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Poor Healthcare Delivery amidst Petroleum Wealth: The Pathetic Situation of Oil-Bearing Communities in Imo State, Nigeria

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Abstract

It is quite paradoxical and disheartening that a naturally endowed group of communities were pushed into penury amidst abundant wealth. This study examined the contribution of petroleum wealth towards healthcare delivery in Imo State oil-bearing communities. The study adopted mixed research design. The study anchored on Richard Auty's natural resource curse theory. The population of the study was one hundred thousand and the study adopted five thousand sample size. Ballot method which is a technique of simple random sampling was utilized to determine the communities that were selected for this study. Survey research technique and documentary method were utilized for data collection. Descriptive statistics, Pearson correlation analysis, regression analysis and analysis of variance were utilized for data interpretation. The study discovered that petroleum wealth has not contributed significantly towards healthcare delivery in Imo State oil-bearing communities. The study recommended that Government agencies established for the purpose of ensuring the welfare and development

of oil bearing communities (Niger Delta Development Commission and Imo State Oil Producing Areas Development Commission) and multinational oil companies should urgently devote adequate resources towards healthcare delivery in the study area, so as to ameliorate their sufferings.

Keywords: Healthcare delivery, oil-bearing communities, Petroleum, Petroleum wealth, poor healthcare, poor.

1: Introduction

There is no gain saying that an improved healthcare delivery system is a sine qua non for human existence on earth for without it, life is put in jeopardy. Unarguably, a robust healthcare delivery system is the mainstay of every healthy society. An efficiently organized healthcare delivery system makes it easy for people to access medical attention and facilitate succor to their medical challenges. The relevance of a properly built healthcare delivery system cannot be overrated. This is because it ensures that preventable deaths do not occur, promotes health and provides information on how to prevent illness as well as curative services. Obviously, every progressive country strives to actualize and maintain a robust healthcare delivery system because it attracts medical truism, allied businesses, creates jobs for medical officers and reduces the rate of maternal and infants mortality.

However, from the mid of 1970s when petroleum production started in large scale in Imo State, Niger Delta of Nigeria, insignificant economic growth has been achieved whereas ecological squalor, poor infrastructure and indigenous technological backwardness as shown by major socioeconomic pointers, like paucity of social amenities and cultural decrepitude have been prevailing and unabated. Nevertheless, petroleum production in Imo State oil-bearing communities has harmfully affected crop cultivation and aquatic environment. Also, gas flaring which pollutes the air is flagrantly practiced and this exposes the people to acid rain which causes itching to the skin, global warning and many other sundry health threatening problems. In addition, oil spillage which occurs often has not only brought constant outbreak of water borne diseases but also taken its toll in the destruction of their flora and fauna. But it is quite disheartening and worrisome that social amenity is grossly inadequate and many people wallow in poverty in an environment paradoxically wealthy. The pathetic condition of healthcare delivery in Imo State oil-bearing communities indicates a situation of deprivation, neglect and insensitivity on the part of the Government and oil multinationals operating in these communities. Over the years, the residents of Imo state oil-bearing communities have been embarking on domestic medical tourism to Owerri (the state capital) and other cities outside the state. Sometimes before they arrive at these hospitals in the city, their health conditions get complicated. In extreme cases, they die on the way to hospitals. Whereas these communities ought to have healthcare services that are robust, efficiently organized and well improved in line with the global standards.

In line with the foregoing strand of reasoning, Duru (1999) observed that Poverty in oil bearing communities is worsen by high cost of living, water borne diseases, poor housing, paucity of potable water and sanitation. Federal Radio Corporation of Nigeria (2013) reported that oil bearing communities are not getting corresponding reward from oil wealth despite the hazards they are exposed to in the course of petroleum production. In their study, Baridam & Govender (2019) noted that oil bearing communities in the Niger Delta are not fairly treated in the sharing of oil wealth generated from their territory despite health hazards they are suffering in the process of oil production. They also asserted that marginalization of the region has led

to the neglect of infrastructural development (including functional healthcare system). It is obvious that petroleum production poses a health hazard to the residents of Imo State oil bearing communities. The question is, to what extent has petroleum wealth impacted on their healthcare delivery? It is against this background that this study examined the contributions of petroleum wealth toward healthcare delivery in Imo state oil bearing communities The following hypotheses was stated for this study: Petroleum wealth has not contributed significantly towards healthcare delivery in Imo State oil bearing communities.

