APPRAISAL OF THE EFFECTIVENESS OF PUBLIC-PRIVATE PARTNERSHIP IN HEALTH CARE DELIVERY IN FEDERAL INSTITUTIONS IN ENUGU STATE

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ABSTRACT

This study appraised the effectiveness of Public-Private Partnership (PPP) in health care delivery in Federal Institutions in Enugu State. Particularly, the study investigated the extent of awareness of Formal Sector Social Health Insurance Programmes (FSSHIP) among federal workers in Federal institutions in Enugu State, extent of enrollees' satisfaction with the FSSHIP in Federal institutions in Enugu State, and the factor(s) responsible for enrollees' utilization pattern of health care services under FSSHIP in Federal institutions in Enugu State, Nigeria. The study captured a total sample of 357 Federal workers in the State while descriptive survey research design was adopted. Method of data collection was direct-served questionnaire while analytical techniques employed were descriptive statistics (percentages/proportions, mean, standard deviation and rank statistics), student's t-test and exploratory Principal Component Analysis (EPCA). Findings uncovered an infinitesimally low level of awareness of Formal Sector Social Health Insurance Programmes (FSSHIP) among Federal workers in Federal institutions in Enugu State (43.9%; t=*

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1.0 INTRODUCTION

In 2005, the World Health Organization (WHO) report shows that Nigeria ranked 197th out of 200 nations with life expectancy of 48 years for males and 50 years for females (WHO, 2005). The WHO report stated that Nigeria accounts for 10% of global maternal mortality figure with 59,000 women dying annually from pregnancy and child birth. They added that for every maternal death, 30 others suffer long term disabilities, while 40% (about 800,000) of global obstetric fistulas occur in Nigeria. The frightening report described the health situation in Nigeria as being so deplorable because only 39% of births are delivered by skilled health professionals. It also stated that the risk of a woman dying from child birth is 1 in 18 in Nigeria compared to 1 in 61 for all developing countries, and 1 in 800 in developed countries, adding that only 23% of children (21 – 23 months) receive full course of immunization against childhood killer

diseases. In order to reduce death toll in child and maternal mortality rate in Nigeria, NHIS was introduced. Although generally, reducing child and maternal mortality rate are part of the Millennium Development Goals (MDGs) which the Nigeria government is committed to. It was observed that unless there is a quick intervention, this MDGs target to reduce death toll of children under the age five by two-thirds between 2000 and 2015, that is, from 207 in 2000 to 67 by 2015; and 75% decline in maternal mortality rate by 2015, that is, from 704 in 2000 to about 176 in 2015might not be achieved; hence, emergence of National Health Insurance Scheme (NHIS).

NHIS was officially launched on 6th June, 2005 under Act 35 of 1999 by the Federal Government of Nigeria to improve the health of all Nigerians at an affordable cost given the general poor state of the nation's health services and the excessive dependence and pressure on government owned health facilities. With the dwindling funding of healthcare in the face of rising cost, the scheme was set up to facilitate fair financing of health care costs through pooling and judicious utilization of financial risk protection. This is in addition to the provision of regulation oversight on Health Maintenance Organizations (HMOS) and Health Care Providers (HCPs).

Health Maintenance Organization (HMOS) purchase care on behalf of the National Health Insurance Scheme (NHIS). They serve as agents to the NHIS and therefore cover both Public and Organized Private Sector. The FSSHIP as a Health Maintenance Organization (HMO) regulates the operations and implementation of the rules of engagement under NHIS, to ensure that Federal Civil Servants benefits from the scheme; thereby working in group to combat the rising deplorable healthcare situation in Nigeria. This collaboration of the government with private sector (private companies or institutions, religious or faith-based organizations, Non-Governmental Organizations (NGOs) in the development and funding of health care facilities and institutions) was to improve health care delivery and welfare services for a wider range of health problems. They equally share risks, responsibility and reward.

These emerging partnerships have tackled a range of healthcare system needs, from construction of facilities, to provision of medical equipment or supplies, and to delivery of healthcare services. They have expanded in terms of the number of countries where they are used and in terms of the number of sectors and projects funded, and have developed various programmes to ensure that every Nigerian has access to good healthcare services. Although, the National Health Insurance Scheme (NHIS) is saddled with the responsibility of accreditation of the Health Maintenance Organizations (HMOs) and the Health Care Providers (HCPs), as well as ensuring compliance with the rules of engagement by them. Sometimes, it does not have the sufficient power to enforce these which therefore undermines its role as an effective regulator of health insurance. These could however, make the insured dissatisfied with the scheme and result in poor utilization of services rendered, seeking for healthcare in alternative places and consequent increase in out-of-pocket expenditures.

