



Assessment of Healthcare Institutions and Socio-Economic Welfare: A Survey of Secondary and Tertiary Hospitals in Rivers State, Nigeria

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

The purpose of this paper is to assess healthcare institutions and the welfare experience of patients and workers in public Secondary and Tertiary Hospitals in Rivers State, with ownership across Federal Government, State Government and the Military. From a stratified sampling technique, a representative survey sample of 90 respondents was involved. Our findings show that Tertiary hospitals in Rivers state rely on funding by Federal Government, State Government, internally generated funds and grants, in their descending order. Budgetary cut on health institution is perceived to reduce service delivery and health workers motivation, though a cut in funding is expected by few, as a result of the prevalent fall in global oil price. The analysis also shows that the price of health services and medicines have increased in recent times, but we could not establish the symptom of inflation on the prices of healthcare consumption. It was established that the level of qualified health workers without gainful employment has slightly increased, owing to low absorptive capacity of government owned hospital, low remuneration from non-public-owned hospitals. The study found that the populace prefers public hospitals over private hospitals, mainly because of affordability and availability of specialists. Although there is evidence of inadequate workforce, bureaucratic holdup and poor ambience. The study concludes that the government is

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the provider of very affordable and quality healthcare in Nigeria. It was therefore recommended that there should be proper accountability by the hospital management on the proceeds and expenses. Efforts should be made to strengthen internally generated revenue, while a public-private partnership, improved efficiency and quality of service delivery will attract funds.

Keywords: Health expenditure, healthcare institution, hospitals, budget allocation.

JEL CODE: H51; I1; C83

1. INTRODUCTION

Despite efforts of the government and healthcare institutions to improve welfare of citizens within its fiscal jurisdiction, it is seen that the people have not benefitted as expected, or are dissatisfied with the level of healthcare delivered; which reflects negatively on human welfare. Studies that assessed public healthcare institutions and welfare yielded mixed results, besides no study had investigated healthcare institutions and socio-economic welfare within the Port Harcourt Metropolitan area.

Provision of necessary modern infrastructure for healthcare delivery is a necessity for development and improvement of human welfare. It suffices to mention that several public-owned healthcare institution within this region are poorly equipped. There are obsolete and dearth of modern health facilities, poor attitude of workforce.

Due to limited funding allocated to tertiary hospital, they have not been able to provide satisfactory healthcare, a significant population of patients that require tertiary healthcare rather access private and foreign healthcare facilities with somewhat outrageous charges, above the average household income level.

Very little work has been done that assessed the socio-economic benefits of major public hospitals in an oil-rich region, there is therefore the need to investigate the resource tracks of such institutions and the extent of its influence on human welfare preference.

From a theoretical stand point, the idea of government failure suggests that private sector management of public investment outlays would achieve higher level of operational effectiveness, due to the absence of political influences and bureaucratic bottlenecks. While the Classical holds that the private sector can efficiently manage the healthcare sector without any form of government intervention, however, some

scholars have prescribed the adoption of a joint venture type of management in the health sector. This paper is an assessment of the condition of Tertiary hospitals in Nigeria, with focus on the Port Harcourt Metropolis.

2. LITERATURE REVIEW

In a similar study, Kassean and Juwaheer [1] compared healthcare in private clinics and public hospital services in Mauritius, they used a representative sample of 300 patients. In their findings, people tend to have a preference for either public hospitals or private clinics. They also showed that people opted for public hospitals because they were generally close by and easily accessible, hospitals care and treatment are free and they are better equipped to deal with emergencies; whereas, their survey showed that long waiting time; unprofessional attitude of some staff members and poor hygiene are responsible for choosing a private clinic, as against public hospitals.

According to Sussmuth-Dyckerhoff and Wang [2], China must find a way to ensure sustainable funding, if its health reforms are to succeed in the long term and healthcare is to become affordable for its citizens, it must also improve the institutional capabilities of all organizations within the health system.

Burke and Sridhar [3] examined budgetary documents from African health and finance ministries of Ghana, Nigeria and South Africa in order to assess the extent to which African governments are meeting targets set at the Organization for African Unity Summit, held in Abuja in 2001. They also investigated how public healthcare systems are organized and whether governments are complying with the Abuja target of spending 15% of government income to achieve health-related Millennium Development Goals, goals for universal coverage of basic healthcare, health equity goals, and financial risk protection. They further showed how federal funding was spent: as 63% of the total went to

staff costs, which is higher than Ghana (43%) or South Africa (46%). 73% of the total was spent on hospital facilities, and 10% on primary care.