This paper is organized into five sections. The first section is the introduction, followed by materials which is the second section. The methodology is thoroughly described in the third section, while data presentation and analysis are reported in the fourth section. The discussion of the findings and concluding remarks are presented in the fifth section.

2: Materials

2.1 Conceptual Elucidation

In this study, efforts were made to clarify the meaning of poverty, petroleum, healthcare delivery, community and oil-bearing community.

2.1.1: Poverty

United Nations (1995) defined poverty as a situation distinguished by extreme lack of basic necessities of life including potable water, food, sanitation, amenities, health, house, education and information. It does not only involve income but also access to services. It entails a situation where individuals lack the resources to take care of themselves. This include lacking the wherewithal to maintain health and physical efficiency (Haralambos and Holborn, 2013). In this study, poverty implies unwanted condition in which an individual or a group of individual lack the means and facilities to live a healthy life style. It is a social problem that puts individuals in discomforting situations in the society.

2.1.2: Petroleum

United States Energy Information Administration (2022) described Petroleum as a fossil fuels which is a mixtures of hydrocarbons that are fashioned from carcass of organism (plants and animals) that lived millions of years ago in aquatic environs. In this study, petroleum is seen as an unprocessed crude oil which is made up of hydro carbon and related organic materials. Petroleum is sourced from the soil and water. Petroleum is processed into gasoline, jet fuel, kerosene asphalt and many other petrochemical products. It is also known as crude oil.

2.1.3: Healthcare Delivery:

Oxford Reference (2022) described healthcare delivery system as a method in which the national, state (regional) and Local healthcare is arranged, managed, made available and paid for. In this study, healthcare delivery means a systematic arrangement made by the government or non-governmental organizations to ensure that healthcare services are provided and delivered to the people. It involves making provisions for hospital buildings, gadgets, drugs (medicine) medical personnel, laboratories and security of the facilities.

2.1.4: Community:

Ogunna (2007) argued that a community is a group of individuals that share common geographical location which is usually a village group. Bureau for local Government and Chieftaincy Affairs (2005), described a community as a people inhabiting a definable topographical expanse comprising many villages and are united by common traditional and

cultural way of life with common historical heritage and approved by the government. In this study, a community is synonymous with an autonomous community and it is taken to mean a group of people that have the same culture, tradition, ancestor (founder of the community) and a definable geographical location.

2.1.5: Oil-Bearing Community:

Oil-bearing communities are described as oil producing communities, host communities to multinational oil companies, communities that lay the golden egg in Nigeria. In this study, an oil-bearing community implies a group of people that have common characteristics, live together and possessed crude oil or petroleum in their soil or water. An oil-bearing community has one or more oil wells and oil production is taking place in their territory.

2.2: Literature Review

In this study, the researchers reviewed scholarly works on the contributions of petroleum wealth on healthcare delivery in Nigeria. Bamidele (2019) described an effort made by Shell Petroleum Development Company of Nigeria (SPDC) to rebuild and furnish the General Hospital at Kolo (Oloibiri), in Ogbia Local Government Aria, Bayelsa state. The health institution was furnished with the state-of-the-art medical gadgets and facilities. The Kolo general hospital has been has been positioned as the centre of medical activities in Ogbia. The incorporated and all-inclusive method to carter for the health / medical needs of the people, which the company refers to the 'Oloibiri health programme' was executed to mark Nigeria's centenary in 2014.

Similarly, Babatunde (2015), narrated the contribution of Shell Petroleum Development Company towards health care delivery in Nigeria. Accordingly, the company collaborated with the native people and the Rivers State Government to establish Obio Community Health Insurance Scheme in 2010. It was a kind of universal health coverage scheme which targeted at providing excellent and affordable health care for the down trodden. The Obio health model is a joint venture arrangement that puts the native at the helm of affairs. The indigenous people through their development board, presents their health needs. Every partner pays a premium of seven thousand two hundred naira only ($10) per annum. The scheme takes care of the members' primary and secondary health care, with special emphasis on maternal and infant healthcare. Shell petroleum takes care of the infrastructure, utility, equipment, gadgets. The community development board manages the hospital. A huge success has been achieved since the establishment of the scheme in 2010. For instance, the average number of monthly outpatient presence rose from six hundred and forty-four (644) per month in 2010 to three thousand seven hundred and fifty-four (3,754) in 2012, and twenty-seven thousand seven hundred and ninety-eight (27,798) in 2015. Also, the Monthly maternal / antenatal attendance average increased from one hundred and eighty-one (181) in 2010 to an average number of two thousand two hundred and seventy-two (2,272) in 2015. The average number of babies delivered in the hospital per month is three hundred and five (335) presently, whereas it was fourteen per month before the scheme was established in 2010.

