

Evaluation of Health Administration in Healthcare Delivery System in Bayelsa State, Nigeria

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Abstract

Bayelsa State, Nigeria, healthcare delivery system health administration efficacy is examined. This research evaluates Bayelsa State's health administration and delivery system. A questionnaire-based evaluative research approach was utilised to collect data from 300 participants. We investigated five hypotheses and five 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 healthcare initiatives are very successful. Additionally, health officers' management methods have greatly improved healthcare delivery in Bayelsa State. The mean ratings of urban and rural Bayelsa State residents on health program efficacy were likewise similar. $Z\text{-calculated} = 1.16 < z\text{-critical} = 1.96$ 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: Healthcare, Healthcare Delivery System, Healthcare Financing, Healthcare Management, Healthcare Organization.

1. Introduction

The 1980s saw remarkable achievements in primary healthcare (PHC), but structural adjustment impacted the Nigerian economy hard, thus 90% coverage seemed excessively optimistic. UNICEF, WHO, and USAID were among the numerous international donor organisations who eagerly supported and helped develop the effort (USAID, 1994). Previously, most programs depended on contributions. Most slashed money, and the program started facing issues in 1993, when the political crisis was greatest. This was predicted. After democracy was restored in 1999, the PHC system became untenable. Governments have reconsidered their approach to healthcare, which has hitherto been entrusted to people, due to growing medical costs and unforeseen health issues. These people are a large part of society and cannot solve these problems on their own, either short-term or long-term.

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 & Akinngbe, 2016).

According to Osabuohien and Efobi (2012), several variables affect health infrastructure acceptance. These elements include the system's ability to adapt and reintegrate with other developments, as well as its road networks, water supply systems, power connections, and people and technical resources (2010). However, many underprivileged healthcare institutions lack such requirements. The decadence may be due to a lack of maintenance culture, but insufficient funds to rebuild ancient buildings are also concerns. Since Nigeria returned to democracy in 1999, some states have provided free medical care. Their states include Jigawa, Osun, Niger, Kaduna, Kano, Ekiti, Lagos, Ondo, and Enugu. According to Onoka, Onwujekwe, and Uzochukwu (2010), free health care and exemption mechanisms were meant to safeguard the most disadvantaged from financial risk, but they have failed.

How much Nigeria's health system boosts the economy depends on several factors. 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 disease prevention, surveillance, and treatment system exacerbate the problem (Obansa & Akinngbe, 2019). A country's health care development may be assessed by its primary health care services, especially in rural areas. This is particularly true in rural regions. The fact that many Nigerians still don't profit from the program and instead resort to patent

medicine shops, herbalists, quacks, or self-medication implies that these aims won't be achieved unless they're significantly advanced. Since the Scheme has been around for a long period without much success, it raises the question of its value to Nigerian healthcare. It also requires finding other ways to give healthcare to most Nigerians to guarantee a healthy society, not only public personnel (Lochonwu & Adedigba, 2018). The Bayelsa state health care delivery system must be evaluated to establish its effectiveness.

The government's goals and plans will be embraced by the competent administrators and managers of Nigeria's healthcare system. According to the old adage, "health is wealth," and the health of the Nigerian people directly impacts the country's safety. Reason being, health care is essential to a nation's progress and prosperity, and everyone should have access to it (Oyibocho, Irinoye & Sagua, 2014). The healthcare system in Nigeria is far from flawless, and not everyone has access to it, so this is not how things truly function there. This unsettling turn of events necessitates a review of Bayelsa State's health administration and healthcare 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. 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).

To address healthcare delivery, the government has devised health insurance plans that cover public, private, and PPH. However, Adebayo and Azuzu (2015) report that many Bayesians still lack adequate health care. Reassessing health administrators' readiness to offer services is crucial to achieving health-related SDGs. This research emphasises on medical services and treatment in Bayelsa State.

1.3 Aim and Objectives of the Study

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

1. Determine the impact of health management in health care delivery system in Bayelsa State.
2. Determine the factors militating against the health administration and effective health care delivery system 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 substantial variance in the mean scores of health officers and patients on the impact of health management in health care delivery system in Bayelsa State.
2. There is no substantial variance in the mean scores of the respondents in urban area and rural area on the factors militating against the effective health administration and health care delivery system in Bayelsa State.

