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ECONOMIC ASSESSMENT OF THE LEVEL OF EFFECTIVENESS OF PRIMARY HEALTHCARE SERVICES IN THE CROSS RIVER STATE NIGERIA

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Abstract

This study examined the level of effectiveness of primary healthcare services in Cross River State (CRS). The data generated were analyzed using the t-test of mean difference and the confidence interval analysis. The results showed that there was a disparity in access to healthcare services between the Northern and Central senatorial districts, while there was no disparity in the level of accessibility to healthcare services between the Northern and Southern and the Central and Southern districts. There was no disparity in the level of government funding and management of healthcare services between the three senatorial districts, but there was a disparity in the level of infrastructural amenities distributed among the three senatorial districts. The government should increase its budgetary allocation for healthcare in line with the World Health Organisation's 15 per cent of the total budget benchmark to boost the effectiveness of primary healthcare services, among others was recommended.

Keywords: Economic-assessment, Healthcare-accessibility, Government-funding, Healthcare-Management, Healthcare-Infrastructures

1. INTRODUCTION

Health is wealth and nations are only as healthy as their citizens. Health, according to the World Health Organisation (1994, 2007, 2008) is not only the absence of illness or infirmity but complete physical and mental well-being and is a basic human right. Article 25 of the Universal Declaration of Human Rights, states that every individual has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care. In pursuit of achieving this right, nations and communities set up mechanisms for providing healthcare for their citizens and members. Nigeria established its National Health Policy in 1988, which aimed to achieve health for all Nigerians by the year 2000, and primary health care (PHC) was adopted as the strategy to achieve the goal of the policy. In order to assess the impact of PHC on the health status of the country, it is important to take a brief look at the health service prior to PHC.

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The following problems were noticeable in the health services prior to the adoption of PHC:

(i) Inadequate coverage: Coverage was very low often below 35% with limited access for the rural communities and the urban poor.

(ii) Disproportionate high investment in curative service to the detriment of preventive services.

(iii) Weak management resulting in waste and inefficiency.

(iv) Minimal community participation

(v) The lack of basic health statistics is a major constraint at major stages of planning, monitoring and evaluation of health services.

(vi) Inadequate funding which acts as a constraint to performance.

(vii) Defective, poorly maintained infrastructure, equipment and logistic supports.

The World Health Community in Alma Ata 1978 adopted Primary Health Care as the key to providing health for all by the year 2000. Primary Health Care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the communities through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination.

Primary Health Care came to Cross River State through the Ministry of Health, with the aim of providing and managing a comprehensive and integrated quality healthcare delivery to the people of the state, with emphasis on meeting the needs of the poor, particularly those in rural communities. The mission of the ministry was:

(i) Integration of disease prevention and control programmes into routine healthcare provision.

(ii) Establishment of a medical emergency response programme to cater for the needs of the injured and critically ill-supported by the provision of an ambulance and paramedical service, accessible within 24 hours.

(iii) Establishing teams of primary healthcare providers to enhance healthcare services available to rural communities. These teams will be led by NYSC doctors and will work in collaboration with Local Government Primary Health Care Providers.

(iv) Upgrading health care facilities and equipment and enhancing of professional skills of healthcare providers through continual training.

(v) Building linkages and encouraging partnerships with private sector health providers as a means of increasing access to timely and quality health for the people of Cross River State.

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It is in this light that this study seeks to investigate and assess the service/organizational factors and client perceptions that influenced the utilization of Primary Health Care (PHC) facilities and their implementation in the Cross River State of Nigeria.

In spite of huge government spending, coupled with bilateral and multilateral assistance in the health sector, the patterns of health status in Cross River State mirror many states in Nigeria, but are worse than would be expected given the state level of per capita Gross State Product. The health system is in shambles, policy somersaults and reversals tend to have undermined several reforms in the health sector over the years. Poor human resources and policy management have led to an unprecedented brain drain in the health sector as health professionals in search of better conditions of service in other states often vote with their feet in droves.