Also, Bamidele (2017), described how Shell Nigeria Exploration and Production Company (S.N.E.P.Co) controlled acute intestinal disease (cholera) outburst in internally displaced persons' camp (IDPC) at Dikwa Local Government Area in Borno State of Nigeria in 2017. The pioneer oil multinational company Shell Petroleum showed the displaced individuals' charity by supplying them medication, safe and potable water, cleanliness materials, and food assistance. The all-inclusive quality of the provisions not only went a long way to prevent the escalation of the disease (cholera) in the camp but also made individuals in the camp to be relatively healthy and safe.

In the same vein, Ojulari (2019), narrated how the oil giant, Shell Nigeria Exploration and Production Company (SNEPCo) worked in conjunction with the federal ministry of health Abuja Nigeria, to upgrade the national hospital (Abuja) cancer treatment and care. The company donated one million five hundred thousand United States of America dollar ($ 1.5), towards the procurement of the state-of-the-art radiation medical equipment/ machine (radiotherapy) and the advancement of the hospital's staff knowledge. The donation from shell petroleum has gone a long way to improve the overall care for cancer patient in the hospital. It has equally reduced the mortality rate associated with cancer in the hospital.

Burger (2016) reported the giant stride of shell petroleum Nigeria toward medical preparedness against Ebola virus disease in 2014. According to the media release, shell petroleum Nigeria collaborated with Nigeria national petroleum corporation (NNPC) to provide medical ambulance, equip Port Harcourt and Lagos Ebola treatment centres, and provide sundry medical facilities. They also provided internet facilities to the two centres, supplied more than twenty thousand liters of fuel for Lagos and Port Harcourt treatment centres.

Ejele (2014), gave an account of gesture done to Niger Delta University Teaching Hospital, Okolobiri in Bayelsa State, by total upstream companies in Nigeria. The company constructed a baby unit, gas chambers, donation of thirty-four single baby beds, fourteen single bed incubators, blood gas analysers, medical gadgets. Accordingly, the project was a deliberate contribution of total and its partners to impact on the lives of Bayelsa residents through the donation. The donation of this baby unit aimed at curtailing preventable deaths of newborn babies and infants in the state. The project has repositioned the capacity of the teaching hospital in the area of baby care. This gesture has gone a long way to ensure that babies are been cared for properly

Amegima (2010), accounted for a giant stride by Total upstream companies in Nigeria for upgrading Erema General Hospital, River State. 'The hospital is a blessing to the community'. Since the hospital was upgraded to a modern secondary healthcare system with the state-of-the-art facilities, many medical problems/cases have been solved with ease. Affiliation between total upstream companies and Erema General Hospital has been a huge blessing and success. Total upstream companies have actually demonstrated that the sound health of their host communities is her utmost priority. The nature and quality of medical gadgets and facilities donated to the hospital by total upstream companies are second to none in the history of rural general hospitals in Rivers State. The hospital has a very good theatre which makes it easy for the doctors to handle surgery cases smoothly. The medical practitioners in the hospital noted that, 'because of the gadgets we handle caesarian sections, appendicitis operations and other minor cases' smoothly.

Odugbesan (2020) narrated a resent donation of newly built ultramodern hospital to Ogijo community in Sagamu local council area, Ogun State. The gesture was done by shell Nigeria in conjunction with Nigeria national petroleum corporation. The medical facility has twenty beds space, medical practitioner's accommodation, and substitute source of electricity, water treatment facility and health ambulance. The health facility will go a long way to ameliorate the health care delivery to the residents of Sagamu and its environs. The same media release by shell petroleum also reported another effort made by the company toward health care delivery in Nigeria. They lately transformed the emergency unit of general hospital Odan, Marina Lagos state Nigeria. The company provided up to date (state of the art) medical gadgets and facilities and a specially made ambulance for the hospital.

Finally, it is obvious that Nigerian petroleum wealth has impacted on healthcare delivery in some parts of the country, but rarely in Imo State oil bearing communities. Nevertheless, there is no terse written work put forth in academic manner, which centres on the contribution of petroleum wealth on healthcare delivery in Imo State oil bearing communities, hence this study took the task of covering this academic gap.