Moreso, the Formal Sector Social Health Insurance Programmes (FSSHIP) is generally faced with various challenges, among which are poor public perception of the scheme, cultural and religious practices, corruption, infrastructural challenge, inadequate financing, and excessive bureaucratization of the administrative process. In a wider view, there is a declining resource allocation to Nigerian health sector, inefficiency and inequality in the distribution of available resources, emergence of new diseases including HIV/AIDS pandemic, Ebola, Coronavirus, Lassa fever and etcetera, persistence of old diseases, increasing costs and the breakdown in the public health facilities, amongst others. Also, the National health management information system is weak as a result of no integrated system for disease surveillance, prevention and

management. Hence, there is high level of mortality and morbidity, high rates of absenteeism among medical doctors, especially in rural areas. In addition to the fact that the healthcare services are yet to be provided to those enrolled in the scheme effectively and efficiently, there are equally unsatisfactory experiences of enrollees in the scheme which is brought about by inadequate drug supplies, poor prescriptions of drugs, poor attitudinal disposition of some health workers, poor registration services, poor referral system and delays in receiving required services.

Moreover, there is inadequate and ineffective awareness campaign. For instance, literature shows that the current coverage is below 20% of the intended population. More so, users have complained about how some healthcare providers charge extra fees for certain services as these are not covered under the benefit package. Thus, provision of qualitative, accessible and affordable healthcare has remained a serious problem. In addition, although evidence from countries that have institutionalized health insurance programme indicates positive impact on the health care system, there is paucity of empirical evidence on whether Formal Sector Social Health Insurance Programmes (FSSHIP) as a PPP model has led to better healthcare delivery among the workers in Enugu state of Nigeria. More than ten years since the commencement of Formal Sector Social Health Insurance Programme, opinion is still divergent among Nigerians on the effectiveness of the scheme in addressing the health problems of workers in the state and country at large. Against this background, the study appraises the effectiveness of public private partnership with a view to assessing the extent to which Formal Sector Social Health Insurance Programmes (FSSHIP) has achieved effective health care delivery in Enugu State, specifically among the Federal Civil Servants in the selected federal Ministries, Departments and Agencies (MDAs) in the state.

1.1 Objectives of the Study

The study has the main thrust of appraising the effectiveness of public-private partnership in health care delivery in Federal institutions in Enugu State. The specific objectives are to:

1) Assess the extent of awareness of FSSHIP among the federal workers in Federal institutions in Enugu State, Nigeria.
2) Determine the extent of enrollees' satisfaction with the FSSHIP in Federal institutions in Enugu State, Nigeria.
3) Examine the factor(s) responsible for enrollees' utilization pattern of health care services under FSSHIP in Federal institutions in Enugu State, Nigeria.

1.2 Research Questions

1) What is the extent of awareness of FSSHIP among federal workers in Federal institutions in Enugu State, Nigeria?
2) What is the extent of enrollees' satisfaction with the FSSHIP in Federal institutions in Enugu State, Nigeria?
3) What are the factor(s) responsible for enrollees' utilization pattern of health care services under FSSHIP in Federal institutions in Enugu State, Nigeria?

1.3 Hypotheses

1) The level of awareness of FSSHIP is not significant among the federal workers in Federal institutions in Enugu State Nigeria.

2) There is no high satisfaction of FSSHIP by enrollees of federal institutions in Enugu State, Nigeria.
3) Affordability of FSSHIP did not bring about positive enrollees utilization pattern of FSSHIP services in Federal institutions in Enugu State.

2.0 REVIEW OF RELATED LITERATURE

2.1 Conceptual Issues

2.1.1 Public-Private Partnership and Its Emergence in Healthcare System in Nigeria

In Nigeria, the introduction of PPP into the healthcare system was made possible through the National Policy on Public-Private Partnership for Health adopted by the Federal Government in 2005. The policy was introduced as a reform to address the deplorable national health profile as evidenced by poor infant and maternal mortality rates, and low life expectancy (Nigeria Demographic Health Survey, 2003). By definition, the Public-Private Partnership (PPP) is generally seen as collaboration between the public and private sector organizations, where there is pooling together of resources which can be financial, human, technical, or information from public and private sources to achieve a commonly agreed social goal. This collaboration, according to Public-Private Infrastructure Advisory Facility (2011) can lead to higher operating efficiency, better service quality and reliability, more cost-efficient use of public money on other public services, better value for money, transfer of some of the risks to the private sector and transparency. In the work of Asghari (2019), Public-Private Partnership (PPP), is a contract between a governmental body and a private entity, with the goal of providing some public benefit, either an asset or a service. Nwankwo (2016) opines that PPP is a contractual relationship that involves the public and the private sector for the purpose of delivering facilities and/or operation of service traditionally provided by the public sector. It provides the private sector partner the opportunity to participate in the design, financing, construction, ownership and/or operation of public infrastructure. Ugwu (2012) laid that PPP can enhance access to universal healthcare and improve efficiency in healthcare areas such as financing, infrastructure development, management and operations, capacity building and training, IT infrastructure, and materials.