2. Review Of Related Literature

2.1 Conceptual Framework

Health Administration

In public health, health administration focusses on managing persons and programs. Health administration, healthcare administration, health care management, and hospital management focus on leading, managing, and administering public health systems, healthcare systems, hospitals, and hospital networks at all three levels of care. Internationally, "health administration" refers to the leadership and management of healthcare systems, hospital networks, and individual hospitals (World Health Organisation, 2013).

Buowari and Kanmodi (2021) say companies need daily management to work efficiently. Plans require structure. Many fields influence administration theory and practice, but management is the most prominent. Everything is the same administratively. This includes worker supervision, program coordination, budget preparation, program monitoring, and outcome and result assessment (Abe, Omo-Aghoja, Onowhakpor, 2013). More important contrasts exist between public health and other fields. Public health administrators prioritise health promotion and illness prevention programs. They educate clients about health and guarantee their well-being. All health care professionals want healthy patients, but some prioritise treatment above prevention.

Benefits of Effective Health Administration

Because of the complexity of the healthcare business, every healthcare organisation that aspires to succeed must have competent health administration. Providers and patients alike may reap the rewards of well-managed healthcare systems. Healthcare managers have the power to make healthcare more efficient and less expensive. They may make sure the healthcare facility abides by all rules and laws, such as HIPAA rules. Policies and procedures that aid in protecting

patients' rights should also be developed by healthcare administrators. You may achieve great success in the field of health administration with the right combination of education, work experience, and perseverance.

Challenges of Health Administration in Nigeria

Multiple, sometimes contrived, hurdles hinder Nigerian health sector administration. Abe et al. (2013) listed Nigeria's health administration challenges. Some issues are bearable, while others are terrible. Healthcare in Nigeria has several challenges. Some healthcare system issues are exclusive to various levels. Thus, it affects basic to tertiary medical care. A weak health care system has a lack of coordination, service fragmentation, inadequate resources, outdated infrastructure, inequality in resource distribution and access to care, and extremely poor quality of care, according to the 2009 Nigeria National Health Conference communiqué. The communiqué said that misunderstanding about government roles contributed to the situation. Nigeria's healthcare system has several issues, according to Ademiluyi and Aluko-Arowolo (2019): Power struggle, resource allocation, conflict, corruption, migration, user fees, and medicine shortages.

Impact of Health Administration in Healthcare Delivery

The data comes from Topper, Zona, and Taylor (2023). Everyone should prioritise their health since it immediately affects productivity and daily activities. Quality medical care eliminates sickness and improves body function. People desire health advice. Researchers and doctors provide recommendations to help people manage their health. The "health care delivery system" is a group of organisations, organisations, people, and resources that help a population stay healthy.

International organisation WHO has been run by the UN since 1948. The UN was founded in 1945 and has 193 member states working to promote international peace, justice, respect, human rights, and tolerance.

Militating factors of effective health care delivery system in Bayelsa State

Health facility status: (p4) of the health personnel. The scheme did not cover all Bayelsians, only civil servants were enrolled. It was expected that the BSHSS would boost the delivery of primary health care in the state but from finding this research, that goal has not been accomplished.

Advocacy and political support/ commitment for health equity: Health equality is a familiar problem for global health professionals. The creation of WHO in 1946 and the Declaration of Alma Ata in 1978 prioritised justice and equality for everyone. However, most of the health agenda's aims have been to ensure considerable progress on important concerns. Because of this, life expectancy has increased significantly in most countries. Conversely, the global health community has long been unable to overcome widening disparities caused by unequal growth. In low and medium-income African and Asian countries, the mortality rate of children under five is rising (Lucas & Gilles, 1984; Abdulraheem, Olapipo, and Amodu, 2020). The fifth of the poorest families had a larger probability of dying before their fifth birthday than the fifth of

the next lowest households, and so on. Several health outcomes show the socioeconomic gradient in health.

2.2 Theoretical Framework

This study was underpinned by two (2) models namely: Beveridge Model of Healthcare System (1942), and National Health Insurance Model of Healthcare Delivery.