Cross River State's health system is comatose, with few hospitals, few drugs, inadequate and substandard technology and a lack of infrastructural support, including electricity, water and diagnostic laboratories resulting in misdiagnosis. Medical record keeping and disease surveillance are very poor. Delivery of primary healthcare becomes a personal affair and is dependent the on ability to pay for basic laboratory and physician services. Healthcare financing is worse hit, especially in poor communities where healthcare faces a serious problem of acceptability with out-of-pocket expenditure due to the high disease burden on most poverty-stricken households which has kept them in the vicious cycle of the poverty trap. Despite the huge resources budgeted on health care services, the shadow economy appears to be absorbing a significant part of it (Opue, Ndem and Okon, 2019), and due to their low-income status, most residents resort to investment in Ponzi schemes. Notwithstanding, research findings reveal that investment in Ponzi schemes has positive and significant impacts on depreciation in income levels, and a positive but insignificant impact on poor access to quality health care within Calabar Metropolis (Opue, Ikpeme and Bankong, 2018). Likewise, research by Otu (2016) reveals that government expenditure on health has a significant effect on economic growth in CRS.

There has been too much concentration of medical personnel in the urban to the neglect of the rural areas. Another significant problem in the management of PHC is transportation. It has been reported in LGA PHCs that there are not enough vehicles for workers to perform their tasks, especially in rural areas. Immunisation outreach services are inadequately conducted. The maintenance culture of the existing vehicles is poor while PHC vehicles were used for other purposes other than health-related activities.

The lack of an adequate integrated system for disease prevention, surveillance and treatment has manifested into a lack of targeted effort at outreach, health promotion and disease prevention activities designed to reach the people where they are. This has resulted in low immunization coverage, pre-national care and screening public health, where it exists, is in a passive mode, with little activity designed to motivate people to change their behaviour or to adopt attitudes and practices that reduce their risk of disease. The result is that many children are still not immunized, pregnant mothers do not receive the prenatal care they need, and older men and women do not have the regular screening they need for blood sugar and cholesterol, for breast and cervical cancer. When health

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professionals refer to the low incidence rate for cancer in Cross River State, they forget that what is not screened for is not reported. Given the extremely low screening rates for cancer, diabetes, hypertension and other chronic and communicable diseases, no wonder the reported incidence and prevalence rate is low too. It is against this backdrop that this study seeks to assess economically the effectiveness of Primary Health Care services in Cross River State.

1.1 Objectives of the Study

The broad objective of this study is to assess from an economic perspective the level of effectiveness of Primary Healthcare Services in the Cross River State of Nigeria.

2. LITERATURE REVIEW

Some studies have been made on the effectiveness and implementation of primary health care in Nigeria. Oyegbite (1989) postulated that a decision was taken by the Federal Government to build a basic healthcare centre in every local government headquarters so as to enhance a model health service to rural dwellers with community involvement and participation. It was also observed by Metiboba (2009) that the scheme still suffers from inadequate awareness for mass mobilization for increased involvement of the citizenry in primary health care services. A greater proportion of the rural population in many communities do not seem to know what PHC is all about, nor are they aware of the various services under the PHC scheme. Rural dwellers are isolated from the local government headquarters where the services and activities of PHC are well felt and enjoyed. Rural dwellers, therefore, need a wide range of information to access the services of PHC in order to improve their health education.

Onyejiaku (1990) argued that despite the international prestige accorded primary health care (PHC) as evidenced by the numerous philosophical papers, workshops and projects carried out in its name, the impact of PHC is still relatively unknown. In many cases, the effectiveness of a PHC project is difficult to assess, particularly when it involves multi-sectional interventions and different health outcomes. Cross-sectional studies often falter when trying to gauge the long-term effects of specific interventions. The reasons were poorly kept or that the PHC success is evaluated in terms of rural clinics constructed rather than in population health parameters.