Also, the public-private partnership initiative can be explained as a financing strategy or gateway that involves the employment or mobilization of private sector capital to put up health care infrastructure and services to improve public health activities/services, or the management of public sector health resources (Asogwa and Odoziobodo, 2016). In other words, the Public-Private Partnership is a means to bring together the public and private sector for the common goal of providing health services and infrastructure, thereby improving the health of the population based on mutually agreeable roles and principles. However, the PPPs are essential and effective model for achieving the sector goals through various programmes (Hellowell, 2019). World Bank (2006) submits that Public-Private Partnership in Healthcare (PPPH) can lead to reduced government spending and greater efficiency in healthcare management. Stressing that healthcare projects partnering can also be particularly valuable as a method of leveraging technical or management expertise, and facilitating technology transfer, all of which can lead to quality improvements, and reduction or better allocation of project risks. Raman and Bjorkman (2009) recognized that PPPH as a collaborative relationship between the public and private sector for providing health services and infrastructure are used to build and operate hospital, schools, prisons, roads, bridges and tunnels, light rail networks, air traffic control systems, and water and sanitation plants.

2.1.2 National Health Insurance Scheme (NHIS)

The National Health Insurance Scheme (NHIS) in Nigeria was launched in 2005under Act 35 of 1999 Constitution of the Federal Government of Nigeria. It was established in efforts to achieve universal coverage with financial risk protection mechanisms by improving the health of the people at an affordable cost. However, six years after the launch of the programme, only 4% of the population (mainly federal government employees), are covered by health insurance and this is mainly through the Formal Sector Social Health Insurance Programme (FSSHIP)of the NHIS. In order to improve access to quality health care services and health status of the citizens, the National Health Insurance Scheme (NHIS) provided sustainable alternative source of funding to health care services (NHIS, 2015). Although, as at then, only three out of the thirty-six states in Nigeria – Bauchi (2008), Cross River State (2007) and Enugu (2010) - had adopted the programme, suggesting the existence of constraints to adoption which need to be identified and addressed.

The NHIS is a public-private-partnership between the National Health Insurance Scheme (NHIS) which is a body set up by Decree 35, of 1999 now Act 35 operating as Public Private Partnership and directed at providing accessible, affordable and qualitative healthcare for all Nigerians, the Health Maintenance Organizations (HMOs) and other health care providers (private and public) (Adewole and Osungbade, 2016). In order to ensure that every Nigerian has access to good healthcare services, the National Health Insurance Scheme developed various programmes to cover formal sector, informal sector workers and the vulnerable groups. The Formal Sector Social Health Insurance Programmes (FSSHIP) consists of Public Sector (Federal, States and Local Governments), Organized Private Sector (OPS), Armed Forces, Police and Other Uniformed Services. The Informal Sector Social Health Insurance Programmes consists of Community Based Social Health Insurance Programmes and Voluntary contributors Social Health Insurance Programmes, while Vulnerable Group Social Health Insurance Programme consists of Physically Challenged Persons, Prisons Inmates, Children Under Five, Refugees, Victims of Human Trafficking, Internally Displaced Persons and Immigrants Social Health Insurance Programme and Pregnant Women. The scheme also has a programme for Students of Tertiary Institution known as Students of Tertiary Institution Social Health Insurance Programmes (STISHIP). Most of all, the current health insurance enrollees in Nigeria are on the Formal Sector Social Health Insurance Programme (FSSHIP) and are employees of the Federal Government and their dependants (NHIS, 2015).

2.1.3 Formal Sector Social Health Insurance Programme (FSSHIP)

The Formal Sector Social Health Insurance Programme (FSSHIP) is a social health security system in which the health care of employees in the Formal Sector is paid for from funds created by pooling the contributions of employees and employers. It consists of Public Sector, Organized Private Sector, and Armed Forces, Police and other Uniformed Services. The Nigerian Formal Sector Social Health Insurance Programme (FSSHIP) is under the National Health Insurance scheme (NHIS), which is designed to cover employees of the public sector and the organised private sector. The roles and responsibilities of Healthcare facility under the Formal Sector Social Health Insurance Programme (FSSHIP) include: to secure appropriate accreditation with NHIS, to provide services as agreed with HMOs in the benefit package, to comply with NHIS operational guidelines, to ensure enrollees' satisfaction, to limit delivery of services to level of accreditation, among others.

Consequently, the Health Maintenance Organization (HMO) under the Formal Sector Social Health

Insurance Programme (FSSHIP) are responsible for effecting timely payments to healthcare facilities, ensuring effective processing of claims (Secondary Services), carrying out continuous quality assurance of healthcare services, ensuring timely approval of referrals and undertake necessary follow up to complete referrals, carrying out continuous sensitization of enrollees, collecting appropriate contributions and make necessary payments to the appropriate pools in a timely manner, effecting necessary returns to NHIS in line with the operational guidelines, and complying with other provisions as spelt out in the operational guidelines.