Similarly, Onotai and Nwankwo [4] reviewed the Nigerian health care funding system and how it compares to the experiences in South Africa, some European countries and United State of America. They outlined the four essential methods of funding health care services which are; general taxation, social health insurance, private health insurance and direct payments by patients. In their supposition, they settled that Nigeria needs a health care funding system that can sustain and improve health care service delivery to the whole population irrespective of patients' financial status, via increased health care funding and restructure the NHIS to cover grass root population; eradicate corruption from the health care sector and provide jobs for majority of the population.

Edeme and Imide [5] suggested the need for restructuring in public health expenditure pattern, that will focus more on primary healthcare as it will benefit more of the poor and vulnerable in the society.

Ichoku and Okoli [6] analysed the concept of fiscal space for health financing in Nigeria. They stated that it is unlikely that there will be dramatic expansions in the share of health spending without increased pressure on government and politicians to increase the funding of health services. They also documented that improvement of absorptive capacity by adding quality health workforce could substantially lead to improved fiscal space or the creation of virtual funds through efficiency gains. In their paper, they suggested that the Nigerian economy needs to step-up political pressure through advocacy to increase the budgetary allocations to the health sector.

According to Yunusa et al. [7], funding of health care sector in Nigeria is still faced with enormous challenges that must be overcome if quality and effective health care service is to be made available to the people. In their work, they enumerated the challenges facing the public health care financing in Nigeria to consist of;

- I. Inadequate political commitment to health, leading to poor funding of health in general, and Primary Health Care in particular.
- II. Gaps in the area of stewardship and governance as evidenced by lack of clarity

of the role of government, at all levels in financing health care.

- III. Inadequate or non-implementation of health policy that clearly spells out how funds are to be allocated and spent in the health sector.
- IV. Governance issues with the National Health Insurance Scheme (NHIS) and poor buy-in by the states limit coverage.
- V. Dominance of Out of Pocket payments presents possibilities of under/oversupply of services depending on financial abilities.
- VI. Non exploitation of other sources of health financing
- VII. Several stakeholders, including development partners finance health independently and not in accordance with government's policy thrust. This has led to inefficient use of scarce resources and duplication of efforts. They however recommended that the Federal Government should explore and improve other sources of financing that are efficient, equitable, fair and sustainable.

Hildebrandt and Thomas [8] stated that medical-care prices also have an indirect effect on inflation through their effect on business costs, thus higher medical-care prices have had only a modest direct effect on total consumer price index.

Rossi and Villar [9] used a panel data from household expenditure survey in Senegal to investigate primary health investments with regards to Malaria prevalence. They found that health expenditures in malaria deepened region catch up with regions with relatively less malaria.

Bhukta and Patra [10] examined the pattern of healthcare expenditure of government and private hospitals in India using least squares method as well as other econometric method of estimation. The authors highlighted that unlike private hospitals, the government hospitals are faced with the problem of poor healthcare facilities, ineffective leadership and medical supplies.

Olatubi et al. [11] examined health care expenditure and national productivity in Nigeria. From a conceptual review approach, they showed that health care expenditure in Nigeria is very poor and low relative to other developing economies in Africa. They conclude that national investment in the health sector is critical to achieving improvement in national productivity.

Oserei and Uddin [12] examined government expenditure on primary health care in Nigeria for the period 1980 to 2015 using OLS technique. They found that government expenditure on health has a positive and significant impact on economic growth; especially in the aspects of financing strategy, quality and mobilization and the framework for implementation.

3. METHODOLOGY

A survey was conducted based on stratified sampling technique using a representative sample of 90 respondents, who recently accessed the secondary and Tertiary hospitals in Port Harcourt, on a regular basis were surveyed, including health workers.

The population of Rivers State is estimated at 5,185,400, with only 1 Tertiary hospital (Federal Government ownership), 1 Secondary hospital (State Government ownership) and another 1 Secondary hospital (Military ownership). The study focused on Rivers State, instead of a national perspective, because it is the treasure base of Nigeria, and the hub of the Niger Delta oil-rich region, according to Ataguba, Fonta, Ichoku and Mba [13], small area studies are likely to produce rich data and results, that are often submerged when the nation or a whole region is considered. The choice of this area is also because it is one of the most important capitals besides its proximity and experience to the investigator.