2.3: Theoretical Framework

The use of an appropriate theory is an essential condition in any scientific inquiry. It provides a veritable guide for analyzing research and facilitating logical consistency. Accordingly, this study anchored on Natural resource curse theory. The theory was propounded by an economic geographer Richard Auty in 1993. Thus, the term is taken to imply a paradoxical condition in which a country's abundant natural resources bring hardship and all manner of untold discomforting conditions to the citizens instead of an improve standard of living. Natural resource curse theory is a situation in which the citizens of a country naturally endowed with extractable resources suffer from poverty, conflict, marginalization and poor healthcare facilities in the midst of wealth found in their environment. It is an aberrant consequences of a state natural resource wealth on its socio-economic and political comfort. It is a condition in which the resources of a country does not brig economic fortune rather a situation of unrest and absence of peaceful atmosphere. (Chukwudi, 2021; Ross, 2014; Vanessa, 2014).

Furthermore, oil bearing communities in Imo state are suffering untold hardship amidst abundance of petroleum wealth. These communities are not getting equivalent benefit from petroleum wealth. They have loss farmlands. Petroleum production activities have adversely affected crop production as a result of oil spillage on farm lands. Many crop farmers have abandoned farming as a result of soil infertility occasioned by oil spillage. There is constant air pollution through gas flaring. This hazardous practice by Multinational Corporations causes acid rain, global warming and other sundry life-threatening challenges. Aquatic organisms are not spared in this ugly scenario because water contaminations occur on a daily basis. Most fisher men have been pushed out of job due to the decreasing number of fishes in the water as a result of oil spillage. Thus, creating unemployment Peril. Yet, the healthcare delivery in these communities are in shambles and abysmally poor.

3: Methodology

3.1: Research Design

Research design is described as the prearrangement of specifications for collecting and examination of facts in a method that targets to join significance to the study objective with cheap in procedure (Kothari & Garag, 2019). In this study, mixed research design was adopted so as to bring to bear the strength of both qualitative and quantitative research designs. Survey research technique which involves the use of questionnaire, observation and interview were utilized for data collection. Also, documentary method of data gathering was equally adopted. The study employed descriptive statistics, karl Pearson correlation, analysis of variance and regression test to analyze and test the hypothesis.

3.2: Study Area

The study took place in Oguta and Ohaji/Egbema Local Governtment Areas in Imo state, (Southeast) Niger delta, Nigeria. The study area is a petroleum rich environment. The people are chiefly farmers, fishermen and entrepreneurs. They are mainly Christians but there are traditionalists in the area. The presence of Oguta Lake, Orashi River and their confluence make the study area a tourist destination. The study Area was selected because oil production

has been taking place in its communities for the past four decades. Thus, the impact of petroleum wealth on healthcare delivery in these communities can be assessed. Some of the multinational oil companies operating in the study area include: Addax Petroleum Development, Nigeria Ltd, Waltersmith Petroleum Oil Ltd, Nigeria Azienda General Italiana Petroli (AGIP) Oil Company Limited and Shell Petroleum Development Company of Nigeria

3.3 Population of The Study

The population of the study is one hundred thousand (100,000). This figure represents the population of the sixteen oil bearing communities in the study area. These communities include: Abacheke, Agwa, Akiri, Assa, Awara, Eze-orsu, Izombe, Mmahu, Nwari, Obiakpu, Obile, Obokofia, Oguta, Ohoba, Orsu-Obodo, and Ugada.

3.4: Sample Size

Kothari and Garge (2019) argued that the magnitude of sample supposed not to be extremely big nor too insignificant. It supposed to be optimal or moderate. A moderate or optimal sample according to them is one which achieves the necessities of efficacy, realism, dependability and litheness. They went further to say that the nature of a population or universe should determine the size of sample. If the population of the study is homogenous, a small sample can serve the purpose. But if the population of the study is heterogeneous, a large sample would be required. Furthermore, for population up to 1000, 5000, and 10,000, Makodi-Bierenu (2006) advocates 20 percent, 10 percent and 5 percent respectively as the requisite sample size. In line with the above, the study adopted sample size of five thousand (5000), out of the total population of one hundred thousand (100,000). This figure represents five percent (5%) of the total population of the study. This selection is deliberate because the oil-bearing communities in Imo State are homogeneous people. This indicates that five thousand sample size is an optimum figure that fulfills the requirements of reliability.