In addition, the NHIS under FSSHIP are charged with the responsibility of setting guidelines and standards for the Programme, accrediting Healthcare Facilities and HMOs, carrying out continuous quality assurance to ensure qualitative healthcare services and programme management, technical support, carrying out Actuary Review to determine contribution rates to be paid by Government and payment rates to service providers, sensitization and mobilization, health education, liaison with owners of health facilities on the use of their facilities and retention of funds by the facilities, and other things to ensure the viability of the programme.

2.2 Theoretical Framework

This study is underpinned to ***Social Health Insurance (SHI) theory*** which was propounded by Arrow in 1963, and further expanded by Rothschild and Stiglitz in 1976. As argued in the theory, each year a proportion of people suffer from serious illness and disability which can lead to high large medical expenses that most people cannot afford, but faced with life and death decisions. For instance, William and Shaw (2007) argue that people will tend to seek expensive medical services even when the costs may bankrupt patients and their families. As a result of this, those that are risk averse would want to be insured against such risks. Similarly, most people may not go for insurance because of their belief that they would not fall sick or they simply ignore the risks of potentially impoverishing their families should they experience catastrophic financial loss and this could create serious social problems. Furthermore, William and Shaw (2007) believe that if health insurance is voluntary, young, healthy people will not want to pool their low health risk with high-risk people such as the elderly and the chronically ill. This type of behaviour leads to adverse selection, a critical problem of voluntary group insurance. As a result, the poor and low-income households who cannot afford the insurance premiums have to be subsidized. For all these reasons, nations that wish to implement universal health insurance must look beyond a purely voluntary system. SHI pools low- and high-risk people, avoids adverse selection and people's failure to address risks, and allows enrollees to contribute based on their ability to pay.

2.3 Empirical Review

Abiodun, Peter, Eyo and Chuku (2016) assessed the awareness of National Health Insurance Scheme (NHIS) and quality of health care services among Civil Servants in Cross River State, Nigeria. The study employed simple and systematic random sampling technique in administering 561 questionnaires on civil servants. The generated data were statistically tested at the 0.05 level of significant using Pearson Product Moment Correlation analytical procedure. Results from the study showed that 92.3% of the respondents were aware of the existence of NHIS program. 63.8% of Civil Servants in Cross River State had the knowledge that NHIS is designed to protect their families from financial hardship arising from huge medical bills while 71.5% of the respondents were aware that NHIS will improve quality of health care in Nigeria. Furthermore, the study

revealed that civil servants awareness of NHIS was significantly related to the quality of health care service rendered to them. The study therefore concluded that Civil servants in Cross River State have comprehensive knowledge of the National Health Insurance Scheme package as a desirable tool for satisfying their health needs.

An empirical investigation carried out by Yahaya (2016) assessed student's satisfaction and quality of patient care under the Nigerian Tertiary Institutions Social Health Insurance Programme (TISHIP). Systematic random sampling technique was employed to select a sample of 68 enrollees of the health services of the Institute of Administration, Ahmadu Bello University, Kongo campus Zaria. Using domains such as warm reception, patient waiting time, provider's attitude towards the patients and the general cleanliness of the hospital for patients care to measure the level of satisfaction, the result of the study showed that the overall level of satisfaction with the quality of services provided was very good with patient-provider relationship rated highest and waiting time rated lowest.

Abdul-Hakeem, Temitope, Oluwagbemiga, Ganiyat, Olufunke, and Abdulkareem (2019) assessed the knowledge and utilisation of NHIS among adult patients who attended a tertiary health facility in Lagos state, South-Western Nigeria. A descriptive cross-sectional research design was adopted while analytical employed were Chi-square test, Fisher's exact test and student's t-test. Out of 500 self-administered questionnaires distributed, 487 were retrieved. Finding revealed that 80.7% of the respondents (393/487) had poor knowledge of NHIS, only12.3% of the respondents had registered with the NHIS, and 43.8% of respondents who had not registered with NHIS claimed they do not know where to register. Also, utilization of NHIS was found to be associated with age, marital status, employment status of the patients. More so, the study established that most of the people (96.0%) who have utilized NHIS were satisfied with NHIS services. In conclusion, majority of the respondents had poor knowledge of NHIS and also majority of those who had registered were satisfied with the scheme.

An empirical investigation was carried out by Aniwada, Ndu, Okoye, Okoye, Okpala and Okpala (2019) to ascertain the utilization of social health insurance programme in tertiary institutions with evidence from undergraduate students in Enugu State, Nigeria. The specific objectives of the study extended to finding out the level of awareness and utilization of tertiary institutions social health insurance programme (TISHIP) in Nigeria. Undergraduate students of Enugu State University of Science and Technology were the study target while analytical techniques employed were Chi Square test and Binary logistic regression. Findings uncovered that 137(44.8%) were aware of TISHIP with major source of awareness being their friends/relatives 82(59.8%). Also, among the study participants, 60% had positive attitude to TISHIP. However, it was established that the key factors influencing TISHIP includes; long waiting time 195(63.7%) and poor attitude of the medical staff 186(60.8%). Among other findings, the study concluded that knowledge and utilization of TISHIP was poor, although majority had positive attitude on TISHIP.