4. RESULTS AND DISCUSSIONS

4.1 Analyses of the Questionnaire

From the Table 1, more of the users of health care institutions are between 30-39 years old, respondents aged between 40- 49 years are 22 (24.44%), followed by Adults users between the ages of 50- 59 years, then users above 60years were 12(13.33%), young persons between the ages of 16- 29 were 11 (12.2%) and 2 persons between ages 5- 15 years old.

From the Table 2, more of the users of health care institutions are females, comprising 51% of our sampled respondents, while 49% comprises of male respondents. This may suggest that users of healthcare services are relatively among women.

From the above Table 3, more of the household that utilize health care have a family

size between 3- 5, respondents with a family size between 6 to 10 are 18 (20%), simple household of 2 are 9 (10%), followed by large household that are more than 10 were 6 (6.67%).

From the Table 4, more of the respondents claimed to be University/ Tertiary Graduates, holders of secondary school certificate comprises 31.11% of the respondents, followed by candidates awaiting entrance into higher tertiary institutions of education, then primary school leavers comprise 17.78%.

From the Table 5 above, it could be seen that 52% of respondents have a good perception of public healthcare, 20% indicated a very good health perception, while 16% were satisfactory, for about 7% respondents, healthcare perception is bad, only 4% affirmed an excellent healthcare perception.

Most of the respondents affirmed that the healthcare institutions rely on the Federal Government for funding, while 33% of respondents affirmed that the Rivers State government is the financier of funding health institutions in Rivers State. While about 21% of respondents indicate that healthcare funding is largely dependent on internally generated revenue. Only 6% of respondents confirmed Grants and other forms of receipt as known sources of funding of healthcare.

Asked if healthcare services will be sustained if the budgetary allocation for the health sector be reduced. Of the 90 respondents, 70% reported that budgetary cut on health institutions funding, will reduce service delivery and health workers motivation, as the institutions are predominantly funded by the government, 21% said they expect a cut in funding, probably as a result of the fall in oil price.

Asked to mention the measures that can be taken to improve healthcare funding, their response are in the categories shown in Table 6 above. 39% reported that there should be proper accountability by the hospital management on the proceeds and expenses. 25% said they should strengthen internally generated revenue, 19% suggested a Public-Private Partnership (PPP), while 10% advice that an improved efficiency and quality of service delivery will attract funds for health institutions, while the remaining 7% suggested an advocacy programme.

4.2 Influence of Inflation on Healthcare Expenditure

Asked if the price of health care and drugs increased. Of the 90 respondents, 61% reported that the price of health services and medicines have increased in recent times, 25 (28%) reported that there is no symptom of inflation on the prices of healthcare consumption, and 10 (11%) expressed ignorance.

4.3 Influence of Unemployment on Healthcare Sector

Asked if the level of unemployment have increased in health institutions. Of the 90 respondents, 48% reported that the level of qualified health workers without gainful employment has increased, 10 (11%) reported that there is no indication of unemployment, and 37 (41%) expressed ignorance whether the level of unemployment has increased in the healthcare institution.

Respondents on the affirmative were asked to state the reasons for the increase in unemployment. Some of the reasons given for increased unemployment include; low absorptive capacity of government owned hospital, low

renumeration from private-owned medical establishments.

This results seem to indicate that, in a broad-spectrum, households (individuals) prefer the public healthcare providers; the reason does not just hinge on the quality of healthcare, but on economic reasons. The table reveals that the rationale for the preference of public hospitals ranges from the fact that it is relatively affordable (cheaper) compared to private healthcare services. There is also availability of classes of Specialists (Consultants), different from the private sector. Our findings also shows that public healthcare institutions makes several kinds of drugs available to its patients, some drugs are subsidized by the government and made available without any fee, such as mosquito nets and drugs for treatment of HIV/AIDs, Tuberculosis, Ebola virus and several other protracted ailments of global concern. Very few were mindful of the location of public hospitals to their residence.

This result is interesting, as it confirms that the government is the provider of very affordable and quality healthcare in Nigeria.