3.5: Sampling Technique

The study adopted probability sampling technique. Ballot method which is a technique of simple random sampling (without replacement), was utilized to determine the communities that were selected for this study. The researchers prepared a bowel, listed the names of all the sixteen oil-bearing communities in the study area, in a separate piece of Papers, folded and squeezed the pieces of papers. The papers were dropped in the bowel. The bowel was wobbled thoroughly and the researchers picked, unfolded and recorded the name of the selected community. This procedure endured till ten communities that were needed or required for this study were selected. The selected communities were: Ezi-orsu, Izombe, Oguta, Orsu-Obodo, Abacheke, Assa, Obiakpu, Mmahu, Ohoba and Obokofia. However, all the healthcare facilities in the selected oil-bearing communities formed part of the institutions the researchers visited. The researchers equally wrote letters to some agencies in the petroleum sector, requesting the record of their contributions toward healthcare delivery in the study area. The researchers utilized religious institutions as well as some community leaders as machinery for distributing and retrieving questionnaire from the residence.

3.6: Instrumentation

In line with mixed research design, survey research technique was utilized. The survey instruments utilized in this study include: questionnaire, interview and observation. On the questionnaire, it was divide into two segments (‘A’ and ‘B’). Segment ‘A’ aimed at obtaining the demographic information (age, gender, occupation, educational qualification and community of residence) about the respondents. While segment ‘B’ of the questionnaire was made up of the main structured questions, prepared in line with the objective of the study. The questions in the questionnaire were framed in line with interval and non-comparative scale

(likert-type or summated scale). The researchers distributed the questionnaire through hand delivery, community leaders and religious institutions. The researchers distributed five thousand questionnaire but retrieved four thousand eight hundred and fifty. The study recorded three percent (3%) attrition rate. The ethical consideration was brought to the fore in this study. This was done by attaching an introduction letter to the questionnaire which clearly spelt out the purpose of this study.

The study also utilized interview instrument for data collection. The researchers adopted personal face to face and unstructured interview. This is because individual interview gives the respondents (interviewee) freedom to express themselves copiously and dispassionately. Whereas unstructured interview gives the researchers greater flexibility to restructure the interview questions as situations require. It also reveals in-depth information/knowledge and wider coverage of the issue under investigation by accommodating both the lettered and less-educated. The major categories of people interviewed are traditional rulers (Ndi-Eze), town union chairmen, women leaders, youth leaders, and market women, village heads, personnel of healthcare facilities in the study area etcetera. The researchers' selection of these group of people was purposeful because they are knowledgeable about the contribution of petroleum wealth on the healthcare delivery in the study area.

Observation method of data gathering was utilized in this study. The researchers went to all the selected oil bearing communities to see the conditions of their healthcare infrastructure. The exercise was done with the purpose of verifying the data obtained from the respondents. Furthermore, apart from survey research technique, the study utilized documentary method of data generation. These involved internet materials, hard copy text books and journals that constituted the reviewed literature.

3.6.1: Reliability of the instrument

The study adopted test-retest reliability. This method of reliability test was adopted because it is easy to administer and most direct method of demonstrating that an instrument is consistently performing its task. Two percent (2%) of the questionnaire was administered to the people of Agwa town in Oguta Local Government Area and after five months, the respondents were given the same questions. The respondent's views and correlation explanations of the test-retest examination are in table I. Accordingly, from table 1, it can be noticed that the correlation coefficient between test and retest is 0.0979 and P value is 0.002. This shows clearly that there is a noteworthy association between the first test and the second test at a significance level of 0.05. This indicates that the questionnaire is dependable.

Table 1: *Test retest correlational analysis*

		Test	Retest
Test	Pearson Correlation	1	.979
	Sig. (1-tailed)		.002
	N	5	5
Retest	Pearson Correlation	.979	1
	Sig. (1-tailed)	.002	
	N	5	5

**. Correlation is significant at the 0.01 level (1-tailed).

Source: *Authors field work 2022*

3.6.2: Validity of the instrument

The researchers ensured that the cardinal purpose of this research was captured in the questions asked in the instrument of data collection. Also, contribution of petroleum wealth

and the situation of healthcare delivery in the study area were represented with ten questions in the instrument of data collection.