Zeitz et al. (1993a, 1993b) asserted that the management of primary health care (PHC) systems in less developed countries are often impeded by factors such as poorly trained personnel, limited financial resources, and poor work morale. The study explored the ability of local-level PHC supervisors in rural Nigeria to use quality assurance (QA) management methods to improve the quality of the PHC system. The supervisors targeted the supervisory system and the health information system (HIS) for improvement. Health worker performance in diarrhoea case management was assessed, using a simulated case to measure the impact of supervision. A HIS audit assessed data collection forms used by seventeen PHC facilities. Gaps in quality were monitored over a 2-month study period and flaws in work processes were modified. PHC supervisors introduced a checklist during monthly visits to facilities to monitor how workers managed

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cases of diarrhoea. Performance in history taking, physical examination, disease classification, treatment and counselling improved over the evaluation period. The HIS audit found that a variety of reporting was standardized, and the number of health facilities using a daily disease registry significantly improved during the period. Conclusively, QA management methods were used by PHC supervisors in Nigeria to improve supervision and the HIS. QA management methods are appropriate for improving the quality of PHC in Nigeria and in other less developed countries where at least a minimal PHC infrastructure exists.

Uzochukwu (2002) compared the level of availability and rational use of drugs in primary health care (PHC) facilities where the Bamako Initiative (BI) drug revolving fund programme has been operational, with PHC centres where the BI-type of drug revolving fund programme is not yet operational. The study was undertaken in twenty-one PHC centres with BI drug revolving funds all in the Enugu State of Nigeria. Data were collected on the essential and non-essential drugs stocked by the facilities. Drug use was determined through analysis of prescriptions in each health centre. The proportion of consumers that were able to remember their dosing schedules was determined. The BI has given rise to more drug prescribing, which could be irrational. The findings call for strategies to ensure more availability of essential drugs, especially in the non-BI PHC centres as a strategy to decrease medical costs and improve the quality of PHC services, while promoting rational drug use in all PHC centres.

Asuzu (2004) used the history of primary health care in Fiji to find out the present PHC policy situation at all the management levels as well as the dynamics of community mobilization and PHC service extension. Findings were to be used to propose the strengthening of the implementation of PHC in the country as the case may be. This is a mail questionnaire study of managers at all three levels of the health services for the historical study and those at the district health system for the PHC implementation. Fiji has had a very active primary health care programme. Community mobilization and health services extension were initially very active and health status indices improved greatly. But this momentum has dropped due to a reduction in following the initial directives for his purpose as at the early part of the programme. It was recommended that the programme of community health service extension be restored as a matter of a national written policy. The medical officers in charge of PHC should be trained in community medicine as before, in order to regain the lost momentum.

Chukwuani (2006) took a survey to audit PHC operations and determine community perception and expectations of PHC service delivery in Enugu State. An expectation of PHC service delivery was conducted in 72 communities in Enugu State, southeastern Nigeria. One hundred and sixteen respondents from each of the facilities in the sample frame were interviewed using a structured self-assessment questionnaire and a qualitative assessment was undertaken in 53 of the facilities using an audit guide. Focus group discussions (FGD) were conducted with the policymakers and planners in each of the 17 LGAs in the state. A total of 832 respondents were interviewed in the communities (using a structured questionnaire) and 42 community FGDs were conducted. The results indicate a lack of operational deficiency in the majority of the facilities audited. It was also

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observed that the majority of the facilities do not provide all services required of them, are poorly maintained, do not have enough skilled health workers and operate without a budget. There appears to be no formal financial management system in place and no policy on financial resource generation. The community survey identified two major problems: low utilization of PHCs and poor service provision. The key indicator identified by the community for evaluating the performance of the PHCs remains "Access to essential drugs." The major prospect was the willingness of an appreciable number of respondents to invest in health financing through insurance schemes and payment of health tax among others. It was evident that poor funding, bad management practices and infrastructural decay are the banes of efficient PHC delivery.

