



HEALTHCARE SYSTEM PERFORMANCE IN BAYELSA STATE, NIGERIA: A COMPREHENSIVE EVALUATION

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Abstract: Bayelsa State, Nigeria, healthcare delivery system health administration efficacy is examined. This research examined the effectiveness of Bayelsa State's health administration and delivery system. A questionnaire-based evaluative research approach was utilised to collect data from 300 participants. We investigated three hypotheses and three research topics. The data were analysed using weighted mean and standard deviation, percentages, and frequencies, and the hypotheses were tested using z-test statistics at 0.05. Patronage of government and commercial hospitals is high, but traditional healers and faith-based healing centres are low (mean ratings 2.33; 2.40; 2.30; 1.97). Also, health officials regularly educate the public about local healthcare services. Bayelsa's healthcare initiatives are very effective. $Z\text{-calculated} = 1.16 < z\text{-critical} = 1.96$ at 0.05 significance level. It was found that health administration improved Bayelsa State healthcare delivery. The report advises that health officials in each community should aggressively sensitise and conduct awareness campaigns to help rural Bayelsa State residents evaluate healthcare initiatives. For program supervision, monitoring, and evaluation, personnel must be actively sought and provided. Nigerian health authorities must prioritise rural health professional training. So rural health professionals won't move to cities. Finally, improving people's living situations above poverty level is essential to promoting healthy lives. Health education must be effective to eliminate infectious diseases like typhoid and malaria.

Keywords: Evaluation, Healthcare, Administration, Delivery System, Management of Resources.

1. Introduction

Nigeria's healthcare has suffered setbacks. The country has significant health care deficiencies despite its excellent position in Africa. State and local governments have failed to execute many of Nigeria's federal health care system changes (Timothy, Irinoye, Yunusa & Dalhatu, 2018). The Nigeria National Health Conference (2009) lists inadequate and deteriorating infrastructure, inequitable resource distribution, lack of coordination and service fragmentation, shortage of resources (including drug supplies), poor quality of care, and inaccessibility to care as symptoms of a weak health care system. The communiqué said that official roles were unclear, compounding the issue.

Eboh, Akpata, and Akintoye (2016) argue that the government should be responsible for ensuring a strong health administration and healthcare delivery system for her citizens, even though people pay for healthcare through health insurance or direct finance. Managing a nation's or state's health services is health administration.

Management and healthcare administration are needed to coordinate people, resources, and services throughout the industry. The doctor leads a team of clinical and non-clinical professionals who offer patient care. Clinical personnel include several types of healthcare professions. These include doctors, nurses, chemists, physiotherapists, lab scientists and technicians, anaesthesiologists, dental technologists and technicians, radiographers, occupational therapists, and others (Obansa & Akinagbe, 2016).

Anyone who works in a healthcare institution but does not have medical training is considered nonclinical personnel. They are well-versed in all facets of running a hospital, including biomedical engineering, building and equipment maintenance, catering, transportation, and security. Members of the accounting, secretarial, finance, and pension departments, as well as human resources managers, solicitors, and other legal professionals make up the administration and management team. Other than physicians, nurses, and other medical professionals, the hospital also employs tradespeople who are responsible for the building's security and physical layout. Tradespeople such as plumbers, carpenters, electricians, retail clerks, biomedical engineers, security guards, health aides (also referred to as manual handlers in certain countries), and ambulance drivers are included in this category. In addition, the hospital employs people who are responsible for the building's physical layout. Administrative knowledge is required for each of these categories of workers in order for them to do their tasks effectively.

Numerous variables influence the extent to which Nigeria's health system contributes to the expansion and improvement of the country's economy. The problem is compounded by a number of factors, including insufficient laboratory facilities, basic infrastructure and equipment shortages, poor human resource management, low compensation and motivation, unsustainable and unequal health care financing, extensive corruption, low government spending on health, high out-of-pocket health expenditures, and the lack of an integrated system for disease prevention, surveillance, and treatment (Obansa & Akinagbe, 2019). Examining the availability of primary health care services, particularly in rural regions, is one way to evaluate the progress that a country has achieved in terms of health care. This is especially true in rural areas.

Again, the Nigerian NHIS favours metropolitan regions when allocating healthcare services, leaving rural communities without medical care. It is also recognised that urban areas have more alternative medicine outlets and patent medications. Some alternatives are patent drugs. This worsens the lack of high-quality medical treatment and nearby replacements in rural regions. In the eighteen years after the program was formed, little progress has been achieved towards her stated goals. These goals include providing high-quality healthcare to all Nigerians, lowering healthcare costs, improving delivery, protecting families from large medical bills, limiting healthcare cost increases, ensuring that healthcare costs are fairly distributed among income groups, improving healthcare quality, and increasing private sector involvement in health. Competent Nigerian healthcare administrators and managers will support the government's ambitions. As the saying goes, "health is wealth," and Nigerians' health directly affects national security. Health care is vital to a nation's development, thus everyone should have access to it (Oyibocho, Irinoye & Sagua, 2014). Nigeria's healthcare system is flawed and not universal, thus this is not how it works. This alarming development requires a rethink of Bayelsa State's health administration and delivery system.

1.2 Statement of the Problem

The World Health Organisation (2010) states that, in addition to aesthetics, health infrastructure is generally accepted based on factors such as the availability of complementary technical and human resources, the efficiency of transport networks, the reliability of water and power supplies, and the preparedness of healthcare facilities. Most Nigerians are concerned about the quality of healthcare in their country.