2.2.1 Beveridge Model of Healthcare System

The Beveridge Model of Healthcare System is named after the British economist William Beveridge, who proposed the model in his 1942 report "Social Insurance and Allied Services." The Beveridge Model is a single-payer healthcare system, which means that the government is the sole provider of healthcare. In this model, the government collects taxes from the population and uses those funds to provide health care facilities to all citizens.

The system is usually administered by a government agency, such as the NHS in the UK. In the Beveridge Model, all people qualify for healthcare services, irrespective of age, income, or health condition. The government finances all healthcare services, resulting in no out-of-pocket expenses for patients. The government also has the power to set prices for healthcare services and negotiate with providers to keep costs low.

National Health Insurance Model (NHID)

The NHID, which is commonly referred to as the "single-payer" model, is a system in which the government is responsible for providing insurance for medical expenditures for all of its citizens. One point of access to healthcare services is supplied via this system, which is sponsored by taxes and offers a single point of access. Under this structure, the government rewards healthcare providers directly for the services that they deliver to individual patients. Several countries, notably Canada, Taiwan, and a few European nations, have embraced this principle as their organisational framework. One of the advantages of the National Health Insurance Model is that it gives universal coverage, which assures that all citizens, regardless of their level of income, have access to medical services. As a consequence of the fact that there is only one insurer, this model also provides very reduced administrative expenditures. Nonetheless, most health care services are given by private firms constituted according to the Bismarck model. Payment is enabled via a government-operated insurance scheme to which every person pays. This is due to the absence of marketing requirement, a lack of financial motivation to reject claims, and the nonexistence of profit. Consequently, these universal insurance plans are often more inexpensive and substantially simpler to run than profit-oriented insurance in the United States. Conversely, a downside of this paradigm is the possibility for lengthy waiting periods for some treatments and procedures. Furthermore, there is a chance that the government may have problems monitoring spending, which may result in greater taxes for normal persons. In rural Africa, China, India, and South Africa, hundreds of millions of people live their whole lives without medical care. They might visit a rural healer who utilises homemade remedies that may or may not work (Woolhanler, 2022).

Relevance to the Study

How the Beveridge Model and The National Health Insurance is Suitable to the Study

In the Beveridge health care model, the government pays for medical care for all inhabitants using income tax funds. A national health insurance plan-based health care system funds health care services using income taxes. Workers in the formal sector pay 15% of their basic income to the NHIS. The company pays 15% and the employee 5%. As of now, NHIS membership in Nigeria is voluntary. The Beveridge model allows physicians to work for the government or as private practitioners, but the government pays their salary. Overall, these health care systems are affordable. Since the government is the lone provider, health care profit motives have disappeared. The Beveridge model is based on the idea that health care is a right that should be available to everyone. A nation that adopts the model guarantees health care for all citizens.

The UHC plan set out by the UN is the overarching objective of the national health insurance program, which aims to attain this objective. The major objective of the NHIS in Nigeria is to enable families, such as the Beveridge family, to get medical treatment without being hindered by financial constraints.

2.3 Empirical Review

Osuchukwu, Osonwa, Eko, Uwanede, Abeshi, and Offiong (2015) examined how the NHIS affects medical patients in Calabar, southern Nigeria. Household and patient exit surveys were used to create 43 pre-tested questions for 200 respondents. This study found that males (58%) and Christians (94.5%) dominated. They were public servants (39.5%) and married (56%). Additionally, 60.5% of respondents had graduated from university, and 27.5% aged 30–34. Over 90% of survey respondents knew about the initiative, yet just 37% engaged. Insufficient plan information, poor healthcare delivery, and system management insecurity prevented individuals from engaging. The programme improves medical treatment, maternity healthcare, and out-of-pocket medical expenses. The plan's performance was satisfactory for 72% of poll respondents, while those who were unhappy stated it needed to be changed.

Omoleke and Taleat examined Nigeria's health sector issues in 2016. Additionally, it examined how Nigerians' challenges have affected their health. The paper gathered primary data from randomly selected doctors, chemists, imaging scientists, and nurses. These exchanges were used to gather information about these patients' hospital issues. Their experiences showed that hospitals face social, economic, and environmental concerns. These issues include brain drain, poor pay, outdated infrastructure, limited medical facilities, and hospital underfunding. Hospitals are underfunded too. The research found that Nigeria's health care system lags below developed nations and certain African states.