Sule, et al. (2008) assessed service/organisational factors and clients' perceptions that influenced the utilization of primary health care (PHC) facilities in a rural community in Nigeria. A cross-sectional household survey in the community, as well as interviews of opinion leaders and healthcare providers and participants' observations of health facilities and utilization patterns, was used to collect data. Forty-four per cent of respondents to the survey who were ill in the preceding six months visited a PHC facility for treatment, while others relied on self-medication/self-treatment. Education was positively associated with the utilization of PHC services ($P < 0.05$). Maternal and child health (45.4%), prompt attention (23.0%) and appropriate outpatient (20.5%) services attracted respondents to use PHC services. Poor education about when to seek care, poverty, perceived high cost of PHC services, lack of drugs and basic laboratory services, and a regular physician on-site at the facility were identified barriers to utilization. He finally concluded that community perceptions of poor quality and inadequate available services were responsible for the low use of PHC services.

3. RESEARCH METHODOLOGY

3.1 Research design

The research design used in this study is both qualitative and quantitative in nature. The qualitative design adopted the survey method. According to Asika (2002), a survey is a scientific experiment conducted on a large scale on a defined population to determine some desirable characteristics of a designed population. For the purpose of this study, the sample survey adopted is aimed at collecting a sample from the population in order to evaluate the effectiveness of primary health care services in Cross River state. The quantitative design employed was empirical in nature through the use of the MINITAB software package. The relevant data for this study were obtained from a questionnaire administered during the sampling process.

3.2 Area of study

The research area of study is Cross River State which is one of the thirty-six States in Nigeria with eighteen local governments (LGAs). Located in the Niger Delta, Cross River State occupies 20,156 square kilometres. The State shares boundaries with Benue State in the North, Ebonyi State in the North-West, Akwa Ibom State in the South-West, and the Cameroon Republic in the South-East. The state is ethnically diverse, including Efiks,

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Bekwara, and Ejagham inhabitants. Efik is very widely spoken in Cross River State because it used to be a language of trade and commerce in the 19th and early 20th centuries. Other languages spoken are Ekoi, Etung, Mbe, Boki and Becheve. The state has an estimated population of 2.89 million according to the 2011 census. The topography of the state is essentially that of a typical rainforest with creeks and rivers of significance including a river cross from where the name of the state is derived.

3.3 Population sample

The required sample is respondents taken from the selected villages in the local government area. The targeted population for this study includes the various primary health care centres spread across the 18 local government areas in the state. The total population sample for this study is made up of 450 respondents, which was selected based on a stratified random sampling technique (Ndiyo, 2005). Of the total population of 450, 150 respondents are sampled from each of the three senatorial districts of the state. The sampled population included both the primary healthcare providers and members of the public.

3.4 Instrumentation and data collection procedure

To collect data for this study, a carefully structured questionnaire was designed and administered by the researcher personally with the help of some assistants. The measuring instrument used by the researcher for this research study is a four–point Likert scale-type questionnaire Panneerselvarn (2011). The questionnaire is divided into two sections. Section one contains information regarding the respondent's personal details. Section two contains information pertaining to our subject of study based on the hypothesis to be tested.

Each response was given a degree score which range from one to four as shown below

Strongly agree	SA	4 Points
Agree	A	3 Points
Disagree	D	2 Points
Strongly disagree	SD	1 Point

3.5 Methods of data analysis

The analysis is carried out using the t-test of mean difference and the confidence interval analysis. The purpose of the test is to validate or invalidate the formulated hypotheses.

4. PRESENTATION AND ANALYSIS OF RESULTS

This section presents the test results of the objectives formulated in this study.

4.1 Primary Health Care Accessibility

The results of primary healthcare accessibility in Cross River State are presented in tables 1, 2 and 3 as follows.

