hazardous to the health system than complete neglect.

Public health care in Nigeria can be classified into three levels (the primary,

secondary and tertiary) and managed by the three tiers of government; the local, state and federal governments respectively.

Primary level healthcare includes the following: ordinary forms of outpatient care, which is provided on the basis of a clinic by professional practitioners who represent, as it were, the first point of call. Primary health centers are the first place of contact for patients, providing preventive, curative, and rehabilitative services.

Secondary level healthcare: At the secondary care level referrer for specialized services are done, through outpatient and inpatient services of Hospitals, medical obstetrics, pediatrics, gynecology and general surgery and community health services.

Tertiary level healthcare on the other hand encompasses more complex systems of specialized hospital treatment such as open-heart surgery (Mechanic, 1968). The tertiary level is the highest health care system in the country and it includes; teaching hospitals, federal medical centers and other specialist hospitals which provide care for specific disease conditions.

Financing of healthcare service in Nigeria

It is important that the government is responsible for the largest share of spending on health, rather than individuals, otherwise the poor may be denied access to healthcare and others may be pushed into poverty through expenditure on health, this is because of the huge amount required in health care provision which is usually unaffordable for private individuals and citizens.

Nigerian Government signed the Abuja Declaration in 2001, which commits them to spending 15% of the total government budget on health. But according to [1], the

decreasing finance of the government oil has left the government with no other choice than reducing budgetary allocation to the health sector prior to the government almost solely financed health services in public health institutions. Ughamadu, 2003 further elaborated on this noting that by the turn of the 1980s, health financing had become joint responsibility of the government and the citizens. In other words both the government and the citizens shared the costs of healthcare services in public health institutions with the greater burden weighing heavily on the government because subsidization of healthcare services was paramount in healthcare budgetary allocations.

NHIS Coverage in Nigeria

Seven years after commencement, the scheme is estimated to cover 5% (roughly 7 million) of Nigerians, mostly in the formal sector. The Nigerian formal sector is said to make up roughly 30% of population. The trend of implementation of NHIS commenced formally in 2005, the NHIS was officially flagged off with the formal sector programme which aims to provide SHI coverage to all workers in the civil service (public sector, armed forces, police and other uniformed services) and the organized private sector. Majority of Nigerians, roughly 60% are poor and exist on less than 1 dollar per day. These are those who make up the large informal sector and vulnerable groups and are presently largely excluded from the current implementation of the National Health Insurance Scheme (NHIS).

METHODOLOGY

The research work was carried out in Ogbomoso Oyo State. The focus of the study was on residents of Ogbomoso North local Government (semi urban). This local government was chosen because it is more of urban than rural area. This study employed survey research method, and it entails the use of special instrument

like questionnaire to achieve or collect the needed information. The population for this study consists of the 113,853 residents in Ogbomoso North Local Government (Census, 2006) as well as the hospitals in Ogbomoso town.

Clustered sampling was used to select the sub-areas in Ogbomoso North Local Government with more civilized individuals while random sampling technique will be used to choose the sample size. Also, NHIS hospitals that were accredited were sampled. Yaro Yamane formula was used to determine the sample size of the distribution. The formula is stated as;

$$n = \frac{N}{1 + N(e)^2} \dots \dots \dots 3.1$$

Where,

n = sample size

N = sample population

e = error term

$$n = \frac{113853}{1 + 113853(0.05)^2}$$

$$n = 398.5996$$

$$n = 399$$

The sample size is 399.

Primary data was used for this study. The primary data was obtained from the questionnaire. The questionnaire was administered to Ogbomoso North residents without any preferential treatment as well as NHIS accredited hospitals across Ogbomoso town. This division is necessary because the subject of this research which is based on the evaluative investigations on Public Health Financing

and National Health Insurance Scheme (NHIS) policy requires a direct comparison of the responses of both the accredited hospitals and the residents. The descriptive statistics employed were chart, percentage frequency while the inferential statistics employed were; chi-square, multiple regression.