Sadeghi, Barati, Bastani, Daneshjafari and Etemadian (2020) investigated the feasibility of implementing public–private partnership (PPP) in the development of hospital services and optimizing resource allocation in Iran. Descriptive statistics was used for data analysis. Result revealed that the participants from the public sector had a significantly higher level of acquaintance with the concept of PPP and significantly more inclination to participate in such projects. Also, result of mean scores of the determinants of implementation of PPP from the viewpoint of public and private sectors showed a significant

difference in their views in terms of financial-capital and social-cultural dimensions. In conclusion, the requirements for implementation of public–private partnerships for hospital services are not properly met. However, the study suggested that for any progress to be made in this regard, Iranian authorities and policymakers should devise a new platform for attracting private participation and improving hospitals' readiness to engage in PPP projects

3.0 METHODOLOGY

3.1 Population and Area of Study

This study was carried out in Enugu State, Nigeria. Participants in the research consisted of federal workers at Federal institutions across Ministries, Departments and Agencies (MDAs) in Enugu state, Nigeria, with a total population of 936based on records. As the population is large, the participants were reduced to a researchable size using the Cochran (1963) formula specified thus:

$$n = \frac{Z^2Npq}{Ne^2+Z^2pq} \quad - - - - - - - \quad (3.1)$$

where, n = the required sample size, N = the population size, P and q = the population proportions, where p = 0.6 and q = 0.4, Z = the value that specifies the level of confidence, which is 95% and is equal to 1.96, e = error margin. Such that substituting into the formula, the sample size is obtained thus:

$$n = \frac{(1.96)^2\times936\times0.6\times0.4}{936\times(0.04)^2+(1.96)^2\times0.6\times0.4} \cong 357 \text{ Federal Workers}$$

However, allocation of this sample size to the different ministries was achieved by using the Bowley's proportional allocation formula as provided below:

$$n_h = \frac{nN_h}{N} \quad - - - - - - - \quad (3.2)$$

Where: nh = the number of units allocated to each ministry, Nh = the number of staff in each ministry in the state, n = the total sample size, N = the actual or total population.

In line with the sample size, a total of 357 copies of the questionnaire were printed and administered directly to the participants. Out of which, three hundred and twenty-five (325) copies representing about 90.3% were correctly filled and returned for analysis. Reliability of the research instrument was ascertained using the "test-retest" method. The computed correlation coefficient was 0.87, indicating a strong positive relation between the two test-retest exercises.

3.2 Data Analysis

A well-structured questionnaire designed for the study was used to obtain numerical information needed for this empirical investigation. 5-point likert scale was used to generate data from the questionnaire. In line with the research questions, the following responses with attached weights: Very Satisfied (VS) = 5, Fairly Satisfied (FS) = 4, Neither satisfied nor dissatisfied (N) = 3, Slightly Dissatisfied (SD) = 2, Very Dissatisfied (VD); Strongly Agree (SA) = 5, Agree (A) = 4, Undecided (U) = 3, Disagree (D) = 2 and

Strongly Disagree (SD) = 1. The data analysis covered descriptive and inferential statistics. The descriptive evaluation captured weighted mean and standard deviations. The decision rule was to accept any item that has a mean score of 3.00 and above. However, one sample t-test, and exploratory Principal Component (PC) method of factor analysis were utilized in testing the research hypotheses. These analyses were aided by the use of Statistical Package for Social Sciences (SPSS) for windows, version 25.0.

The operational equation of the factor analysis is given by:

$$\begin{aligned} P_1 &= a_{11}X_1 + a_{12}X_2 + \cdots + a_{1k}X_k \\ P_2 &= a_{21}X_1 + a_{22}X_2 + \cdots + a_{1k}X_k \\ &\vdots \quad \vdots \quad \vdots \quad \vdots \quad \vdots \\ P_k &= a_{k1}X_1 + a_{k2}X_2 + \cdots + a_{kk}X_k \end{aligned} \quad - \quad - \quad - \quad (3.3)$$

From equation 3.3, the X's represent the component scores of P_i's called the principal components. The a_{ij}'s are the factor loadings worked out in such a way that the extracted components satisfy two conditions: (i) the principal component are uncorrelated (orthogonal); and (ii) the first principal component (P_1) has the maximum variance, the second principal component (P_2) has the next maximum variance and so on. The confidence level for the t-test inferential statistics was 95% which is same as 0.05 level of significance, while the decision rule for the t-test was to reject the null hypothesis for estimated probability value (p-value) less than or equal to 0.05. However, for the Principal component analysis, the decision rule was to extract factor(s) with highest component score.

