Corruption, Provision of Medical Consumables and Healthcare Service Delivery in Bayelsa State

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Abstract

The study examined the impact of corruption on healthcare services delivery in Bayelsa state, Nigeria. The study adopted stratified sampling technique to capture all the eight (8) Local Government Areas in Bayelsa State. The data were obtained through the use of structured questionnaire and data were analyzed by the use of percentages and chi-square cross tabulation technique. The results showed that 82% respondents (practitioners) said that healthcare supplies are always the recommended consumables. Also, 78% respondents (practitioners) agreed that healthcare facilities have First Aid Boxes. The outcome of the study clearly indicates that even if there is corruption in the provision of medical consumables, it is not visible so as to endanger qualitative provision of healthcare services in Bayelsa state. However, the chi-square critical value 0.7584 was statistically significant at 1% level indicating that there is no significant difference between the expected and actual responses. Thus, the hypothesis that corruption has no significant impact on provision of medical consumables is expected with the conclusion that corruption has no significant impact on provision of medical consumables based on the perception of medical practitioners. The study recommends that the federal government should sustain its fight against corruption in the health sector of Nigeria as it has some positive outcomes in the health sector of Nigeria in the area of provision of recommended consumables and availability of such requirement in healthcare facilities. This recommendation is made to sustain the tempo of provision of recommended medical consumables and to also encourage healthcare services providers to always utilize available consumables for the treatment of patients as it will guarantee quality healthcare services delivery in Nigeria.

Keywords: Bayelsa, Corruption, Healthcare, Practitioners, Non-practitioners

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Background to the study
As critical and dangerous corruption is, it could be more deadly if it found itself in the health sector of every society. In consideration of the importance of a healthy society that results in wealthy nation, the government of Bayelsa State introduced the health insurance scheme, improved human and health infrastructure in the state. However, corrupt practices are found dangerous in achieving health for all policies of nations.

Be it dangerous as corruption is, some scholars have argued that corruption hurts economic development because it redirects resources in unproductive direction and instills distortions in the economy. Four channels through which corruption may have an adverse effect on economic growth has been identified. These are; higher public investments, lower government revenues, lower expenditures on business operations and maintenance, and lower quality of public infrastructures (Anyanwu, 2002; Idomeh, 2006). Thus, the quality of social infrastructures, such as health care facilities is grossly affected by this evil called corruption. Corruption brings a nation no good. The resources meant for water supply, roads, education, health and other basic and social services that are captured and stolen by a handful of Nigerians through corrupt acts stultify economic and social development, hence, creeping poverty all over the place.

In recent times, public analysts have centered their debates on the rising rate of corruption resulting to inappropriate public finance planning and implementation mostly in most developing economies including Nigeria which has drastically reduced the level of economic growth and development in other sectors in Nigeria. It has become a disease that has eaten deep into the cultural, political and economic growth of most countries as well destroying the smooth running of various organs and sectors of the economy. Nigeria's rising level of corruption has contributed to the poor state of our electricity supply, transport sector, health sector, education sector and communications which has become a major problem of economic growth and development. This could pose a challenge towards bringing about a qualitative health system and services in Nigeria.

Though, copious literature on the relationship between corruption and the Nigerian health sector, with particular reference to Bayelsa State is lacking. It is in a bid to provide for this gap that we decided to carry out the study. The study, therefore, seeks to examine the impact of corruption on the health sector in Bayelsa State with specific objective to ascertain the impact of corruption on provision of medical consumables and healthcare service delivery in Bayelsa State.