Abdulraheem, Olapipo, and Amodu (2020) say healthcare systems should prioritise universal, affordable care. This has not happened in Nigeria, and it is unlikely to happen in the next decade. It is unfortunate that rural Nigerians are ignored more than urban Nigerians, even though basic health care facilities were created in both areas to promote equity and make medical treatment easier. In Nigeria, uneven and unequal health has caused infectious illnesses, poverty, and high mortality. The situation prompted these worries. The deteriorating healthcare system has contributed to the nation's life expectancy decline to 48 years for males and 50 years for women. Fasina, Wole-Alo, and Idowu (2016) found that men and women had a 48-year Healthy Life Expectancy (HALE). The World Health Organisation ranked Nigeria 197 out of 200 countries in 2005 due to its poor life expectancy and terrifying health crises caused by its limited national health budget. Due to these two variables. Besides a poor referral system, most basic health care facilities are rundown and lack essential equipment.

According to the Ministry of Health's strategic health development plan (2009–2012), communicable diseases cause most illness, disability, and death in Bayelsa State. According to the state's health indices, there are 114 fatalities per 1,000 live births, 200 maternal deaths per 1,000, and other illnesses. Due to their ability to address the situation, Bayelsans struggle to handle the high medical costs. It now includes health care efficiency and availability in addition to cost. This led to the Bayelsa State Health Service (Pondei, 2016).

Furthermore, the government has created health insurance policies that cover both public and private healthcare facilities, as well as PPH, in an effort to address the problem of providing healthcare services. On the other hand, according to Adeboya and Azuzu (2015), a sizeable portion of Bayesians continue to have rates of access to and use of health care that are insufficient. It is essential to conduct a reevaluation of the preparedness of health administrators to deliver services in order to make progress towards SDGs that are relevant to health. The administration of medical services and the provision of medical care in Bayelsa State are thus the primary focusses of this study.

1.3 Aim and Objectives of the Study

The aim of the study was to evaluate the effectiveness of Health Administration and Healthcare Delivery System in Bayelsa State, Nigeria. Specifically, the study sought to:

1. Ascertain the types of health care system practiced in Bayelsa State.
2. Assess the knowledge, practice and utilization of health programs in Bayelsa State.
3. Examine the effectiveness of health programs operating in Bayelsa State.

1.4 Hypotheses

At a significance level of 0.05, the following null hypotheses were developed and subjected to statistical analysis:

1. There is no significant difference in the mean scores of health officers and patients regarding types of health care system in Bayelsa State.
2. There is no significant difference in the mean scores of male and female respondents on the knowledge and practice of health programs in Bayelsa State.
3. There is no substantial variance on the mean scores of urban and rural dwellers on the effectiveness of health programs operating in Bayelsa State.

2. Review of Related Literature

Fundamentals of Healthcare Administration

The discipline of healthcare administration encompasses the management and leadership of healthcare organisations, including public health agencies, insurance corporations, hospitals, clinics, and nursing homes (Eclea Business School, 2023). The provision of healthcare services to communities and individuals is

overseen, planned, organised, directed, and controlled by healthcare administrators. In addition to ensuring that their services are of high quality, safe, and compliant, they are in charge of their organisations' financial, human, and material resources.

Healthcare Organizations: Healthcare administrators need to understand the structure, function, and culture of different types of healthcare organizations, such as acute care, long-term care, ambulatory care, home health care, and managed care. They also need to be aware of the external factors that affect their organizations, such as laws, regulations, policies, accreditation standards, and market forces.

Healthcare Management: Managerial skills, including planning ahead, communicating effectively, resolving conflicts, leading teams, motivating employees, and upholding ethical standards, are essential for healthcare administrators. They also need to use various tools and techniques to manage their operations, such as budgeting, accounting, marketing, human resources, information systems, and quality improvement.

Healthcare Technology and Information Strategies: In order to improve the efficiency and effectiveness of their organisations, healthcare administrators should use data and technology to their advantage. They should be well-versed in the many kinds of health data and information, as well as its sources and formats, including EHRs, CDSSs, telemedicine, and health information exchanges (HIEs). In addition, they should have the analytical and interpretive skills to use tools from fields like statistics, epidemiology, and health informatics to health data and information.

Challenges of Corruption in Healthcare Administration

The Scheme has high corruption and minimal funding. Due to corruption allegations, the Executive Secretary was fired, and the House Committee on Health of the National Assembly was investigating the "alleged rot in the implementation of the" in 2017, according to Punch Newspaper. Despite public and NHIS worker protests, the Executive Secretary has been summoned back to work. The House Committee was investigating how Health Maintenance Organisations contributed to the NHIS's inability to provide services. The Punch Newspaper claimed in 2017 that NHIS and Health Maintenance organisations had clashed over 23,000 phantom enrollees who have been receiving benefits. "Since HMOs are paid for services not rendered, they obviously make illicit gain from the enlistment of these ghost enrollees."

Healthcare Delivery System

A broad variety of entities, such as individuals, organisations, and programs, are included in the health care delivery system. These entities provide assistance with patient flows, diagnosis, illness treatment, and the promotion of health maintenance programs. There are many various kinds of services that are included in this category. Some examples of these services include mental health services, rehabilitation, speciality treatment, public health, primary care, hospital care, and emergency services. There are many different types of health care delivery systems, but one example is a basic service that is given by a single practitioner. One other illustration of this would be a complicated network that serves the requirements of a whole town (Abimbola, 2020).