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Table 1: Primary Health Care Accessibility in Northern and Central Cross River State

Senatorial Districts	Calculated t-value	Critical value	Confidence interval
Northern CRS	-10.37	± 1.96	-9.548
Central CRS	-10.37	± 1.96	-6.492

Level of significance = 0.05

The empirical results as presented in table 1 above show that the calculated t-value of (-10.37) is less than the critical t-statistic of -1.96 at five per cent of significance. Since the t-value falls in the critical region, the null hypothesis is rejected while the alternative hypothesis is accepted. Hence, there is a significant difference in the level of accessibility to healthcare services between the Northern and Central districts of Cross River State. There is therefore a 95 per cent confidence that the mean difference lies between (-6.492) and (-9.548).

Table 2: Primary Health Care Accessibility in Northern and Southern Cross River State

Senatorial Districts	Calculated t-value	Critical value	Confidence interval
Northern CRS	-0.23	± 1.96	-1.074
Southern CRS	-0.23	± 1.96	0.848

Level of significance = 0.05

The results as presented in table 2 shows that the calculated t-value of (-0.23) is greater than the critical t-value (-1.96) at a five per cent level of significance. Since the calculated t-value is greater than the critical value, the null hypothesis is accepted while the alternative hypothesis is rejected and hence there is no significant difference in the level of accessibility to healthcare services between the Northern and Southern districts of Cross River State. Thus, there is 95 per cent confidence that the mean difference in accessibility lies between (-1.074) and (0.848).

Table 3: Primary Health Care Accessibility in Central and Southern Cross River State

Senatorial Districts	Calculated t-value	Critical value	Confidence interval
Central CRS	-0.86	± 1.96	-1.514
Southern CRS	-0.86	± 1.96	0.594

Level of significance = 0.05

The result shown in table 3 indicates that the calculated t-value of (-0.86) is greater than the critical value of (-1.96) at a five per cent level of significance. Therefore, the null hypothesis cannot be rejected; hence there is no significant difference between the level of accessibility to healthcare services between the Central and Southern districts of Cross River State. Thus, there is 95 per cent confidence that the mean difference in accessibility lies between (-1.514) and (0.594).

From the analysis above, we can conclude that there is a disparity in access to healthcare services between the Northern and Central districts of Cross River State, while there is

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no disparity in the level of accessibility to primary healthcare services between the Northern and Southern and between Central and Southern districts of Cross River State.

4.2 Government Funding of Healthcare in Cross River State

The result of Government Funding of Health Care in Cross River State is presented in Tables 4, 5 and 6 as follows.

Table 4: Government Funding of Health Care in Northern and Southern Cross River State

Senatorial Districts	Calculated t-value	Critical value	Confidence interval
Northern CRS	-0.47	± 1.96	-0.602
Southern CRS	-0.47	± 1.96	0.976

Level of significance = 0.05

The results as presented in Table 4 shows that the critical t-value is (±1.96) at a five per cent level of significance. Since the calculated t-value of (-0.47) lies within the acceptance region, we do not have evidence to reject the null hypothesis. Thus, there is no significant difference in the level of government funding of health care services in the Northern and Southern districts of Cross River State. Thus, there is 95 per cent confidence that the mean difference in government funding of health care lies between (-0.602) and (0.967).

Table 5: Government Funding of Health Care in Central and Southern Cross River State

Senatorial Districts	Calculated t-value	Critical value	Confidence interval
Central CRS	0.87	± 1.96	-1.22
Southern CRS	0.87	± 1.96	3.14

Level of significance = 0.05

Similarly, the results as presented in Table 5 shows that the calculated t-statistics value of (0.87) is less than the critical value of (1.96) at a five per cent level of significance. Since the calculated t-value is less than the critical value, we accept the null hypothesis and reject the alternate hypothesis and conclude that there is no significant difference in the level of government funding of healthcare services in the Central and Southern districts of Cross River State. Thus, there is 95 per cent confidence that the mean difference in government funding of health care lies between (-1.22) and (3.14).