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 non-parametric 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 non-parametric static technique, the t-test was used to analyse the data.

The previous study used three (3) hypothesis while this present study used five hypothesis formulated which was all accepted for the study. The results are analyzed using likert scale. From the findings it was discovered that respondents affirmed that health care programs in Bayelsa state has been effective to a high extent and that maternal and infant mortality has reduced to a high extent.

Omoleke and Taleat (2016) conducted a research in which they investigated the present problems and difficulties that are faced by the Nigerian health industry. This research study is likewise comparable to the one that is now being conducted. It is also possible to find similarities in the sample methods that were used. In other words, the earlier research used a straightforward random method, and the current investigation utilised the same methodology. Both studies, however, have distinct approaches to the design of their research.

Daniel (2017) examined the Nigerian NHIS's healthcare in Maiduguri, Borno State. A poll assessed Maiduguri Metropolitan Council residents' knowledge and impressions of the Scheme. A prepared questionnaire was presented to 393 regional enrollees. ANOVA was employed to test research hypotheses. Information on NHIS goals among subscribers in Maiduguri Metropolitan Council had little effect on NHIS Healthcare operations among consumers, with a coefficient of 0.39 and 5.19, respectively. As well, enrollee perception had no effect on NHIS Health Centre visits ($F_c=0.3$). Prior study examined maternal health care knowledge and barriers to use in Amassoma, Bayelsa State. Both study employed different data analysis methods. In this research, the t-test was utilised for data analysis, although the previous study used ANOVA. Each study has a distinct scope. The present study was conducted in Bayelsa

State, unlike the prior one in Borno. However, these studies employed similar sampling methodologies.

In 2021, Amos and Ebenezer studied "health, awareness, and knowledge of the National Health Insurance Scheme." The Unguwar Soya Community in Kabong, Jos North Local Government Area, Plateau State, Nigeria, was the setting for this multi-stage sample community-based descriptive study. This study examined residents' NHIS knowledge, attitudes, and habits. An interviewer distributed 252 standardised questionnaires to eligible community members. The 20-29 age group accounts for 33.7% of responders. The majority of respondents were women (63.5%), married (54.0%), secondary school graduates (47.2%), craftsmen (32.1%), and had a yearly income of more than 30,000 naira (25.8%). Family and friends were the main sources of NHIS information (25.5%) for 59.5% of respondents. Most respondents (49.3%) had not heard of the NHIS in over five years. The NHIS was liked by 77% of poll respondents. 13.3% of respondents are NHIS-registered. 88.5% of medical bill payers pay out-of-pocket. The index population lacked NHIS knowledge and comprehension. Thus, a small percentage of the population participated in the program. Amos and Ebenezer's research has parallels and differences. This research used evaluation design whereas the previous one used descriptive survey design. The prior research was in Plateau State, this one in Bayelsa. This research employed mean and standard deviation for data analysis, whereas the prior study used basic percentage. Both used structured questionnaires to collect primary data from respondents.

Another research, Doyle (2019), examined Nigerian healthcare administrators' duties, responsibilities, and career prospects. This research examined National Health. Established over eighteen years ago, the NHIS is being evaluated to determine its performance in providing healthcare to all Nigerians. The study employed a questionnaire and interviews with 384 purposefully chosen Niger residents. Data was analysed using ANOVA. The Scheme failed to meet its goals. The topic matter makes this study similar to the current one. The preceding research examined Nigeria's healthcare system's challenges and prospects. A questionnaire was the main data gathering method in both studies. The previous study was in Niger, whereas the present one was in Bayelsa. The prior study employed purposive sampling, whereas the present study used simply random sampling. The data was analysed using a t-test, whereas the previous study utilised an ANOVA. This study examined Nigeria's P.H.C system and its barriers to implementation. The study was conducted at many Enugu primary health care clinics.

A systematic sampling approach was used to choose the primary health care centres from among around eight primary health centres located within the Enugu Metropolis.