4.0 RESULTS AND DISCUSSION

Hypothesis One

H_o1: The level of awareness of FSSHIP is not significantly high among the Federal workers in Federal institutions in Enugu State, Nigeria.

Table 1: Level of awareness of FSSHIP among Federal workers in Federal institutions in Enugu State, Nigeria

Level of Knowledge	Very High	High	Moderate	Low	Very Low
Percentage	13.3%	10.0%	20.6%	31.7%	24.4%

***Source**: Field Survey, 2021*

As shown in the result in table 1 above, about 13.3% of the federal workers have very high knowledge of FSSHIP in the area; about 10% have high knowledge; about 20.6% and 31.7% respectively have moderate and low knowledge about FSSHIP services while about 24.4% have very low knowledge about FSSHIP services in the State. However, the researcher deduced (with a cluster mean value of 2.56 < 3.00

(likert average) and standard deviation of1.114 < 1.581 (likert standard deviation) that generally, there is low level of awareness of FSSHIP services in the area (43.9%).

Using the one-sample t-test approach, $t^* = \frac{\bar{x} - \mu_o}{\frac{s}{\sqrt{n}}}$ with (n-1) degree of freedom. Where, $\bar{x}$is thesample mean, s = sample standard deviation, and n = sample size. The computed t-statistic (t*) is−1.73 with p-value = 0.14>0.05, which confirmed that there is low level of awareness of FSSHIP services among Federal workers in Federal institutions in Enugu State, Nigeria. The null hypothesis is therefore upheld.

Hypothesis Two

H_o2: The level of enrolees' satisfaction with FSSHIP in Federal institutions in Enugu State, Nigeria, is not significantly high.

Table 2 Level of enrollees' satisfaction with the FSSHIP in Federal institutions in Enugu State, Nigeria

Level of satisfaction	Very Satisfied	Fairly Satisfied	Neither satisfied nor dissatisfied	Slightly Dissatisfied	Very Dissatisfied
Percentage Response	21.0%	44.9%	24.6%	21.4%	8.1%

***Source**: Field Survey, 2021*

From the descriptive result in table 2 above,21.0% of the enrollees are very satisfied with the FSSHIP services, 44.9% are fairly satisfied, 24.6% are neither satisfied nor dissatisfied, 21.4% are slightly satisfied, while 8.1% are very dissatisfied. In over all, the mean response was 3.41>3.00 with associated standard deviation of 1.142<1.581. It therefore shows that the enrollees' satisfaction with FSSHIP in the area is positive. With the t-statistic value of 4.26 as obtained from the t-statistics computation and associated probability value of 0.0080<0.05, it was deduced that the level of enrollees' satisfaction with FSSHIP in Federal institutions in Enugu State, Nigeria, is significantly high. Hence, the null hypothesis is rejected.

Hypothesis Three

H_o3: Affordability of FSSHIP did not bring about positive enrollees utilization pattern of FSSHIP services in Federal institutions in Enugu State, Nigeria.

Table 3 Component Scores Matrix (Varimax with Kaiser Normalization method)

	Component Scores		Communalities
	1	2	
Health care services under FSSHIP are cheaper compared to others	-.054	.383	.850
NHISAccredited health care facilities have quality drugs	.095	.055	.159
Services under FSSHIP are fast and affordable	-.167	**.444**	.803
NHISaccredited health care facilities have specialist doctors to attend to patients	**.406**	-.141	.885

Accredited health care facilities are closer to me than other health facilities	-.033	.360	.812
Accredited health care have good diagnostic equipments	.362	-.071	.857
I receive special attention from healthcare provider	.352	-.081	.774
Eigenvalue	***2.696***	***2.444***	
%age of Variance	***38.509***	***34.912***	
Cumulative %age	***38.509***	***73.421***	

KMO stat. = 0.641, Bartlett's Chi-Sq. = 2385.431, Df = 21, P=0.000<0.05

Source: Author's SPSS Result, 2021

The Kaiser-Meyer-Olkin(KMO) test of sample adequacy as presented in the result in table 3 above (KMO stat. = 64.1%>50.0%) shows that the sample is adequate. However, the Bartlett's Chi-Sq. estimate of 2385.431 with associated p-value of 0.000<0.05 confirmed that the sample data is spherically significant.

From the principal component analysis, it was ascertained that the key factors responsible for enrollees' utilization pattern of FSSHIP services in Federal institutions in Enugu State Nigeria are: NHIS accredited health care facilities have specialist doctors to attend to patients, and Services under FSSHIP are fast and affordable. The null hypothesis is therefore rejected. Particularly, the variance decomposition matrix indicates that the two factors extracted explained about 73.42% of the total variance in the utilization patterns of healthcare services under FSSHIP in Enugu State Nigeria. However, the factor that NHIS accredited health care facilities have specialist doctors to attend to patients accounted for about 38.51%, while the factor that Services under FSSHIP are fast explained about 34.91%. The positive and negative values of the component scores showed that they have both magnitude and direction.