Multiple regression analysis was employed for the work. The model specification for the study is

$$\text{NHIS adoption} = (\text{Income} * \text{occupation} * \text{education} * \text{religion})$$

$$NA = k + b_1I + b_2OC + b_3 E + b_4 R$$

Where;

$$NA \text{ is NHIS adoption} = (\text{Income} * \text{occupation} * \text{education} * \text{religion})$$

K is constant

I is Income

OC is occupation

E is education

R is religion

B₁-b₄ is coefficient of explaining variables

RESULT AND DISCUSSION

Chi-square test was used to examine the public health financing on NHIS and presented in the table below. The chi-square value was 14.000 while the critical p-value was 0.007 which was lower than the 0.05 level of significant. Furthermore the phi and Cramer's V value were both statistically significant at 0.05 significant level. It was thus inferred that public health financing had statistically significant effect on NHIS.

Chi-Square Tests of Public Health Financing and NHIS

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.000(a)	4	.007
Likelihood Ratio	15.106	4	.004
Linear-by-Linear Association	6.000	1	.014
N of Valid Cases	7		

Symmetric Measures of Public Health Financing and NHIS

		Value	Approx. Sig.
Nominal by Nominal	Phi	1.414	.007
	Cramer's V	1.000	.007
N of Valid Cases		7	

Source; Researcher's computation (2018)

To evaluate the effect of socio-cultural character education, income, religion and sex on NHIS adoption, multiple regression analysis was employed. The R-Square obtained was 0.624 which implied that the extent to which the social-cultural character of the respondents explained the variation in the dependent variable was NHIS adoption was 62 percent. Furthermore, the multiple correlation coefficient of the independent variables

was 0.7.

The F-ratio obtained was 15.344 and the critical p-value was 0.000 which is lower than 0.05 (note: values below 0.05 of stSS sh v which implied that the combine effect of the independent variables on the dependent variable was statistically significant at 0.05 significant level. Thus, it was inferred that adoption of NHIS has effect on the socio-cultural character.

Model Summary of the Effect of Socio-Cultural Character on NHIS Adoption

Mode	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.790(a)	.624	.583	.70145

ANOVA of the Effect of Socio-Cultural Character on NHIS Adoption

Mode		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	30.200	4	7.550	15.344	.000(a)
	Residual	18.205	37	.492		
	Total	48.405	41			

Coefficients of the Effect of Socio-Cultural Character on NHIS Adoption

Mode	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	B	Std. Error	Beta	Std. Error		
(Constant)	-.408	.981			-.415	.680
Education	.354	.173	.219		2.044	.048
Income	.731	.160	.498		4.577	.000
Religion	-.020	.195	-.011		-.102	.919
Sex	-.914	.260	-.374		-3.507	.001

Source; Researcher’s computation (2018)

CONCLUSION AND RECOMMENDATIONS

Based on the analysis and findings of the study, it was concluded that NHIS don’t settle their patient medical bill promptly and the patronage of health facility centers by NHIS patient was minimal, while public health financing had effect on NHIS. it was established that adoption of NHIS hinged on the socio-cultural character.

Thus, it was recommended that government should ensure prompt payment of NHIS patients’ medical bills to encourage health facilities providers. Also, government should increase the awareness of NHIS so that larger population can benefit from it. Likewise, government should provide endowment fund for NHIS

to invest in other business oriented financial body so as to generate additional income for NHIS which will in turn reduce financial implication of registering for NHIS in other words government should help to increasing internally generated revenue.

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APPENDIX

Socio Demographic Character of Respondents

Variable	Measure	Frequency	Percent
Sex	Male	279	73.8
	Female	99	26.2
	Total	378	100.0
Age	21-40	16	4.2
	41-60	154	40.7
	61 And Above	208	55.0
	Total	378	100.0
Education	SSCE	20	5.3
	OND/NCE	45	11.9
	HND/B.Sc	128	33.9
	Post Graduate	185	48.9
	Total	378	100.0
Occupation	Civil Servant	306	81.0
	Trader	41	10.8
	Artisan	18	4.8
	Unemployed	13	3.4
	Total	378	100.0
Religion	Christianity	252	66.7
	Islam	108	28.6
	Others	18	4.8
	Total	378	100.0

Source; Field survey (2018)