2.2 Theoretical Framework

This study was underpinned by National Health Insurance Model of Healthcare Delivery.

National Health Insurance Model (NHID)

The NHID, which is often referred to as the "single-payer" model, is a system in which the government is responsible for providing insurance for medical expenses for all of its inhabitants. One point of access to healthcare services is provided via this system, which is supported by taxes and gives a single point of access. Under this arrangement, the government compensates healthcare professionals directly for the services that they give to individual patients. Several nations, including Canada, Taiwan, and a few European nations, have

adopted this concept as their organisational structure. One of the characteristics of the National Health Insurance Model is that it offers universal coverage, which guarantees that all residents, regardless of their level of income, have access to medical treatments. As a result of the fact that there is only one insurer, this model also offers comparatively minimal administrative expenses (Woolhanler, 2022).

National Health Insurance Scheme in Nigeria

The overall goal was to achieve the UHC of the United Nations. The NHIS which was by decree 35 of 1999 constitution was signed by Abdulsalam Abubakar under the democratic dispensation, the National Assembly adopted and codified the decree National Health Insurance Scheme CAP N42 L F N (2004), accessed (2022) (Chukwuma, 2020). Despite the NHIS being formed in 2006, a research that was published in the Lancet, a medical magazine, found that more than ninety percent of the Nigerian population did not have health insurance. There are fewer than five percent of Nigerians working in the formal sector who are covered by the NHIS. Only three percent of those who work in the formal sector are anticipated to have access to optional private health insurance.

Bayelsa Health Insurance Scheme (BHIS)

Julius (2021) said "how we were expanding coverage in Bayelsa state" (The Guardian). Four years after its 2017 launch, the Bayelsa state health insurance program (BHIS) has improved healthcare efficiency throughout the state. In this interview, BHIS executive secretary, consultant cardiologist, and state civil service permanent secretary Dr. Zuobemi Agadah recounts the journey thus far. The BHIS claims to have made great strides in a field four years after its founding, whereas the NHIS is still struggling.

Zuobemi said there aren't enough pharmaceuticals when participants travel to other treatment centres. Pricing was another issue. Most Bayelsa-wide theme parks were exclusively open to public personnel and a few private sector businesses and people. Several diseases were missed in the strategy.

Eboh, Akpata, and Akintoye (2016) argued that the government must fully own the responsibility to ensure proper administration and health care delivery to its citizens, even when individuals contribute to health care through health insurance schemes or direct financing. Thus, health administration coordinates medical providers in a state or nation. Again, the distribution of health care facilities in Nigeria, which the NHIS uses, favours urban areas and leaves rural areas with little or no treatment. Rural populations still lack access to high-quality medical care and neighbouring alternatives.

2.3 Empirical Review

Abimbola (2020) studied. This study evaluates primary health care facilities in South-west states Osun and Oyo, and South-South states Edo and Delta. Five health care facilities were selected from each of the four states. After deciding to employ a questionnaire and an oral interview, 320 questionnaires were sent to respondents from four states. Healthcare professionals, local residents, medical specialists, and administrative authorities were sampled using stratified and simple random procedures. With three Agreed (A), strongly Disagreed (SD), and Disagreed (D) answers and a nonparametric chi-square analysis, the south-west showed substantial patronage, as shown by health professionals and modernised primary health care facilities. The south-south zone has poor primary health care system patronage owing to insufficient protection for health workers, lack of equipment, unsatisfactory service delivery, and weak infrastructure. This research finds that inadequate health policy management and insufficient financing, particularly for basic healthcare programs, cause shortcomings in Nigerian health services at all levels. This study is similar to the current one in topic matter. A prior research evaluated primary health facilities in two south-west states (Osun and Oyo) and two south-south states (Edo and Delta). The contest selected five health care facilities from each of the four states' two Local Government Areas. Each study employed survey design. This study was done in twenty health

facilities in Bayelsa, Nigeria, including four private, two federal, eight primary, and eight general hospitals. The research included eight LGAs. This investigation used basic random sampling. Unlike prior studies, which employed chi-square, a nonparametric static technique, the t-test was used to analyse the data. Previous studies employed three hypotheses; this research utilised five, all of which were approved. Results are analysed using likert scale. Based on the data, respondents said Bayelsa state health care services had decreased maternal and newborn mortality.

Healthcare delivery as a public good was another Chikeleze (2018) study. The article was "An evaluation of the NHIS as an option in healthcare management in Nigeria." Through the course of this research, the in Nigeria NHIS was investigated with the purpose of determining the extent to which it has been successful in delivering medical care to all Nigerians since its start more than eighteen years ago. A total of 348 persons from the state of Enugu participated in the research study, which was done via the use of a questionnaire and interviews. The Scheme failed to achieve its aims. The report advised that the government fund healthcare services directly as a public benefit. Additionally, the research recommended that healthcare should not be the responsibility of the individual with health issues. The preceding research investigated healthcare delivery, hence this study is linked. This research used evaluation design, whereas the previous one used survey. Current research assessed healthcare administration and healthcare delivery. Furthermore, the earlier study addressed healthcare delivery as a public good: An appraisal of the NHIS as a feasible alternative in healthcare management in Nigeria. The present research was done in Bayelsa State, whereas the preceding study took conducted in Enugu State.