Literature Review
Theoretical Framework
Karl Marx Theory
One of the classical sociological theorists of the 19th and 20th century was Karl Marx, who explained through his theory that human cultural values are important for a society. According to him, power and money shapes the social structure through developing the struggle among the classes to attain the best. Karl Marx believes not only brings a negative
aspect of society but the positive side also emerges only if the class's difference of upper and lower is put on an end and if there are equality and inclusiveness in the society. He made clear that materialistic view made people earn for food, shelter, home and clothing hence, works for their living. This struggle shapes up the social structure of the society by creating the labour and owners. These two divisions of people create the differences as the owners gain profit but pay less to the labour than the worth of the work, which leads to exploitation of the society. This exploitation further brings political domination creating classes in power who are economically strong and so gain the power of controlling the country (Campbell, 981).

Bad Apple Theories
This like the public choice theories primarily looks at the level of the individual corrupt agent for the causes of corruption. These studies seek the cause of corruption in the existence of people with faulty (moral) character, the so-called “bad apples”. There is a causal chain from bad character to corrupt acts; the root cause of corruption is found in defective human character and predisposition toward criminal activity. “Wrong” values are therefore the cause of corruption.

Empirical Literature
The harmful and detrimental effect of corrupt practices in health sector is unimaginable. The impact of corruption to all facets of societies is on the front burner of most developing nations, development scholars, commentators, government at all levels and analysts. Much has been said and done on the subject matter. For instance, Azuh (2012) conducted a research to find out whether health care challenges facing the country are significantly related to corrupt practices. The study was designed to examine the opinion of respondents at grassroots level on corruption and impact on health services. The study was carried out in Ado-Odo/Ota Local Government Area (LGA) in Ogun State, Nigeria. Respondents were drawn from health personnel in each PHC/health clinic and women attending antenatal clinics within the jurisdiction of the selected 11 wards. These respondents were interviewed using the questionnaire instrument.

The SPSS software was used to analyze data. The findings show that cost of service, staff development, non-availability of drugs and consumables and equipment inadequacy among others were positively and significantly related to corruption and diminish the delivery of healthcare services at grassroots. The study made recommendations for better healthcare delivery services and minimizing corruption within the system.

Nagari, and Abdul (2013) used the Ordinary Least Square (OLS) regression technique to investigate the impact of corruption on economic development in Nigeria. Secondary data were sourced from World Bank reports on Nigeria and corruption reports from transparency international on Nigeria. Hypothesis tested with respect to Corruption Perception Index (CPI) was not accepted implying that the tests were statistically significant, meaning that Corruption Perception Index (CPI), a proxy for corruption in this research negatively affects economic development. On the other hand, the hypothesis tested on the Corruption Rank (CR) of Nigeria among countries Cadre is also statistically significant. The findings show that corruption has a significant negative effect on economic growth and development.
Nwankwo, (2014) investigated the impact of corruption on the growth of Nigerian economy using granger causality and regression techniques. The study used Gross Domestic Product (DGP) as a proxy of corruption in their analysis. The study revealed that the level of corruption in Nigeria over the years has significant negative impact on economic growth in Nigeria. The implication of this study is that economy cannot grow fast without zero tolerance in corruption.

In a study on corruption in the healthcare sector, published in October 2013, by the European Commission; states that;

*The objectives of the study are; to enable a better understanding of the extent, nature and impact of corruption practices in the healthcare sector across the EU; and to assess the capacity of the MSs to prevent and control corruption within the healthcare system and the effectiveness of these measures in practice.*

Benjamin (2012), reviewed evidences on corruption in developing countries in the light of these recent advances, focusing on three questions: how much corruption is there, what are the efficiency consequences of corruption and what determine the level of corruption? They found robust evidence that corruption responds to standard economic incentive theory, but also that effects of anti-corruption policies often attenuate as officials find alternate strategies to pursue it.

Similarly, Roohi and Masood (2012), estimated the petty corruption in the provision of healthcare services in the slum areas of Karachi. The empirical results provide significant evidence that the residences of slum areas of Karachi in all the five districts are forced to pay bribes in order to get the basic healthcare facilities.

The result shows that people with better income and education understands the importance of good health and are thus ready to pay bribes to get the health services. Moreover, in the public health care units all staff including doctors, nurses and others is actively involved in corruption activities.