3. Methodology

Method

The evaluation research design was the one that was chosen for this particular study's research plan. Bayelsa State is a beautiful state in the Niger Delta region of Nigeria. It's known for its lush vegetation, beautiful beaches, and rich cultural heritage. The state capital, Yenagoa, is a

vibrant city with a mix of modern and traditional architecture. The state is home to a number of historical sites, including the Bayelsa Museum, which houses a collection of artifacts from the region. Bayelsa is also home to several parks and reserves, including the Idanre Forest Reserve and the Isaac Boro Park. And of course, it's also known for its natural resources, including oil and gas. Bayelsa State has eight local government areas, or LGAs, with a total land area of around 12,200 square kilometers. There are a number of both public and private health care facilities in Bayelsa State. The public facilities include the Federal Medical Center in Yenagoa, the Bayelsa State Specialist Hospital in Yenagoa, and the General Hospital in Sagbama. There are also a number of private hospitals, including Diète Koki Memorial Hospital in Yenagoa, Glory Land Hospital in Yenagoa, and Family Care and Clinic Services in Yenagoa which are suitable for this study.

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. Twenty (20) health care institutions have been selected, including sixteen (16) government-owned facilities among the eight (8) existing local government areas, and four (4) private health care facilities within the same state. Within the framework of thirty-five (35) respondents in a centre, the target populations for this research are thus comprised of seven hundred (700) health professionals and patients from each of the twenty public and private health centres located within the state. Field Survey, (2023) is the source data. 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; Diète Koki Memorial Hospital; and Family care clinic and services.

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

The researchers chose a sample size using a percentage. 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. Most data was collected by questionnaire. A four-point Likert scale is used to construct research instruments with Very High Extent (VHE), High Extent (HE), Low Extent (LE), and Very Low Extent options. 30 non-cognitive components make up this tool. Sections A and B comprise HAHCDSES. Section A covers personal data, whereas Section B covers health administration and healthcare delivery effectiveness.

Two Imo State University educational measurement and evaluation experts verified the research instrument. 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. Assisting researchers were taught to deliver and recover the instrument from study participants. Researchers in Bayelsa State used study assistants to administer and collect instruments from participants at all twenty public and private health care institutions. For study analysis, the recovered instrument was employed.

Model

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: To what extent has health management impacted on health care delivery in Bayelsa State?

Table 4.2: Computation of respondents' responses on the impact of health management on health care delivery system in Bayelsa State. HO=138; P=156. (N=294)

S/N	Items	Health Officers			Patients		
		\bar{x}_1	sd_1	Remark	\bar{x}_2	sd_2	Remark
1	Adequate health care Planning is carried out identifying and addressing the health need of the people	3.45	0.86	HE	3.40	0.59	LE
2	Attitude of health personnel towards patients has so far encourage seamless health care service utilization	3.20	0.80	HE	3.21	1.01	HE
3	There has been high quality of healthcare service delivery due to perceived increase in funding of health care programs in the state	3.04	0.76	HE	3.07	1.07	HE
4	Patients are said to be satisfied due to intensive monitoring of health programs by health officers in the state	2.96	0.74	HE	2.95	0.71	HE

5	Families with fewer numbers of children is as a result of family planning counselling and campaign programs in Bayelsa State.	2.84	0.71	HE	2.85	1.05	HE
6	There is equality in service delivery of all enrollees irrespective of the premium	2.70	0.68	HE	2.69	0.67	HE
Grand Mean		3.03	0.76	HE	3.02	0.75	HE

Source: Field Survey, 2024

The research shown in Table 4.2 above reveals the degree to which health management in Bayelsa State has had an influence on the delivery of health care. Furthermore, the research indicates that effective health care planning has been implemented to identify and address the health requirements of the people. The respondents believed that health management had significantly improved health care delivery in Bayelsa State. The overall mean scores for the health officials and patients were 3.03 and 3.02, respectively, both above the criterion mean score of 2.50.

Research Question 2: To what extent has factors militating against health administration effected health care delivery system in Bayelsa State?