3.7: Method of Data Analysis

In this study, descriptive statistics was adopted for summarizing and transforming the raw data into a form that will enabled easy interpretation. Karl Pearson correlation analysis was utilized for measuring the level of association between petroleum wealth, healthcare delivery and the state of healthcare delivery in the study area. Also, regression analysis and analysis of variance (ANOVA) were employed for analyzing the direction of the relationship between the variables under investigation. The study also employed statistical package for social science (IBM SPSS), software for the analysis. The reason for the SPSS utilization is to avoid error in calculations and to ensure accuracy, speedy calculation and analysis.

3.9: Limitations of the Study

In the process of conducting this study, particularly in the course of collecting data, the researchers encountered a lot of daunting challenges that attempted to impede the progress of the work. Some of the challenges include: the researchers were prevented from gaining entrance to Shell Petroleum Development Company of Nigeria, Location quarters office at Egbema Imo State, by the security officers at the gate. However, it took the intervention of a community leader who called the attention of an administrative staff of Shell, who received the introduction/ formal letter from the researcher. Also, some residents of Imo state oil bearing communities were apprehensive of the research and refused to accept the questionnaire nor answer the questions in it. The researchers overcame this impediment by using religious institutions as a machinery for distributing and retrieving the questionnaire.

4: Data Presentation and Analysis

4.1: Data Presentation

From table 2, precisely in item one, 98.5 percent (61.4% + 37.1%) of the respondents affirmed that there are healthcare centres in at their communities. While 1.4 percent (0.2% + 1.2%) of the respondents expressed a contrary view. In item two, 90.3 percent (80% + 13.8%) of the respondents stated that the Niger Delta Development Commission (NDDC) does not donate drugs or medical gadgets to healthcare facilities in their communities. While 3.7 percent (1.6% + 2.1%) of the respondents expressed a contrary view. 2.5 percent of the respondents were unfamiliar with item. Similarly, in item three, 83.5 percent (52.6% and 30.9%) respondents noted that NDDC has neither built healthcare facility nor renovated existing ones in their communities. 2.1 percent of the respondents noted that they were not knowledgeable about item three. While 14.4 percent of the respondents stated that NDDC has built and renovated healthcare facility in their communities.

Furthermore, in item four, 93 percent of the respondents which represents a greater percentage of the sample strongly oppose the notion that malaria parasite test takes place in the healthcare center or hospital at their community. 3.1 percent of the respondents were not whether malaria parasite test takes place in the healthcare facility in their community. While 3.9 percent of the respondents affirmed that malaria parasites test takes place in the healthcare facility at their community. In item five, 86.9 percent of the respondents noted that ISOPADEC has not renovated healthcare facility at their communities. While 9.7 percent of the respondents argued that ISOPADEC has renovated healthcare facility at their communities. In the same manner, a greater number of the respondents (86.7%) in item six noted that ISOPADEC does not donate drugs and other medical paraphernalia to the healthcare center at their communities.

Table 2: *The responses of the residents of Imo state oil-bearing communities in a simple percentage*

S/N	Items	Responses				
	Contribution Of Petroleu Wealth To Healthcare	**Strongly Disagreed**	**Disagreed**	**Unknown**	**Agreed**	**Strongly Agreed**
1	There is a health centre or hospital at my community	12 0.2%	60 1.2%		2978 61.4%	1800 37.1%
2	Niger Delta Development Commission (NDDC) from time to time donate drugs or medical gadgets to healthcare centre or hospital in my community	3880 80%	670 13.8%	120 2.5%	80 1.6%	100 2.1%
3	A healthcare centre or hospital has been built or renovated by Niger Delta Development Commission (NDDC) in my community	2550 52.6%	1500 30.9%	100 2.1%	500 10.3%	200 4.1%
4	Malaria parasites test takes place in the healthcare centre or hospital at my community	3000 61.9%	1510 31.1%	150 3.1%	80 1.6%	110 2.3%
5	Imo State Oil Producing Areas Development Commission (ISOPADEC) from time to time donate drugs or medical gadgets to healthcare centre or hospital in my community	2750 56.7%	1465 30.2%	167 3.4%	300 6.2%	168 3.5%
6	A healthcare centre or hospital has been built or renovated by Imo State Oil Producing Areas Development Commission (ISOPADEC)	3235 66.7%	1000 20.%	65 1.3%	370 7.6%	180 3.7%
7	Labour and delivery services takes place smoothly in the health centre at my community	2480 51.1%	1860 38.4%	10 0.2%	300 6.2%	200 4.1%
8	Multinational oil companies from time to time donate drugs or medical gadgets to healthcare centre or hospital in my community	3000 61.9%	1410 29.1%	70 1.4%	220 4.5%	150 3.1%
9	A medical laboratory scientist is serving in the health centre or hospital at my community	2892 59.6%	1448 29.9%	20 0.4%	280 5.8%	210 4.3%
10	A medical doctor is serving in the health centre or hospital at my community	2723 56.1%	1862 38.4%	15 0.3%	150 3.1%	100 2.1%