4.1 Discussion

Nigerians are yet to appreciate the essence of health insurance. Religious and cultural factors further worsen this negative perception. Culturally, preparing for unforeseen unfortunate events is seen as an invitation to ill luck or ill health among people living in the urban areas and among the very educated ones. Enrollees' level of awareness of the scheme's objectives and operations is poor and they seem not to be aware of their rights under the scheme. These factors among others excluded millions from having access to quality health care services with resultant and persistent poor health indices and development. The low level of awareness of FSSHIP among the federal workers in the State could be as a result of poor sensitization of the programme by the HMOs and the inability of HMOs to market the approved health plans to the enrollees. As a result, if HMOs could efficiently discharge their responsibilities by making affordable healthcare facilities, more people would enroll into the FSSHIP. This similar issue was spotted out in the study carried out by Ndie (2013) among civil servants in Enugu and Abakaliki. However, more sensitization and public awareness campaign on the benefits and utilization of NHIS is required to enable people make it a desirable tool for satisfying their health needs.

Also, the enrollees were satisfied with the processes of NHIS enrolment/registration, skills and experiences

of the doctors that attend to patients, quality of drugs received, promptness in attending to patients by medical staff at the accredited health care facility, friendliness and courtesy of medical staff to NHIS enrollees and seldom with the quality of laboratory services. This is because, the waiting time is low and patient-provider relationship is good. Consequently, NHIS accredited health care facilities have specialist doctors to attend to patients at fast and affordable cost which the work of Abdul-Hakeem, Temitope, Oluwagbemiga, Ganiyat, Olufunke, and Abdulkareem (2019) has earlier identified. Equally, Aniwada, Ndu, Okoye, Okoye, Okpala and Okpala (2019) carried out an empirical investigation on similar study among undergraduate students in Enugu State supports, identifying low level of awareness of social health insurance programme and poor utilization of Tertiary Institutions Social Health Insurance Programme (TISHIP) in Nigeria.

4.2 CONCLUSION AND RECOMMENDATIONS

This paper had empirically appraised the effectiveness of Public-Private Partnership (PPP) in health care delivery in Federal Institutions in Enugu State, Nigeria. Statistical evidence revealed that awareness level among the workers as to how the programme operates is low. The result also uncovered that the workers were satisfied with the scheme as a result of fast services under FSSHIP and availability of specialist doctors in the healthcare facility. Based on the findings, the study concluded that FSSHIP as a PPP model has not performed effectively in healthcare delivery among the federal workers in Enugu State, Nigeria. However, in other to achieve effectiveness in healthcare delivery through public-private partnership in Federal Institutions in Enugu State, the following recommendations were made:

i. Federal Government should work towards raising the level of awareness of Public-Private Partnership (PPP) scheme among the workers; by embarking on a massive and far-reaching enlightenment campaign to educate the workers and the populace at large on the scheme, the rights of an enrollee and the benefits therein to the majority of the citizens.
ii. There is the need for government to implement and sustain the current level of patient-provider relationships, patient-provider communication and hospital environment while effort should be made to address patient waiting time and hospital bureaucracy. Government needs to conduct assessment needs of the people and incorporate these various needs which are currently not in the NHIS health list. To achieve this, a body or an organization can be set up to monitor and receive complaints from the enrollees of the scheme.
iii. The federal government should increase the investment funds for the health sector especially towards healthcare infrastructure to ensure that accredited health facilities have better diagnostic equipments. They should put resources together and intensify effort to strengthen the capacity for the successful implementation and utilization of FSSHIP.

REFERENCES

Abdul-Hakeem, O. A., Temitope, L., Oluwagbemiga, O., & Ganiyat, K. O., Olufunke, I. O., &Abdulkareem, A. T. (2019). Knowledge and utilisation of national health insurance scheme among adult patients attending a tertiary health facility in Lagos State, South-Western Nigeria. *African Journal of Primary Health Care & Family Medicine, 11(1)*, 1-7.

Aniwada, E. C., Ndu, A. C., Okoye, C. J., Okoye, P. C., Okpala, A. C., & Okpala, C. V. (2019). Utilization of tertiary institutions social health insurance programme (TISHIP) among undergraduate students in Enugu State. *Nigerian Journal of Medicine: Journal of the National Association of Resident Doctors of Nigeria, 28(4)*, 413-422.

Anyaehie, U. S. B., Nwakoby, B. A. N., Chikwendu, C., Dim, C. C., Uguru, N., Oluka, C. P. I., & Ogugua, C. (2014). Constraints, challenges and prospects of public-private partnership in health-care delivery in a developing economy. *Annals of Medical and Health Sciences Research, 4(1)*, 61-66. DOI: 10.4103/2141-9248.126615.