Major (2017) set out to discover how the Bayelsa State Health Service Scheme (BSHSS) affects the delivery of healthcare in the Bayelsa state. The structural functionalism theory was chosen as the foundation for measuring BSHSS's performance in providing effective health care. Respondents were gathered from numerous Bayelsa State Ministries, Departments, and Agencies (MDAs) and questioned utilising the survey design. A total of 396 persons were selected to participate in the survey using the algorithm designed by Taro Yamane. Although 64% of respondents were aware of the plan, the survey indicated that only a tiny number actually utilised it, with over 70% of respondents not even engaging in it. The most significant factor affecting BSHSS use was a lack of expertise (29 percent), followed by a lack of facilities or equipment (16 percent), registration (14 percent), and personnel shortages. Seven percent of respondents were satisfied with BSHSS services, indicating poor satisfaction. Finally, respondents responded that lack of integration and supportive supervision is the biggest hurdle to BSHSS's success. The present study is also related to the previous study in that the researcher carried out an assessment of state health service scheme and health care delivery service in Yenagoa, Bayelsa State, Nigeria. However, both studies differ in the use of design. Whilst the previous study used descriptive survey design, this present study adopted evaluation design. Both studies are also because the studies carried out in Bayelsa State and equally adopted Taro Yamane as sample determination technique.

Okaro, Ohagwu, and Njoku studied South East Nigerian radiographers' comprehension and impression of the National Health Insurance Scheme in 2014. This research aims to determine household attitudes, willingness to pay, benefit package options, and health system readiness for the Insurance Scheme. Techniques: A cross-sectional study was undertaken with 400 family heads and 43 health workers in Enugu, Southern Nigeria. The NHIS was known by 56.8% of household heads and 86% of health workers. Educational level ($X^2 = 16.083$, $P = 0.001$) and employment ($X^2 = 5.694$, $P = 0.017$) were associated with NHIS knowledge among household heads. Men (61.6%) reported more accurate NHIS perceptions than women (58.6%), although the difference was not statistically significant ($X^2 = 0.336$, $P = 0.562$). Eighty-nine percent of families stated they would pay for NHIS. Occupation and willingness to pay were significantly correlated ($X^2 = 5.169$, $df = 1$, $P = 0.023$). However, employment did not affect willingness to pay the 5% premium ($X^2 = 0.884$, $P = 347$). Health

institutions make up 11.6 percent of plan providers. Despite strong desire to pay, most individuals are not willing to pay a 5% salary premium. We should increase public awareness and hire additional health institutions to give more coverage. The previous researcher's work was similar, although there are some differences. Current research uses an assessment design, whereas previous research employed a cross-sectional approach. The current study tested hypotheses using the mean, standard deviation, and t-test, whereas the analysis employed basic percentages. The geographical breadth of the investigation also differs. For instance, the previous study was conducted in Enugu, South East Nigeria, whereas the present study was conducted in Bayelsa South-South.

Along the same lines, Osuchukwu, et al (2015) conducted a research to examine the effect of the NHIS on health care consumers in Calabar city, southern Nigeria. This study is comparable to the one that is being conducted right now. The prior research used a survey design, but the current study utilised an assessment design throughout its whole. The previous research used simple percentages for data analysis, but the present study utilised t-tests for inferential statistical analysis. The two studies, on the other hand, are comparable in terms of the subject matter, which is the healthcare delivery system.

In their 2016 study, Omoleke and Taleat investigated the present problems and difficulties that are faced by the Nigerian health industry. In addition to this, it made an effort to determine the impact that the problems and difficulties have had on the health of the people living in Nigeria. at the article, primary data was collected via interactions with medical physicians, chemists, imaging scientists, and nurses who were chosen at random. The purpose of these interactions was to extract facts and information on difficulties, challenges, and problems that these individuals encounter at their respective hospitals. The results of their experiences indicated that hospitals are facing a constellation of social, economic, and environmental issues. These challenges include brain drain, low recompense, antiquated infrastructure, insufficient medical facilities, and underfunding of hospitals. Hospitals are also experiencing a lack of funding. Based on the findings of the study, it was determined that the health care system in Nigeria is lacking in comparison to that of industrialised nations and even a few African countries.

3. Methodology

The evaluation research design was the one that was chosen for this particular study's research plan. The research population was sourced from all hospitals and health institutions, both public and private, situated in the eight local government areas within the three senatorial districts of Bayelsa State. The districts include the Bayelsa West Senatorial District, the Bayelsa Central Senatorial District, and the Bayelsa East Senatorial District. The following is a list of all twenty (20) health care institutions that are located in the state of Bayelsa. Niger Delta University teaching hospital; Federal Medical center Yenagoa; Federal Medical center Otuoke; Ofoni General hospital; Town Brass General Hospital; Nembe General Hospital; Kolo General Hospital; Odi General Hospital; Audama-Epetiama General Hospital Sagbama General Hospital; Town Brass Comprehensive Health center; Nembe Comprehensive Health center Ogbolomabiri Nembe; Comprehensive Health center Bassambiri Nembe; Comprehensive Health center Ogbia Town; Okpoama Coltage Hospital; Sampou primary health care center; Oforigbene primary health care center; Glory land hospital imirigi medical center; Diete Koki Memorial Hospital; Family care clinic and services.

Source: Ministry of Health, Bayelsa State (2023).