Table 1. Age of respondents

Options (Years)	No. of Respondents	% of Respondents
0- 4	0	0
5- 15	2	2.2
16- 29	11	12.2
30- 39	23	25.56
40- 49	22	24.44
50- 59	20	22.22
Above 60	12	13.33
Total	90	100

Source: Field Survey, 2020

Table 2. Gender of respondents

Option	No. of Respondents	% of Respondents
Male	44	49
Female	46	51
Total	90	100

Source: Field Survey, 2020

Table 3. Number of family members

Options	Frequency	%
0- 2	9	10
3- 5	57	63.33
6- 10	18	20
More than 10	6	6.67
Total	90	100

Source: Field Survey, 2020

Table 4. Level of education of respondents

Options	No. of Respondents	% of Respondents
Never been to school	0	0
Primary	16	17.78
Preparatory	17	18.89
Secondary	28	31.11
University/ Tertiary	29	32.22
Don't know	0	0
Total	90	100

*Source: Field Survey, 2020***Table 5. Healthcare assessment by respondents**

Options	No. of Respondents	% of Respondents
Excellent	4	4
Very Good	18	20
Good	47	52
Satisfactory	14	16
Bad	7	7
Total	90	100

*Source: Field Survey, 2020***Table 6. What are your sources of fund**

Options	No. of Respondents	% of Respondents
Internally Generated funds	19	21
Federal Allocation	35	39
State Allocation	30	33
Grants/ others	6	7
Total	90	100

*Source: Field Survey, 2020***Table 7. Budgetary allocation for health sector**

Options	No. of Respondents	% of Respondents
Yes	63	70
No	19	21
Do not Know	8	9
Total	90	100

*Source: Field Survey, 2020***Table 8. Measures to improve public healthcare funding**

Categories	No. of Respondents	% of Respondents
Strengthening Internally generated Revenue	23	25
Public-Private Partnership (PPP)	17	19
Improve Efficiency & Quality of Service	9	10
Promoting Advocacy Programme	6	7
Proper Accountability	35	39
Total	90	100

*Source: Field Survey, 2020***Table 9. Is there any indication that the price of healthcare has increased?**

Options	No. of Respondents	% of Respondents
Yes	55	61
No	25	28
Do not Know	10	11
Total	90	100

Source: Field Survey, 2020

Table 10. Have the level of unemployment increased in the healthcare institutions?

Options	No. of Respondents	% of Respondents
Yes	43	48
No	10	11
Do not Know	37	41
Total	90	100

Source: Field Survey, 2020

Table 11. Do you prefer public healthcare institution over private owned

Options	No. of Respondents	% of Respondents
Yes	78	87
No	12	13
Total	90	100

Source: Field Survey, 2020

Table 12. Why do you prefer public medical care

Options	No. of Respondents	% of Respondents
Affordability	40	44
Availability of Specialists	25	28
Availability of Several Kinds of Drugs	19	21
Nearness to Residence	6	7
Total	90	100

Source: Field Survey, 2020

Table 13. Assessment of healthcare institutions condition

Questions	Yes (%)	No (%)
Are the number of staff adequate to meet patient's needs	(11)	(79)
Are you satisfied with the quality of services offered at this hospital	(16)	(84)
Was the Toilet dirt-free	(6)	(94)
Was the Waiting room hygienic	(38)	(62)
Were the equipment clean and tidy	(53)	(47)
Was the look of workers clean	(88)	(12)

Source: Field Survey, 2020

Most of the respondents revealed their preference for public healthcare institutions. 87 percentage of respondents prefers public healthcare institutions, over the private owned institutions. Below table is the rationale for their revealed preference.

In summary, the above Table 13 shows that the number of staff are not adequate to meet the patient's need, a good proportion of respondents are dissatisfied with the quality of service dispensed, as it is largely bureaucratic. It was also stated that services received in public-owned health establishments appears to involve some difficult and cumbersome clerical requisites for treatment. In addition, users of public-owned health facilities stated that the toilets were not clean with poor ambience of the wards, hence poorly maintained. Although, the healthworkers appeared clean.

5. CONCLUSION

This study set out to qualitatively investigate public healthcare institutions and socio-economic welfare of its populace, using convenience sampling procedure to examine users of secondary and tertiary public healthcare institutions.

The findings shows that public-owned healthcare institutions rely largely on the government for funding, while other sources of funds are internally generated; and from grants and other miscellaneous sources.