Table 4.3: Computation of respondents' responses on factors militating against health administration effected health care delivery system in Bayelsa State. M=142; F=152. (N=294)

S/N	Items	Male Respondents			Female Respondents		
		\bar{x}_1	sd_1	Remark	\bar{x}_2	sd_2	Remark
1	Availability of qualified health care providers	2.35	0.59	LE	2.37	0.59	VHE
2	Availability of health care facilities, equipment and medications	2.17	0.54	LE	2.11	0.53	ME

3	Cost of health care service	2.70	0.68	HE	2.58	0.64	ME
4	Inadequate funding	2.84	0.71	HE	2.83	0.71	LE
5	Lack of public awareness on health issues	2.80	0.70	HE	2.80	0.70	ME
6	Lack of basic infrastructure like roads, electricity, and water supply	3.15	0.79	HE	3.25	0.81	HE
Grand Mean		2.67	0.67	HE	2.66	0.66	ME

Source: Field Survey, 2024

The analysis presented in Table 4.3 above reveals that both male and female respondents have provided responses regarding the factors that are working against the health administration and health care delivery system in Bayelsa State. The grand mean for both respondents is 2.67, and the grand mean for female respondents is 2.66. Both scores exceed the criteria mean score of 2.50. The respondents concurred that deficiencies in fundamental infrastructure, including roads, electricity, and water supply, insufficient funding, limited public awareness regarding health issues, the expense of healthcare services, the availability of qualified healthcare providers, and the accessibility of healthcare facilities, equipment, and medications have all adversely affected healthcare delivery in Bayelsa State.

According to the findings, the respondents have confirmed that the factors that are working against the health administration and health care delivery system in Bayelsa State include a lack of basic infrastructure such as roads, electricity, and water supply; inadequate funding; a lack of public awareness on health issues; the cost of health care services; the availability of qualified health care providers; and the availability of health care facilities, equipment, and medications.

4.2 Test of Hypotheses

Hypothesis 1: There is no substantial difference in the mean scores of health officers and patients on the impact of health management in health care delivery system in Bayelsa State.

Table 4.4: Computation of no substantial difference in the mean scores of health officers and patients on the impact of health management in health care delivery system in Bayelsa State

Responses	n	Mean	SD	z-cal	α	Df	z-crit	Dec.
				x	(0.05)			
Health Officers 0.76	138	3.03						Accept
				1.11	0.05	292	1.96	H ₀₄
Patients 0.75	156	3.02						

Source: Field Survey, 2024

Table 4.4 presents a summary of the scores, averages, standard deviations, and a z-test analysing the differences among respondents. The calculated z-test statistic was 1.11, while the z-critical value was 1.96. This was established using 89 degrees of freedom at a significance level of 0.05. With a significance level of 0.05 and 292 degrees of freedom, the estimated value of 1.11 is lower than the critical value of 1.96. It can be said that there is no statistically significant difference between the average judgements of health officers and patients about the influence of health management on the healthcare delivery system in Bayelsa State.

Hypothesis 2: There is no substantial difference in the mean scores of male and female respondents on the factors militating against the effective health administration and health care delivery system in Bayelsa State.

Table 4.5: Computation of no substantial difference in the mean scores of the respondents in male and female respondents on the factors militating against the effective health administration and health care delivery system in Bayelsa State

Responses	n	Mean	SD	z-cal	α	Df	z-crit	Dec.
		(0.05)						
Male	142	2.67	0.67					Accept
				1.13	0.05	292	1.96	H ₀₅
Female	152	2.66	0.66					

Source: Field survey, 2024

At a level of significance of 0.05 and a degree of freedom of 292, the z-calculated value of 1.13 is lower than the z-critical value of 1.96. This is seen in Table 4.5. According to the researcher, the null hypothesis is correct. The researcher comes to the conclusion that there is no substantial

difference in the mean scores of male and female respondents on the elements that are working against the efficient administration of health care and the delivery of health care in Bayelsa State. This conclusion is based on the testing of the hypothesis.

4.3 Summary of Findings

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

1. That health management practices by the health officers has positively impacted on healthcare delivery in Bayelsa State to high extent.
2. A hypothesis test indicates that there is no statistically significant difference in the mean ratings of health officers and patients about kinds of health care systems in Bayelsa State. The study indicates that the computed z-value of 1.43 is less than the required z-value of 1.96 at the 0.05 significance level.
3. There is no significant difference in the opinion of male and female respondents on the knowledge, practice and utilization of health programs in Bayelsa State. Result of analysis shows that $z\text{-calculated} = 1.16 < z\text{-critical} = 1.96$ at 0.05 level of significance.
4. There is no significant difference in the mean scores of health officers and patients on the impact of health management on health care delivery system in Bayelsa State. Result of analysis shows that $z\text{-calculated} = 0.11 < z\text{-critical} = 1.96$ at 0.05 level of significance.
5. There is no significant difference in the mean scores of male and female respondents on the factors militating against the effective health administration and health care delivery system in Bayelsa State. Result of analysis shows that $z\text{-calculated} = 0.13 < z\text{-critical} = 1.96$ at 0.05 level of significance.