Questionnaires were given to 300 respondents, 43% of the research population, comprising health authorities and patients. Using basic random selection, the researcher selected the sample size to offer all responders an equal chance to participate. Data was largely collected by questionnaire. The questionnaire was created after a thorough literature review. The researcher considered the study questions and hypotheses to get as much data

as possible from respondents. This enabled the researcher to gather as much data as possible. Section A covers personal data, whereas Section B covers health administration and healthcare delivery effectiveness. Two Imo State University educational measurement and assessment professionals evaluated the exam questions for relevance, topic area coverage, language appropriateness, and clarity of aim. This evaluated the study instrument's face and content validity. The final instrument incorporated their feedback and was delivered to my supervisor for revisions and confirmation. Consistency and stability were measured using Cronbach's alpha to assess instrument dependability. The SPSS reliability coefficient was 0.85, indicating that the instrument is trustworthy. Researchers engaged five research assistants to deliver the instrument among participants.

The hypotheses that were developed served as the basis for the data analysis that was performed for this research. Both the mean and the standard deviation were used in the analysis of the study topics. In order to provide a benchmark for accepting and rejecting options, a criteria mean of 2.5 was established. Based on the following formula, the criteria mean was determined to be 2.5: $4+3+2+1/4$. The criteria mean was set at 2.5, which means that in order for any item to be approved, it must have a minimum mean value of 2.5 or above, whereas anything that scored lower than 2.5 was rejected. Using the independent z-test with a critical value of 1.96 and an alpha level of significance of 0.05, each and every hypothesis was examined and evaluated individually. The use of these statistical methods is for the purpose of determining whether or not there are any significant differences, and then deciding whether or not to either keep the null hypothesis or reject it.

Decision:

The null hypothesis was accepted when the computed z-value was lower than the t-critical value of 1.96. It was rejected when the calculated z-value was greater than the t-critical value of 1.96. Consequently, the null hypothesis was accepted.

4. Results and Discussion

4.1 Presentation and Analysis of Data

In this study, responses were generated from 96 respondents randomly selected from respondents in Bayelsa State.

Table 4.1: Questionnaire Distribution to Respondents and Retrieval

Issued Questionnaire	300	100%
Well filled/Used	294	98%
Wrongly filled/Unused	06	2%

Source: Survey Data, 2023.

A total of ninety-six (98) copies of the questionnaire were delivered to the individuals who filled out the questionnaire, as shown in Table 4.1 above. Ninety-eight (98) copies which represent 98% were well filled, retrieved and used for the study, while six (06) copies which represents 2% of distributed questionnaire were incorrectly filled.

Research Question 1: What are the types of health care system practiced in Bayelsa State?

Table 4.2: Computation of health officers and patients' responses on types of health care system practiced in Bayelsa State. HO=138; P=156. (N=294)

S/N	Items	Health Officers			Patients		
		$\times_1$	sd_1	Remark	$\times_2$	sd_2	Remark

1	Scientifically approved methods (Biomedicine)	2.76	0.69	HE	2.42	0.60	LE
2	Primary health care system	3.05	0.76	HE	3.10	0.77	HE
3	Use of herbs by traditional healers	2.33	0.58	LE	2.40	0.60	LE
4	Traditional birth attendees	2.75	0.69	HE	2.74	0.68	HE
5	Faith-based clinics, praise/worships are used for healing	2.30	0.58	LE	1.97	0.49	LE
6	Private hospitals/clinics	3.21	0.80	HE	3.15	0.79	HE
Grand Mean		2.73	0.46	HE	2.63	0.66	HE

Source: Field Survey, 2024

Analysis in Table 4.2 above revealed the types of health care system practiced in Bayelsa State. From the analysis so far both health officers and patient agreed to a high extent the prevalent of private hospital/clinics with a mean score of 3.21 and 3.15 respectively. The respondents also indicated other healthcare systems in Bayelsa state to include primary health care system, scientifically approved methods (Biomedicine), and traditional birth attendees. However, it is reported that the patronage of traditional healers and faith-based healing centers is to a low extent representing a mean rating of 2.33; 2.40 and 2.30; 1.97 respectively for both respondents.

Research Question 2: To what extent has community mobilization enhanced the knowledge, practice and utilization of health programs in Bayelsa State?

Table 4.3: Computation of male and female respondent responses on community mobilization, knowledge, practice and utilization of health programs in Bayelsa State. M=142; F=152. (N=294)

S/N	Items	Male			Female		
		$\bar{x}_1$	sd_1	Remark	$\bar{x}_2$	sd_2	Remark

1	Health officers are actively involved in sensitizing the populace on any current health programs in their community	3.20	0.80	HE	3.37	0.84	HE
2	Cultural factors, religious beliefs hinder health services utilization.	2.76	0.69	HE	2.22	0.55	LE
3	Cost of health care services affect utilization of available health care delivery	2.76	0.69	HE	2.21	0.55	LE
4	I am delighted to patronize public health facility because the health personnel in the various health centers do treat and take care of patients nicely.	3.05	0.76	HE	3.23	0.81	HE
5	Routine immunization of the under-five is a practice to prevent killer diseases.	3.35	0.84	HE	3.32	0.83	HE
6	Adequate self-breast examination is a practice to early detection, treatment and prevention of breast cancer.	3.30	0.83	HE	3.46	0.87	HE
Grand Mean		3.07	0.77	HE	2.96	0.74	HE

Source: Field Survey, 2024

The fact that the mean replies of 3.07 and 2.96 are higher than the criteria mean score of 2.50 is an evidence that community mobilisation has significantly improved the practice of healthcare activities in Bayelsa State. Table 4.3, which is located above, illustrates this. It is worth noting that the replies from both male and female participants, who had average scores of 3.35 and 3.32, respectively, suggest that the regular vaccination of children under the age of five is at a high level. In addition, both respondents were in agreement to a significant degree that health officers are actively engaged in educating the general public about any health initiatives that are currently being implemented in their town.