It was also found that budgetary cut on health institutions will reduce service delivery and workers motivation.

Some of the measures to improve public healthcare funding outlined are to ensure proper

accountability, strengthening internally generated revenue, promoting public-private partnership, improving efficiency and quality of service.

It was also confirmed that the cost of health services have increased as well as the level of unemployment. The survey revealed preference of public-owned medicare over the private sector, due to affordability of public medicare, availability of specialists and several kinds of drugs.

CONSENT

As per international standard or university standard, participant's written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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QUESTIONNAIRE

Directions: Please indicate your level of agreement or disagreement with each of these statements. Place an "X" mark in the box of your answer.

Demographic Data

Name (optional): _____

Gender: Male
Female

Age:

0- 4	<input type="checkbox"/>
5- 15	<input type="checkbox"/>
16- 29	<input type="checkbox"/>
30- 39	<input type="checkbox"/>
40- 49	<input type="checkbox"/>
50- 59	<input type="checkbox"/>
Above 60	<input type="checkbox"/>

Number of Family Members:

1-2
 3-5
 6-10
 More than 10

Level of Education:

Never been to school
 Nursery
 Primary
 Preparatory
 Secondary
 University/ Tertiary
 Don't know

Email Address (optional): _____

Questions

Perception of Healthcare Delivery:

1. How is your health?

Excellent	<input type="checkbox"/>
Very Good	<input type="checkbox"/>
Good	<input type="checkbox"/>
Satisfactory	<input type="checkbox"/>
Bad	<input type="checkbox"/>

2. Are you satisfied with the quality of service offered at this hospital?

Yes No

3. Are the number of Staff adequate to meet the Patients needs?

Yes No

4. How clean and ordered were the facilities?
Excellent Very good Good Poor Satisfactory
5. Was the toilet clean?
Yes No
6. Was the Patient waiting room clean?
Yes No
7. Were the hospital equipments clean?
Yes No
8. Was appearance of the health workers clean?
Yes No
9. Do you prefer a public health institution over the private owned medical care?
Yes No
10. If yes, tick in the box, your reason?

Affordability (It is cheaper)	<input checked="" type="checkbox"/>
Availability of Specialists	<input checked="" type="checkbox"/>
Availability of several kind of drugs	<input checked="" type="checkbox"/>
Nearness to residence	<input checked="" type="checkbox"/>
All of the above	<input checked="" type="checkbox"/>
None of the above	<input checked="" type="checkbox"/>

Perception of Healthcare Expenditure:

11. Will health services be maintained if the budget for health be cut?
Yes No Don't know
12. Do you know if the share of total government spending going to health will _____?
Increase Fall Remain the same Don't know
13. Is there any indication that the prices of medicines have increased recently?
Yes No Don't know
14. Is there any indication of increase in general price level of market commodities recently?
Yes No Don't know
15. Has Naira value reduced recently?
Yes No Don't know
16. Have the level of unemployment increased in the health system?
Yes No Don't know
17. Which of the following category of expenditure do you often pay for?

Hospitalization charges	<input checked="" type="checkbox"/>
Charges for the Doctors	<input checked="" type="checkbox"/>
Laboratory tests	<input checked="" type="checkbox"/>
X-ray charges	<input checked="" type="checkbox"/>
Dental care	<input checked="" type="checkbox"/>
Optometry (Eye glasses)	<input checked="" type="checkbox"/>
Mortuary Services and other unclassified charges	<input checked="" type="checkbox"/>

18. Which of the following measures can hospital management adopt to improve healthcare expenditure?

Reinforcement of internally generated expenditure	<input checked="" type="checkbox"/>
Reinforcement of Public-Private Partnership	<input checked="" type="checkbox"/>
Improving efficiency	<input checked="" type="checkbox"/>
Vindication of possible reduction in funding for health	<input checked="" type="checkbox"/>
Promoting Advocacy	<input checked="" type="checkbox"/>
Proper monitoring of health institutions accounts	<input checked="" type="checkbox"/>
All of the above	<input checked="" type="checkbox"/>

None of the above

Υ

19. Do you think that a high proportion of the budget for health is focused on hospitals in the City?

Yes Υ

No Υ

Don't know Υ

20. Do you think that a high proportion of those living in rural areas are not reached by the health care system?

YES Υ

NO Υ

DON'T KNOW Υ

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