Table 6: Government Funding of Health Care in Northern and Central Cross River State

Senatorial Districts	Calculated t-value	Critical value	Confidence interval
Northern CRS	- 0.74	± 1.96	-2.85
Central CRS	-0.74	± 1.96	1.30

Level of significance = 0.05

Further examination of the results as presented in Table 6 shows that the calculated t-value of (-0.74) lies with the acceptance region, i.e., between (±1.96) at a five per cent level of significance. Therefore, there is no significant evidence to reject the null

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hypothesis and hence, we conclude that there is no difference in the level of government funding of health care services in the Northern and Central districts of Cross River State. Thus, there is 95 per cent confidence that the mean difference in government funding of health care lies between (-2.85) and (1.30).

In conclusion, the results revealed that there is no significant difference in the level of government funding of health care services between the three senatorial districts of Cross River State. This means that government funding for the healthcare system has been fairly distributed across the three senatorial districts.

4.3 Management of Health Care in Cross River State

The result of Health Care Management in Cross River State is presented in Tables 7, 8 and 9.

Table 7: Health Care Management in Northern and Central Cross River State

Senatorial Districts	Calculated t-value	Critical value	Confidence interval
Northern CRS	-0.36	± 1.96	-1.375
Central CRS	-0.36	± 1.96	0.948

Level of significance = 0.05

The results as presented in Table 7 shows that the calculated t-statistic value of (-0.36) lies within the acceptance region of (±1.96) at a five per cent level of significance. Therefore, we cannot reject the null hypothesis that there is no significant difference in the level of healthcare management between the Northern and Central districts of Cross River State. We are therefore confident that the mean difference lies between (-1.375) and (0.948).

Table 8: Health Care Management in Northern and Southern Cross River State

Senatorial Districts	Calculated t-value	Critical value	Confidence interval
Northern CRS	-0.32	± 1.96	-1.575
Southern CRS	-0.32	± 1.96	1.135

Level of significance = 0.05

In the same vein, the results presented in Table 8 show that the calculated t-statistic value of (-0.32) lies within the acceptance region of (±1.96) at a five per cent level of significance. Therefore, we cannot reject the null hypothesis that there is no significant difference in the level of healthcare management between the Northern and Southern districts of Cross River State. We are therefore confident that the mean difference lies between (-1.575) and (1.135).

Table 9: Health Care Management in Central and Southern Cross River State

Senatorial Districts	Calculated t-value	Critical value	Confidence interval
Central CRS	-0.01	± 1.96	-1.796
Southern CRS	-0.01	± 1.96	1.756

Level of significance = 0.05

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Further examination of the results of Table 9 shows that the calculated t-statistic value of (-0.01) lies within the acceptance region of (±1.96) at a five per cent level of significance. Therefore, we cannot reject the null hypothesis that there is no significant difference in the level of healthcare management between the Southern and Central districts of Cross River State. We are therefore confident that the mean difference lies between (-1.796) and (1.756).

From the results obtained, we can conclude that there is no significant difference in the means of health care management among the three senatorial districts in the state.

4.4 Health Care Infrastructures in Cross River State

The result of Health Care Infrastructures in Cross River State is presented in Tables 10, 11 and 12.

Table 10: Health Care Infrastructures in Northern and Central Cross River State

Senatorial Districts	Calculated t-value	Critical value	Confidence interval
Northern CRS	-10.37	± 1.96	-9.548
Central CRS	-10.37	± 1.96	-6.492

Level of significance = 0.05

The results as presented in Table 10 shows that the calculated t-statistic value of (-10.37) lies outside the acceptance region of (±1.96) at a five per cent level of significance. Therefore, we reject the null hypothesis that there is no significant difference in the level of health care infrastructures between the Northern and Central districts of Cross River State. We are therefore confident that the mean difference lies between (-9.548) and (-6.492).