Research Question 3: To what extent has the health care programs been effective in Bayelsa State? **Table 4.4: Computation of respondents' responses on the effectiveness of healthcare program in Bayelsa State. UD=89; RD=205. (N=294)**

S/N	Items	Urban Dwellers			Rural Dwellers		
		$\bar{x}_1$	sd_1	Remark	$\bar{x}_2$	sd_2	Remark
1	Maternal and child health care has reduced maternal and child mortality rates	3.31	0.83	HE	3.30	0.83	HE
2	Because of the HIV prevention from mother to child transmission (PMTCT) initiative, the number of cases of the illness being passed down from mothers to their children has decreased.	3.25	0.81	HE	3.21	0.80	HE
3	Routine monitoring exercise are carried out by health officers to ensure effective health care service delivery in the community	3.15	0.79	HE	3.10	0.76	HE
4	Bayelsa State health insurance scheme (BHIS) provide cover for all citizens in the state.	2.76	0.69	HE	2.91	0.73	HE
5	There are adequate health personnel who are trained to discharge quality health care services to the citizens in Bayelsa State	3.00	0.75	HE	2.98	0.74	HE
6	Health care programs in the state are sufficiently funded to cater for the need of citizens in Bayelsa State	2.67	0.67	HE	2.22	0.56	HE
Grand Mean		3.02	0.76	HE	2.95	0.74	HE

Source: Field Survey, 2024

With grand means of 3.02 and 2.95 for urban and rural dwellers, respectively, exceeding the criterion mean score of 2.50, the respondents affirmed that healthcare programs in Bayelsa State have been effective to a high extent, as shown in Table 4.4 above, which analyses the effectiveness of the programs. In addition, with a mean rating of 3.31 and 3.30 for urban residents and rural residents, the respondents alluded to the fact that maternal and child health care has reduced maternal and child mortality rates to high extent.

4.2 Test of Hypotheses

Hypothesis 1: There is no significant difference in the mean scores of health officers and patients regarding types of health care system in Bayelsa State.

Table 4.5: Computation of no significant difference in the mean score of health officers and patients on the types of health care system in Bayelsa State

Responses	n	Mean	SD	Z-cal	α	Df	Z ^{-crit}	Dec.	–	x
Health Officers	138	2.73	0.46	1.43	0.05	292	1.96	2.96	0.66	
Patients	156	2.63	0.66							

Source: Field survey, 2024

According to the data shown in Table 4.5, the computed z-value of 1.43 is inferior than the crucial z-value of 1.96. The significance level was established at 0.05, with 292 degrees of freedom. The researcher asserts that the null hypothesis is valid. The researcher concludes that there is no significant difference in the mean scores of health officers and patients in Bayelsa State about the various kinds of health care systems. This conclusion is derived from the hypothesis testing.

Hypothesis 2: There is no substantial difference in the mean scores of male and female respondents on the knowledge, practice and utilization of health programs in Bayelsa State.

Table 4.6: Computation of no significance Difference in the Mean Score of male and female respondents on the knowledge, practice and utilization of health programs in Bayelsa State

Responses	n	Mean	SD	Z-cal	α	Df	Z ^{-crit}	Dec.	–	x
Male	142	3.07	0.77	1.16	0.05	292	1.96	2.96	0.74	
Female	152	2.95	0.74							

Source: Field survey, 2024

According to the data shown in Table 4.6, the computed z-value of 1.16 is less than the critical zvalue of 1.96, given a degree of freedom of 292 and a significance level of 0.05. The researcher chooses to reject the alternative hypothesis and accept the null hypothesis. The hypothesis testing results indicate that the researcher concluded there is no statistically significant difference between the mean scores of male and female respondents in Bayelsa State about their knowledge, practice, and utilisation of health programs.

Hypothesis 3: There is no substantial difference on the mean scores of urban and rural dwellers on the effectiveness of health programs operating in Bayelsa State.

Table 4.7: Computation of no substantial difference on the mean scores of urban and rural dwellers on the effectiveness of health programs operating in Bayelsa State

Responses (0.05)	n	Mean	SD	Z-cal	α	Df	Z-crit	Dec. –	x
Urban Dwellers	89	3.02	0.76					Accept	
				0.70	0.05	292	1.96	Ho3	Rural Dwellers
205 2.95	0.74								

Source: Field survey, 2024

In accordance with the data shown in Table 4.7, the z-calculated value of 0.70 is lower than the zcritical value of 1.96 when the degree of freedom is 292 and the level of significance is 0.05. According to the researcher, the null hypothesis is correct. The study determined that there is no significant difference in the average ratings of urban and rural populations in Bayelsa State regarding the effectiveness of health initiatives. The hypothesis was tested, and this conclusion was reached as a result of the testing.

4.3 Summary of Findings

On the basis of the explanation of the data, the following conclusions were reached:

1. From the analysis so far, the type of healthcare service in Bayelsa state are: government general hospitals, Primary health care system, Use of herbs by traditional healers, Traditional birth attendees, Faith-based clinics, and praise/worships are used for healing, private hospitals/clinics. However, it is reported that the patronage of traditional healers and faith-based healing centers is to a low extent representing a mean rating of 2.33; 2.40 and 2.30; 1.97 respectively for both respondents.
2. That community mobilization process has enhanced the knowledge, practice and utilization of healthcare activities in Bayelsa State to high extent. It was revealed that health officers are actively involved in sensitizing the populace on any current healthcare programs in their community.
3. That healthcare programs in Bayelsa state has been effective to a high extent.