Asghari, A. (2019). Public-private partnership pros & cons benefits and disadvantages of PPP contracts.https://www.linkedin.com/pulse/public-private-partnership-pros-cons-benefits-ppp-amirmehdi-asghari.

Asogwa, M. N. O. &Odoziobodo, S. I. (2016).Public private partnership in the provision of health services for the Millennium Development Goal s: The imperative need for optimizing the public-private mix. *European Scientific Journal, 12(29),* 175-191.

Baba, M. &Omotara, B. (2012). Nigeria's public health: Gains and challenges. http://www. peah.it/2012/09 /nigerias-public-health-gains-and-challenges/.

Doetinchem, O., Schramm, B. and Schmidt, J. (2006). The Benefits and Challenges of Social Health Insurance for Developing and Transitional Countries. In: Laaser, Ulrich; Radermacher, Ralf (Eds.), Financing Health Care – A Dialogue between South Eastern Europe and Germany. Series International Public Health, Vol. 18, Lage.

Dutta, A., Eddie, K., John, O., Gilbert, K., Ali, J. O., Muhammed, L. & Akin, O. (2009). *The PrivateHealth Sector in Nigeria – An Assessment of Its Workforce andService Provision*. Bethesda, MD: Health Systems 20/20 project, AbtAssociates Inc.

Federal Ministry of Health (2005). National Policy on Public-Private Partnership for Health in Nigeria, National Consultation Workshop on Public-Private Partnership in Nigeria, 30 March – 1st April, 2005.

Hellowell, M. (2019). Are public–private partnerships the future of healthcare delivery in sub-Saharan Africa? Lessons from Lesotho. *BMJ Glob. Health, 4*, 1-6.

Hirose, A. Yisa, I. O., Aminu, A., Afolabi, N., Olasunmbo, M., Oluka, G., Muhammad, K., & Hussein, J. (2018). Technical quality of delivery care in private- and public-sector health facilities in Enugu and Lagos States, Nigeria.*Health Policy and Planning, 33(5)*, 666-674. doi: 10.1093/heapol/ czy032.

McIntyre, D., Ranson, M. K., Aulakh, B. K. & Honda, A. (2013). Promoting universal financial protection: Evidence from seven low- and middle-income countries on factors facilitating or hindering progress. https://health-policy-systems.biomedcentral.com/track/pdf/10.1186/1478-4505-11-36.

Minett, C. (2012).Nigerian partnership for Transforming Health systems.www.google.com. Retrieved on 2/05/2021.

Mukasa, R., Mnyanyi, C., &Ngirwa, C. (2021). Effectiveness of the business environment in supporting the implementation of public-private partnership policies in Tanzania's education sector. *International Journal of Research and Innovation in Social Science (IJRISS), 5,* 393-400.

Nduhura, A., Nuwagaba, I., Settumba ,J. P., Molokwane, T. & Lukamba, M. T. (2020).Public Private Partnerships: Systematic review of availablemodels for improving health care services. *The 5th Annual International Conference on Public Administration and Development Alternatives 07-09 October 2020, Virtual Conference,* 669-682.https://www.researchgate.net/publication/346677813

Nwankwo, W. (2016). Evolving effective healthcare system through public private partnership .*International Journal of Engineering Research & Technology (IJERT), 5(12),* 456-470.

Odeyemi, A. O. (2014). Community-based health insurance programmes and the national health insurance scheme of Nigeria: challenges to uptake and integration. International Journal for Equity in Health, 13(20). http://www.equityhealthj.com/content/13/1/20.

Okolo, C. N., Nwankwor, C., Okoli, C., Obikeze, E., &Onwujekwe, O. (2019). The challenges of establishing universal health coverage in Enugu State, South East Nigeria. *Developing Country Studies, 9(4)*, 49-64.

Onwujekwe, O., Onoka, C., Uzochukwu, B., Okoli, C., Obikeze, E. &Eze, S. (2009). Is community-based health insurance an equitable strategy for paying for healthcare? Experiences from southeast Nigeria.*Health Policy, 92(1)*, 96–102.

Onyedibe, K.I., Goyit, M.G. &Nnadi, N. E. (2012). An evaluation of the National Health Insurance Scheme (NHIS) in Jos, a North-Central Nigerian City.*Global Advanced Research Journal of Microbiology, 1(1)*, 005-012.

Sadeghi, A., Barati, O., Bastani, P., Daneshjafari, D. &Etemadian, M. (2020).Fe services and optimizing resourceallocation in Iran. *Cost Eff.Resour.Alloc., 18(25),* 1-8.

Ugwu, A. O. (2012). Assessing the viability of public – private partnership (PPP) as an option for infrastructural development in Nigeria: A study of Enugu State 2007 – 2012.*Department of Public Administration and Local Government University of Nigeria, Nsukka,* 1-99.

Venkat, R.A. &Bjorkman, J. W .(2009).*Public Private Partnership in Health Care in India*: Lessons for Developing Countries. London.