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:

Health Management Impact and Healthcare Delivery

Table 4.4 shows the results from participants who answered questions concerning the premise that health officers and patients had similar average ratings on the impact of health management on Bayelsa State health care. The research found that $z\text{-calculated}$ is 0.11, smaller than $z\text{-critical}$, which is 1.96 at 0.05. This supported the null hypothesis, which argues that there is no significant difference. Therefore, data support Chikeleze (2017). In his research, healthcare management performed well on healthcare delivery.

On average, health management improved in internal domains related to enrollees' services, including the provision of high-quality medical services and the protection of families from high medical costs. Soyibo, Lawanson, and Olaniyan (2012) claim that healthcare service provision is limited in the south-west (Osun and Oyo States) and south-south (Edo and Delta States). This study contradicts them. As a consequence, they argue that a dependable and

sustainable community health care system is needed to guarantee that everyone has access to health care, regardless of income. This idea holds that the government's social obligation is to provide healthcare using public funds. This ensures equitable and fair access for everybody, regardless of income.

Factors Militating against Health Administration and Healthcare Delivery System

In Bayelsa State, hypothesis 2 showed no statistically significant difference in mean scores between male and female respondents on characteristics that hinder healthcare administration and delivery. Analysis shows that the estimated z-value of 0.13 is below the essential 1.96 at the 0.05 significance level. Our results support Abimbola (2015)'s conclusion that the government manages primary health care facilities. Many research participants said the government should improve healthcare. Most research participants felt that Nigerian primary health care institutions were underfunded by the government. They believe the WHO, NGOs, and other government agencies must work together to fulfil the primary health care system's core purpose in Nigeria. Patients benefit more from basic health care when providers are nearby. According to Anyika (2014), medicine shortages, corruption, poor health staff attitudes, and obsolete and failing health facilities hinder health sector operations and development. The National Health Insurance Scheme (NHIS) has various challenges, including a physician shortage, according to Osuchukwu et al. (2013). Premium payment delays are one of several worries for health facility managers, according to Omoruan, Bamidele, and Philips (2019). Sanusi and Awe (2009) especially mentioned the frequent usage of outdated and insufficient healthcare facilities. Agba, Ushie, and Osuchukwu (2010) say corruption and financial diversion have hurt the health sector, while Sanusi and Awe (2009) are harsher.

Despite modern medical equipment and technology, individuals are not trained. The equipment is underused and may be damaged. Even though Osuchukwu (2013) listed it as a major NHIS concern, According to Anyika (2014), pharmaceutical shortages, corruption, a negative attitude among health workers, and obsolete and decaying health facilities all hinder health sector operations and development. Omoruan, Bamidele, and Philips (2019) also note delays in premium payments to health facility owners.

Sanusi and Awe (2019) highlighted that healthcare providers employ obsolete and substandard facilities. Corruption and financial diversion have hurt the health sector, according to Agba, Ushie, and Osuchukwu (2010). Sanusi and Awe (2019) stressed the importance of these facilities. All of these variables and more have helped the National Health Insurance System (NHIS) meet its national goals more efficiently. Others have highlighted concerns about society, the government, medical care facilities, the Scheme, and its functioning and structure.

5. Conclusion and Recommendations

This chapter presented the summary findings, limitations, conclusions, recommendations, contributions to knowledge and suggestions for further studies.

5.1 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 have 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. 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.
3. It is crucial to provide the appropriate staff whenever feasible and to vigorously undertake proper program supervision, monitoring, and evaluation. The Nigerian government should make the education of additional rural health professionals a top priority in order to improve the country's health strategy. In order to stop rural health personnel from moving from rural areas to metropolitan centres, this measure is being taken.
4. To reduce the high turnover rate of healthcare personnel, further financial and other incentives should be offered.

6 References

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