Source: *Authors field work 2022*

In item seven, 89.5 percent of the respondents asserted that Labour and delivery services does not takes place smoothly in the health centre at their communities. While 10.2 percent of the respondents had a contrary view. Furthermore, in item eight, 91 percent of the respondents noted that multinational oil companies operating in their communities does not donate drugs and medical gadgets to their healthcare facilities. While 7.6 percent of the

respondents expressed a contrary opinion. In item nine, 89.5 percent of the respondents noted that there is no medical laboratory scientist serving in the health facility at their communities. While 10.1 percent of the respondents expressed a contrary view. In item ten, the study discovered that 94.5 percent of the respondents noted that there is no medical doctor serving in the healthcare facility at their communities. While 5.2 percent of the respondents had a contrary opinion.

4.2: Test of Hypotheses

Hypothesis one: This hypothesis states that Petroleum wealth has not contributed significantly towards healthcare delivery in Imo State oil bearing communities. The independent variable is petroleum wealth while healthcare delivery is the dependent variable. The study adopted 0.05 level significance. The decision rule is as follow: Decision rule1: the null hypothesis should be rejected if P value is less than 0.05. Decision rule 2: the null hypothesis should be accepted if P value is greater than 0.05. The data was taken from table 1. (From item one through item five)

Table 3: *Correlation analysis result for the contribution of petroleum wealth on healthcare delivery in Imo State oil bearing communities*

		Petroleum wealth	Healthcare delivery
Petroleum Wealth	Pearson Correlation	1	.000
	Sig. (1-tailed)		.500
	N	25	25
Healthcare Delivery	Pearson Correlation	.000	1
	Sig. (1-tailed)	.500	
	N	25	25

Source: *Authors fieldwork, 2022*

From the result of correlation analysis in table 3, it can be observed that the correlation coefficient between petroleum wealth and healthcare delivery is 0.000 and the P value is 0.500. This suggests that there is no significant association between petroleum wealth and healthcare delivery, because 0.500 which is our P value is greater than 0.05 which is our significance level.

Regression Analysis result for the contribution of petroleum wealth on healthcare delivery in Imo State oil bearing communities

Table 4: *Model summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.000[a]	.000	-.043	1209.05259

A. Predicator: (constant), Petroleum Wealth
Source: *Authors fieldwork, 2022*

Table 5: *Analysis of variance*

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.000	1	.000	.000	1.000[b]
	Residual	33621588.000	23	1461808.174		
	Total	33621588.000	24			

A. Dependent variable: healthcare delivery
B. Predicator: (constant), Petroleum wealth
Source: *Authors fieldwork, 2022*

From the analysis of variance result in table 5, it can be seen that F value (that is, the ratio of two variance or two mean squares) of petroleum wealth and healthcare delivery is 0.000 and the P value is 1.000. This indicates that there is no relationship between the two variables. This is because 1.000 which is our P value is greater than 0.05 which is the significance level.

Table 6: *Coefficients*[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(constant)	970.000	567.096	.000	1.710	.101
	Petroleum Wealth	.000	170.986		.000	1.000

a. Dependent variable: Healthcare Delivery
Source: *Authors fieldwork, 2022*

Similarly, from the result of regression coefficients in table 6, it can be noticed that the T value of petroleum wealth and healthcare delivery is 0.000 and the P value is 1.000. This shows clearly that there is no relationship between the independent variable (petroleum wealth) and the dependent variable (healthcare delivery). Therefore, considering the forgoing, the null hypothesis which states that petroleum wealth has not contributed significantly towards healthcare delivery in Imo State oil-bearing communities, is hereby maintained. This is because the P vales in table 3, 5 and 6 are greater than 0.05 which is our level of significance. The result reveals clearly that petroleum wealth has not in actual sense contributed toward healthcare delivery in the study area. It equally shows that the condition of healthcare infrastructure in these communities do not reflect the humongous proceeds from the sale of petroleum derived from their territory. This implies that there is a very poor healthcare delivery system in these communities. Similarly, the study discovered that the healthcare facilities in the study area are in various poor conditions.