In Nigeria, a study by Adegboyega and Abdulkareem (2012), examines the challenge of corruption in Nigeria public health delivery system. They state that, like other sectors, the health sector in Nigeria is prone to corrupt practices. This is attributed to the fact that health services are in great demand coupled with low public access to health information and expenditure. They further argued that, corruption in the health sector has made various health institutions to be ineffective while scarce resources invested in the sector are wasted. The study, therefore, examines the extent to which corruption in the Nigerian health sector has undermined consumers’ access and effectiveness of health care services.

In Nigeria, corruption has hampered social, economic and political development. As a result, productivity is lower, administrative efficiency is reduced and the legitimacy of political and economic order is undermined. Finances meant for aid and investment get into the accounts of corrupt officials and leaders, especially banks, in stable and developing countries. The
reverse flow of capital leads into political and economic instability, poor infrastructure, education, health and other services and a general tendency to create or perpetuate low standards of living (Buscaglia and Ratliff, 2001)

Methodology
The Study Area
This study will be carried out in Bayelsa State. It is one of the 36 states of the federation that was carved out of Rivers State in 1996. The State has boundaries with Rivers State to the West and North-West and Delta State to the East and South-East. The Gulf of Guinea lies to its South. Bayelsa State covers an area of 9,415.8 square kilometers. The State lies at latitude 4° 45’ north and longitude 6°05’ east. According to the National Population Commission’s 2006 report, the population of the state is put at 1,704,515, which are made up of 874,083 males and 830,432 females clustered in eight local government areas (Annual Abstract of Statistics, 2012).

Data Collection
The data to be used for this study will be related to healthcare institutions in Bayelsa State. The data will be drawn from both primary and secondary sources. Four hundred questionnaire obtained using Tayo Yamane will be administered in all the eight local government areas of the state to generate the primary data as 50 questions will be administered in each of the LGAs, while the secondary data will be obtained from the Bayelsa State Ministry of Health, the Niger Delta University Teaching Hospital, the Federal Medical Centre, Ministry of Education of Bayelsa State, Private Clinics/Hospitals in Bayelsa State, Healthcare service delivery agencies such as; UNICEF, UNDP, UNSAID, UNAIDS, WHO, Bayelsa State Hospital Management Board and World Bank. The questionnaire would be tailored towards gathering information on the impact of Corruption in the Nigerian Health Sector.

Data Analysis
The study employed simple percentages, charts and tables in our analyses. Chi-square ($\chi^2$) test statistics as statistical tool to analyze the data that were generated. The Chi-square symbolized by ($\chi^2$) is a non-parametric test that can be used whenever we wish to examine whether or not the frequencies which have been empirically obtained ($f_o$) differ significant from those which would be expected ($f_e$). In order to provide answers to these research questions above, we will employ simple percentages, charts and tables in our analyses. We shall also adopt the test of proportion, test of mean and the chi-square ($\chi^2$) test statistics, as statistical tool to analyze the data that would be generated. This method of data analysis would be employed because of the fact that, they are most appropriate for the type of data and their nature of general acceptability and easy usage.

The Chi-Square symbolized by ($\chi^2$) is a non-parametric test that can be used whenever we wish to examine whether or not the frequencies which have been empirically obtained ($f_o$) differ significantly from those which would be expected ($f_e$) under a certain set of theoretical assumptions or a priori expectations.
The formula for the chi-square ($X^2$) test statistic is given below;

$$X^2 = \sum_{i=1}^{n} \frac{fo - fe}{Fe}$$

With $(r - 1) (c - 1)$ degree of freedom and level of significance

Where;
- $fo =$ is the observed frequency
- $fe =$ is the expected frequency
- $r =$ is the number of rows in the contingency table
- $c =$ is the number of columns in the contingency table

Results and Discussion
Distribution of Respondents
The study captured the eight (8) Local Government Areas in Bayelsa State, where four hundred questionnaires were distributed and 399 retrieved. The demographic information of the respondents is presented both in pie charts and tables.