4.4 Discussion of Findings

The research objective and hypotheses that guided the present inquiry are outlined in accordance with the most significant conclusions from this study. In particular, the results were described under the subheadings that are as follows:

Types of Healthcare System Practiced in Bayelsa State

Data on Bayelsa State's health care systems is presented to test hypothesis 1. The mean evaluations of health professionals and patients for various health care systems in Bayelsa State are not statistically significant. The study's computed z-value is 1.43, below the essential 1.96 at the 0.05 significance level. The findings here support Buowari and Kanmodi (2021)'s notion that all Nigerian health facilities are categorised by management strategy or service. Hospitals are classified by administration as private or government. Faith-based health clinics and other non-governmental health institutions are also considered "private" Doyle (2019) further noted that State Ministries of Health, State Hospital Management Boards, and LGAs administer public health facilities and services. This matches previous findings.

Community Mobilization, Knowledge, Practice and Utilization of Health Programs in Bayelsa State

In this study, the second hypothesis suggests that male and female respondents in Bayelsa State evaluate health services similarly. Previous hypothesis results inform this theory. Table 4.6's z value of 0.1.16 is below the z-

critical threshold. Male and female respondents in Bayelsa State had similar views on health program understanding and implementation.

Eme et al. (2014) discovered anything related to this result. Some healthcare programs improve healthcare-seeking, maternal health service use, and out-of-pocket medical costs, according to the authors. If their idea was true, 72% of respondents were satisfied with the plan's performance, while those who were displeased suggested adjustments. In contrast, he added that enrolling in any healthcare program was tough because individuals didn't trust the plan's administration, there wasn't enough factual information, and they didn't receive adequate medical treatment.

Effectiveness of Healthcare Programs

The third hypothesis shows that Bayelsa State's urban and rural populations' mean health initiative effectiveness ratings are similar. The estimated z- value of 0.70 is less than the essential value of 1.96 at a significance level of 0.05. The availability of health experts and the upgrading of various primary health care centres in the south-west zone were due to high patronage, according to Abimbola (2020). The results match Abimbola's. This idea contradicts Okpoko (2021), who discovered that non-public sector workers cannot access Scheme healthcare services. Major (2017) found that although while respondents were aware of the Bayelsa State Health Service program and its efficacy in providing health care, they seldom utilised it. Following this, facility, equipment, registration, and staff shortages occurred.

In contrast, Okaro, Ohagwu, and Njoku (2010) noted that current health care services are inadequate and a major issue. Despite their noble intentions of treating low-income and rural patients, many primary health clinics (PHCs) are in poor condition owing to underfunding. However, Nigeria's healthcare system must be improved regardless of its location or economy.

5. Summary, Conclusion and Recommendations

5.1 Summary of the Study

Despite the fact that the majority of primary health care institutions are in a variety of states of disrepair, the infrastructure and equipment are either non-existent or out of date. In addition to this, an effort was made to identify the primary goal and objectives of the investigation, as well as research questions and hypotheses, and to demonstrate the relevance of doing the study. The scope of the research, also known as the delimitation, was also discussed in this chapter, and crucial terminology were defined in an operational sense.

Within the second chapter, the theoretical underpinning of this study was presented. There were four models that served as the foundation for the study's theoretical framework. These models were the Beveridge Model of Healthcare System (1942), the Bismark Model of Healthcare System (1880), the NHI Model of Healthcare Delivery, and the Uninsured Model of Healthcare Delivery. A better understanding of the possibilities of offering superior healthcare services to everyone at a price that is reasonable is provided by these models. These models have as their primary objective the provision of all-encompassing, universal healthcare that is provided at no cost at the point of service. Additionally, it addressed the conceptual framework, which was a significant aspect of the work, and essential topics were treated in depth from the points of view of a number of writers and scholars. An empirical review was also carried out in order to give insight into earlier empirical investigations that were relevant. Additionally, a summary of the relevant literature that was examined was carried out.

5.2 Conclusion

The study evaluate the effectiveness of health administration and healthcare delivery system in Bayelsa State. The research's main results are based on the replies of the participants, which were collected in order to evaluate the performance of health administration and healthcare delivery systems in Bayelsa State in relation to the

particular goals of the study. According to this survey, there is a low level of support for traditional healers and faith-based healing centres. It was also disclosed that health officials are actively working to educate the public about any healthcare services that are currently available in their neighbourhood. That healthcare programs in Bayelsa state has been effective to a high extent. That health management practices by the health officers has positively impacted on healthcare delivery in Bayelsa State to high extent. Based on the findings of the study, the study concludes that health administration have positively impacted on healthcare delivery system in Bayelsa State.

5.3 Recommendations

In light of the study's results, the following recommendations are proposed;

1. Government hospitals and healthcare centers should be adequately funded to guarantee universal health coverage in Bayelsa State.
2. Health officers in the various community should vigorously sensitize and carry out awareness campaign to enable rural populace assess healthcare programs in Bayelsa State.
3. The improvement of living conditions for those who are more affluent than the current poverty level should be given priority in order to improve the quality of life for people who are healthier. To achieve this goal, it is imperative that the public get health education that is both comprehensive and efficient. This is necessary in order to eradicate illnesses such as malaria, typhoid fever, and other infectious diseases.