5: Discussion of Findings and Conclusion

5.1: Discussion of Findings

The study examined the contribution of petroleum wealth towards healthcare delivery in Imo State oil-bearing communities. This study discovered that petroleum wealth has not contributed significantly towards healthcare delivery in the study area. (See table 2, 3, 5, and 6). It shows that a substantial commitment has not been made by the Government agencies and multinational oil companies to establish a well improved healthcare delivery system in these communities. It baffles our imaginations why it is difficult for Niger Delta Development Commission (NDDC) and Imo State Oil Producing Areas Development Commission (ISOPADEC) to build and equip outstanding healthcare facilities in these communities whose environments and lives are put in jeopardy as a result of petroleum production. These oil-bearing communities have lost the ambiance of a habitable environment, yet there is no robust arrangement put in place to cater for their healthcare needs despite continuous petroleum production in their environs. The injustice in the sharing of oil wealth seems to contribute in no small measures towards high level of connivance to steal petroleum in the Niger Delta. The Government and oil multinational companies should realise that an improved healthcare delivery system is essential to oil-bearing communities, the same way petroleum is vital to them. The findings of this study is in line with our theoretical assumption (natural resource curse theory), which postulates that people tend to suffer untold harsh socioeconomic conditions despite the quantum of

natural resources they are endowed with. In this case, petroleum wealth has not brought succour to the healthcare challenges and needs of the people, rather there exist deprivation of healthcare facilities in the study area.

Furthermore, there exist poor healthcare delivery in the study area. The unfair treatment meted on the oil-bearing communities in Imo Sate is better imagined than experienced. For example, in all the health facilities visited in the study area, the study discovered that the healthcare centre buildings are in poor conditions. There is no serving medical doctor(s), basic medical apparatus were obsolete and inadequate and poor Labour and delivery services. There was no laboratory and medical laboratory scientist(s) or technician(s). The most worrisome part of the problem is that the study area is a malaria endemic region but malaria parasites test is does not take place in virtually all the healthcare facilities visited. (See table 2). The paradoxical aspect of it is that petroleum production started at the study area in the mid of 1970s, yet there is nothing to show for it in terms of functional healthcare delivery system.

In addition, the study equally observed that multinational oil companies that are producing oil in these communities have been contributing towards healthcare delivery in many other parts of the country but not in Imo State oil-bearing communities. For example, Shell Petroleum Development Company of Nigeria has contributed towards establishing Obio community health insurance scheme in 2010, in Rivers State (Babatunde, 2015), upgrading of National hospital Abuja Cancer treatment and care (Ojulari, 2019) and donation of newly built ultramodern hospital to Ogijo community in Sagamu local council area, Ogun State (Odugbesan, 2020).

5.2: Conclusion

This study examined the impact of petroleum wealth on healthcare delivery in Imo State oil-bearing communities. Based on the findings of this research, the study concludes as follow: petroleum wealth has not contributed meaningfully toward healthcare delivery in Imo State oil-bearing communities. Also, healthcare delivery facilities in these communities are in poor conditions. Finally, stakeholders in the petroleum sector have not contributed adequate resources toward building a standard healthcare delivery system in the study area.

Based on the findings of this research, the study recommends that: Government agencies established for the purpose of ensuring the welfare and development of oil bearing communities (Niger Delta Development Commission and Imo State Oil Producing Areas Development Commission) should as a matter of necessity contribute adequate resources toward building a well-improved healthcare delivery system in Imo State oil-bearing communities. This can be done by contributing five percent (5%) of their annual budgets to the healthcare needs of these communities. Similarly, multinational oil companies (Addax Petroleum Development Nigeria Ltd and Shell Petroleum Development Company of Nigeria) that are producing petroleum in Imo State oil bearing communities are encouraged to expand the scope of their corporate social responsibility on healthcare delivery in these communities. Alternatively, Niger Delta Development Commission, Imo State Oil Producing Areas Development Commission and the multinational oil companies that are doing business in these communities can go into partnership to build an outstanding healthcare facility in a central place at Imo State oil bearing communities. If this is done, it will go a long way to remedy or cushion the hazardous effects of petroleum production on their health and reduce drastically the high level of domestic medical tourism and preventable deaths.

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