Bayelsa State is made up of eight (8) Local Government Area(LGA’s), which comprises; Brass, Ekeremor, Kolokuma/Opokuma, Nembe, Ogbia, Sagbama, Southern-Ijaw and Yenagoa. The study covers the entire eight LGAs. A total number of four hundred (400) questionnaires were distributed across the eight(8) LGAs as fifty (50) copies for each of the LGAs. However, in Ekeremor LGA, forty-nine (49) out the the Fifty (50) were retrieved as it is shown in the stata output in table 1 below.

Table 1: Distribution of Respondents

<table>
<thead>
<tr>
<th>Local Government Area</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brass</td>
<td>50</td>
<td>12.50</td>
</tr>
<tr>
<td>Ekeremor</td>
<td>50</td>
<td>12.50</td>
</tr>
<tr>
<td>Kolokuma/Opokuma</td>
<td>50</td>
<td>12.50</td>
</tr>
<tr>
<td>Nembe</td>
<td>50</td>
<td>12.50</td>
</tr>
<tr>
<td>Ogbia</td>
<td>50</td>
<td>12.50</td>
</tr>
<tr>
<td>Sagbama</td>
<td>50</td>
<td>12.50</td>
</tr>
<tr>
<td>Southern Ijaw</td>
<td>50</td>
<td>12.50</td>
</tr>
<tr>
<td>Yenagoa</td>
<td>50</td>
<td>12.50</td>
</tr>
</tbody>
</table>

| Medical Practitioners         | 49        | 12.25      |
| Non-Practitioners             | 351       | 87.75      |

| Gender                        |           |            |
| Male                          | 234       | 60.75      |
| Female                        | 157       | 39.25      |
| Total                         | 400       | 100        |

Source: Field Survey, 2018
The study focused on two categories of respondents which were classified as Health Practitioners and Non-Practitioners. A total of 400 questionnaires that were distributed, 351 which constitute 87.75 per cent were Non-Practitioners, while 49 which constitute 12.25 per cent were Medical Practitioners. Gender composition of those who responded to the questions, 39.25 per cent were female, while 60.75 per cent were male. The table 1 above shows the composition while percentages of respondents from LGAs are also shown below in a pie chart, indicating that we have more male respondents than female respondents.

Gender composition of respondents according to LGAs, 41.16 per cent are female, while 58.84 per cent are male. The percentages of respondents are also shown below in a pie chart, indicating that we have more male respondents than female respondents.
Table 2: Corruption Awareness of Respondents

<table>
<thead>
<tr>
<th>Local Government Area</th>
<th>Respondents with Awareness of corruption</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brass</td>
<td>11</td>
<td>22.45</td>
</tr>
<tr>
<td>Ekeremor</td>
<td>8</td>
<td>16.33</td>
</tr>
<tr>
<td>Kolokuma/Opokuma</td>
<td>3</td>
<td>6.12</td>
</tr>
<tr>
<td>Nembe</td>
<td>6</td>
<td>12.24</td>
</tr>
<tr>
<td>Ogbia</td>
<td>6</td>
<td>12.24</td>
</tr>
<tr>
<td>Sagbama</td>
<td>9</td>
<td>18.37</td>
</tr>
<tr>
<td>Southern-Ijaw</td>
<td>4</td>
<td>8.16</td>
</tr>
<tr>
<td>Yenagoa</td>
<td>3</td>
<td>6.12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>49</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The table 2 above is the analysis of the 399 respondents that were aware of corruption in the Nigerian health sector.

**Impact of Corruption on provision of Medical Consumables**

**Research Question Two:** Are there Patients that enjoy some services which others do not? Do you pay for drugs that are not given?