6. References

- Abdulraheem, I. S., Olapipo, A. R., & Amodu, M. O. (2020). Primary health care services in Nigeria: Critical issues and strategies for enhancing the use by the rural communities. *International Journal of Public Health and Epidemiology*, 9 (3), 1-9.
- Abimbola, A. R. (2020). Assessment of the primary health care (PHC) system in Nigeria. *American Journal of Multidisciplinary Research and Development (AJMRD)*, 2(9), 51-60.
- Adebayo, A. M. & Asuzu, M. C. (2015). *Utilisation of a community-based health facility in a lowincome urban community in Ibadan, Nigeria*. Prestil Press.
- Bayelsa Ministry of Information (2021). Bayelsa information commission partners with professionals to reduce maternal and infant mortality. Bayelsa State Ministry of Information and Strategy.
- Buowari, D. Y., & Kanmodi, K. K. (2021). Health administration in Nigeria: Challenges and prospect. *East African Journal of Public Health*, 10(3), 571-575.
- Center for Disease and Prevention (CDC) (2021). Economic evaluation overview Polaris policy and strategy. <http://www.cdc.gov/economics>
- Chikeleze, F. O. (2018). Healthcare delivery as public good: An evaluation of the NHIS as an option in healthcare management in Nigeria. *Global Journal of Political Science and Administration*, 6(5), 1-21.
- Chuwuama, C. M., Olugboji, A., Akuto, E. E., Odebunmi, A., Ezeilo, E., & Ugbennee, A. (2016). A baseline survey of the primary health system in south eastern Nigeria. *Health Policy*, 7(2), 182 – 201.

- Dike, H. I. (2016). Evaluation of educational program: Need analysis, formative evaluation and summative evaluation. Schecks Publishers.
- Eboh, A., Akpata, G. O., & Akintoye, A. E. (2016). Health care financing in Nigeria: An assessment of the national health insurance scheme (NHIS). *European Journal of Business and Management*, 8(3), 20-36.
- Eme, O. I., Uche, O. A., Uche, I. B. (2014). Building a solid health care system in Nigeria: challenges and prospects. *Academic Journal of Interdisciplinary Studies*, 3(6), 501-510.
- Eucléa Business School (2023). Fundamentals of healthcare administration. <https://www.linkedin.com/pulse/fundamentals-healthcare-administration>.
- Fasina, O. O., Wole-Alo, F. I., & Idowu, F. L. (2016). Determinants of the level of utilization of maternal health care services 'Abiye Program' by rural women in Ondo State, Nigeria. *British Journal of Education, Society and Behavioral Science*, 12(2), 1-9.
- Federal Ministry of Health (2010). National strategic health development plan (2010-2015). FMH Press.
- Julius, O. (2021). How we are expanding health coverage in Bayelsa state. *The Guardian Newspaper*.
- Lochonwu, N. A., & Adedigba, M. A. (2018). Awareness and perception of resident doctors towards national health insurance scheme in a tertiary hospital. *The Nigerian Health Journal*, 17(2), 17-27.
- Major, I. (2017). Bayelsa state health service scheme and health care delivery service in Yenagoa, Bayelsa state, Nigeria. *Equatorial Journal of Social Sciences and Human Behavior*, 2(1), 1024.
- Nigeria National Health Conference (2010). Nigerian society primary health care. <https://www.ngnnc>.
- Obansa, S., & Akinagbe, O. (2016). Health care financing in Nigeria: Prospects and challenges. *Mediterranean Journal of Social Sciences*, 1(2), 11-26.
- Obansa, S. A. J., & Akinagbe, O. (2019). Health care financing in Nigeria: Prospects and challenges, *Mediterranean Journal of Social Sciences*, 4(1), 20-33.
- Okaro, A. O., Ohagwu C. C., & Njoku, J. (2010). Awareness and perception of national health insurance scheme (NHIS) among radiographers in south east Nigeria. *American Journal of Scientific Research*, 8(1), 18-25.
- Okpoko, P. I. (2021). The public awareness of the national health insurance scheme (NHIS) among patients accessing health care in supreme faith hospital, Ado-Ekiti, Nigeria.
- Omeleke, N., & Taleat, S. I. (2017). Challenges of healthcare delivery system in Nigeria. *International Journal of Nursing and Midwifery*, 2(3), 10-15.
- Osuchukwu, N. C., Osonwa, K. O., Eko, J. E., Uwanede, C. C., Abeshi, S. E., & Offiong, D. A. (2015). Evaluating the impact of national health insurance scheme on health care consumers in Calabar metropolis, southern Nigeria. *International Journal of Learning and Development*, 3(4), 30-45.

Pondei, O. (2016). The health care delivery in Bayelsa. News Report, 8, 5-7.

Simon Tumba, (2019); “Addressing Health Challenges in Nigeria – Minerva Strategies.
<https://Minervastrategies.com>.

The Bureau of Labor and Statistics (2021). Work place for health administrators. BLS Centers.

Timothy, G., Irinoye, O., Yunusa, U., Dalhatu, A., Ahmed, S., & Suberu, A. (2014). Balancing demand, quality and efficiency in Nigerian health care delivery system. European Journal of Business and Management, 6(23), 50-57.

W.H.O. World Bank (2018). Tracking universal health coverage: First global monitoring report.
<http://whoint/healthinfo/universalhealthcoverage/report/en/accessed>.