Table 11: Health Care Infrastructures in Northern and Southern Cross River State

Senatorial Districts	Calculated t-value	Critical value	Confidence interval
Northern CRS	-2.29	± 1.96	-2.635
Southern CRS	-2.29	± 1.96	-0.192

Level of significance = 0.05

In the same manner, the results as presented in Table 11 shows that the calculated t-statistic value of (-2.29) lies outside the acceptance region of (±1.96) at a five per cent level of significance. Therefore, we reject the null hypothesis that there is no significant difference in the level of health care infrastructures between the Northern and Southern districts of Cross River State. We are therefore confident that the mean difference lies between (-2.635) and (-0.192).

Table 12: Primary Health Care infrastructures in Central and Southern Cross River State

Senatorial Districts	Calculated t-value	Critical value	Confidence interval
Central CRS	7.58	± 1.96	4.884
Southern CRS	7.58	± 1.96	8.330

Level of significance = 0.05

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Further analysis of the results as shown in Table 12 reveals that the calculated t-statistic value of (7.58) lies outside the acceptance region of (±1.96) at a five per cent level of significance. Therefore, we reject the null hypothesis and accept the alternative that there is a significant difference in the level of healthcare infrastructures between the Southern and Central districts of Cross River State. We are therefore confident that the mean difference lies between (4.884) and (8.330).

From the results, it is clear that there is a significant difference in the level of healthcare infrastructure among the three senatorial districts in Cross River State.

5. SUMMARY OF MAJOR FINDINGS, POLICY RECOMMENDATIONS AND CONCLUSION

5.1 Summary of major findings

From the results in section four, it was found that:

(i) There is a disparity in access to healthcare services between the Northern and Central senatorial districts of Cross River State, while there is no disparity in the level of accessibility to healthcare services between the Northern and Southern and between the Central and Southern districts of Cross River State.

(ii) There is no disparity in the level of government funding of healthcare services between the three senatorial districts of Cross River State. This implies that government funding of the healthcare system is equitably distributed across the three senatorial districts of the state.

(iii) There is no disparity in the level of management of healthcare services between the three senatorial districts in the state.

(iv) There is a disparity in the level of infrastructural amenities distributed among the three senatorial districts in Cross River State.

5.2 Policy recommendations

Based on the results obtained, the following policy recommendations are made.

(i) There is an urgent need for the government to implement policies that will increase access to healthcare services in the state. To achieve this, there is a need for the government to provide motorable roads and also increase the number of healthcare facilities in the three senatorial districts so as to make it easier for accessibility.

(ii) There is also a need for the government to increase the funding of healthcare services in the state. This can be done by increasing budgetary allocation to the health sector to bring it in line with the World Health Organisation's 15 per cent of the total budget benchmark.

(iii) It is equally important that steps be taken to restructure the management of the healthcare system in the state. Health experts and practitioners should be made

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to manage the health sector in the state so as to achieve optimum performance and efficiency in health care delivery.

(iv) Lastly, the government should do more to provide infrastructural amenities in various health centres in the state. The provision of modern healthcare facilities will help improve the quality of healthcare in the state.

5.3 Conclusion

This study assessed the level of effectiveness of primary health care services in the Cross River State of Nigeria. Extant literature in human capital development has considered health as a vital ingredient in the economic growth and development of any nation. However, for this to happen, the healthcare system must be organized in such a way that it performs effectively the function of delivering efficient and affordable healthcare services to the people.

On the basis of the results obtained from the t-test of mean differences and confidence interval analyses, indicating that the level of effectiveness of healthcare services between the three senatorial districts of CRS are mixed and in line with the recommendations of 5.2, there is a need for government to increase its budgetary allocation for healthcare services in line with the World Health Organization's 15 per cent of the total budget benchmark so as to cater for motorable roads to health centres, employment of health experts, provision of modern health care facilities, and above all, for the creation of more health care centres in CRS.

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