**Non-Practitioners**

The results on the impact of corruption on provision of medical equipment based on non-practitioners are presented in table 1. It cross tabulates the perception of non-practitioners on payment for drugs that are not given to patients and Patients that enjoy some services which others do not in the facility.

Table 3: Corruption on provision of medical equipment based on Non-Practitioners' perception

<table>
<thead>
<tr>
<th>There are patients that enjoy some services which others do not</th>
<th>Pay for Drugs that are not given</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>No</td>
<td>233(226.8)</td>
</tr>
<tr>
<td>Yes</td>
<td>70(76.2)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>303(88)</strong></td>
</tr>
</tbody>
</table>

Chi-square = 5.4023 [0.020]

Note: (i) observed (expected) Values; (ii) Chi-square probability value in braces [ ]

**Source:** Authors' Computation from Field Survey data, 2018

The results indicate that 25% respondents said that there are patients that enjoy some services which others do not and 75% said there are not. Also 12% paid for drugs that are not given while 88% did not. If corruption has no significant impact on provision of medical equipment, it was expected that at most 11 respondents enjoy some services which others do not would have also paid for drugs that are not given, but more persons (17 respondents) enjoys services which others do not. The chi-square critical value 5.4023 was statistically insignificant at 1% level indicating that there is no significant difference between the expected responses and the actual. Thus, the hypothesis that corruption has no significant impact on provision of medical equipment is accepted with the conclusion that corruption has no significant impact on provision of medical equipment based on the perception of non-practitioners.
Practitioners
The results on the impact of corruption on provision of medical equipment based on practitioners are presented in Table 3. It cross tabulates the perception of practitioners on healthcare facility has First Aid Box and supplies are always the recommended consumables.

Table 4: Corruption on provision of medical equipment based on Practitioners' perception

<table>
<thead>
<tr>
<th>Supplies are always the Recommended Consumables</th>
<th>Healthcare Facility has First Aid Box</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has No Fi</td>
<td>Has First</td>
</tr>
<tr>
<td>No</td>
<td>1(2.0)</td>
</tr>
<tr>
<td>Yes</td>
<td>10 (9.0)</td>
</tr>
<tr>
<td>Total</td>
<td>11(22)</td>
</tr>
</tbody>
</table>

Chi-square =0.7584 [0.384]
Note: (i) observed (expected) Values; (ii) Chi-square probability value in braces [ ]
Source: Authors' Computation from Field Survey data, 2018

The results indicate that 82% respondents said that healthcare supplies are always the recommended consumables and 18% said supplies are the recommended consumables. Also 78% of the healthcare facilities have First Aid Boxes while 22% do not. If corruption has no significant impact on provision of medical equipment it was expected that at most 32 respondents said facility has First Aid Box, but less persons (31 respondents) said supplies are always the recommended consumables. The chi-square critical value 0.7584 was statistically insignificant at 1% level indicating that there is no significant difference between the expected responses and the actual. Thus, the hypothesis that corruption has no significant impact on provision of medical equipment is accepted with the conclusion that corruption has no significant impact on provision of medical equipment based on the perception of medical practitioners.

Conclusion and Recommendation
The impact of corruption on the Nigerian health sector was computed using corruption impact on provision of medical consumables in Bayelsa State healthcare service delivery. The results revealed that there is no corruption in the provision of healthcare services to healthcare seekers. The study also concludes that there is no corruption impact on the provision of medical consumables because the supplies of consumables are recommended ones and most respondents agreed that their healthcare facilities have First Aid Boxes. Based on the findings, the study recommends that the federal government should sustain its fight against corruption in the health sector of Nigeria as it has some positive outcomes in the health sector of Nigeria in the area of provision of recommended consumables. This recommendation is made to sustain the tempo of provision of recommended medical consumables and to also encourage healthcare services providers to always utilize available consumables for the treatment of patients as it will guarantee quality healthcare services delivery in Nigeria.
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