

Research Article

Assessing the Impact of Healthcare Quality on Facility Utilization among Rural Dwellers in Bauchi State Nigeria

Abdulbaqi Alhaji Magaji ¹, Shuaibu Suleiman ², Rashidat Oluwabukola Owolabi ², Maryam Dahiru Umar ³ and Abuhuraira Ado Musa ^{1*}

¹Department of Public Health, Bauchi State University Gadau, Bauchi Nigeria,

²Department of Community Health Emirates College of Health Science and Technology Kano, Nigeria

³Department of Medical Microbiology and Parasitology, Bayero University Kano, Nigeria

*Corresponding author: Mshurairah @gmail.com

Article Info

Keywords: Facilities, Healthcare, Quality, Utilization

Received: 9 June 2024;

Accepted: 20 August 2024;

Published: 6 September 2024

 © 2024 by the author's. The terms and conditions of the Creative Commons Attribution (CC BY) license apply to this open access article.

Abstract

Rural areas in Nigeria, including Bauchi State, face significant healthcare challenge, with limited access to quality healthcare services. This study as aimed at assess the impact of healthcare quality on facility utilization among rural Dwellers in Bauchi State Nigeria. A cross sectional design was used for this study. Simple random sampling technique was used to select three local government areas from each senatorial district. A total of 1344 respondents were sampled for the study. The questionnaires were administered by the researcher and some research assistants. The reliability index as determined using Cronbach's alpha test of internal consistency stood at 0.89. The data from the study were presented using descriptive statistics of mean and percentages for the research questions. The analysis was carried out using SPSS version 25. The results obtained showed that the quality of healthcare services influences the utilization of health care facilities by rural dwellers in Bauchi State. However, the r^2 value of 0.29 indicates that the quality of healthcare services have 8% influence on the utilization of health care facilities by rural dwellers in Bauchi State. Therefore, the stake holders in the health sector, in collaboration with Government and healthcare workers should ensure that the quality of services offered in the health care facilities is improved upon. This will in turn encourage the rural dwellers to regularly visit healthcare facilities in Bauchi State Nigeria.

1. Introduction

The performance of primary health care systems has traditionally been assessed in terms of coverage of services with little attention to the quality of the services provided. The ability to assess the quality of care provided is an essential component of quality assurance and improving quality. Inadequacy in the quality of health service delivery at the primary health care level is a product of failures in a range of quality measures - structural problems, process failings and a lack of a protocol for systematic supervision of health workers [1]. There are several indicators of poor quality of health care. These include overall management weaknesses, technical incompetence, lack of drugs owing to mismanagement of drug supply, drug leakage or illegal drug selling, poor attitudes and behavior of health staff, low staff motivation and morale, and insufficient supervision. The major challenge is thus how to approach and improve such a detrimental state of affairs. A study of PHC in Nigeria undertaken by the [2] which focused on the analysis of the performance of PHC providers and the variables driving this performance using the World Development Report (WDR) 2004 accountability framework shows that despite Government efforts, the delivery of quality primary health care services remains a challenge in Nigeria. The condition of the infrastructure is poor; many facilities do

not have the required equipment or the pharmaceutical products to offer quality care. In addition, household satisfaction with services is low and very few outreach services are provided. In addition, health personnel salaries are often delayed and are not linked to the provision of services [2] .

All over the world, People use healthcare services for the purpose of diagnoses, cure, or to ameliorate illnesses. Healthcare services are also needed to improve or maintain function, obtain information about health status and for prognosis. In theory, healthcare utilization is expected to correlate strongly with need [3], but the quality of services offered is a determinant of this correlation. The quality, as well as the inaccessibility of the available healthcare facilities has an obvious influence on the utilization of modern health care services by a vast proportion of the people in the most developing countries, and in particular among rural dwellers who still depend on traditional medical care and self-medication [4].

Various studies have been conducted to assess the rates of utilization of the public and private sector health services. The utilization rates in public health service systems range from 10 to 42% [5]. Understanding how the quality of healthcare services affects the utilization of health care facilities/services in rural areas of Bauchi State, Nigeria, will help the government to bridge the gap thus encouraging more people to access Health Care Facility.

2. Methodology

Study Area, Design, and Population

Bauchi State as one of the States in northern Nigeria, is with its capital in Bauchi. The State occupies an area of land totaling 49,119 km^2 (18,965 sq^2) representing about 5.3% of Nigeria's total land mass. Bauchi is located between latitudes 9° 3' and 12° 3' north and longitudes 8° 50' and 11° east [] (Abdulbaqi et al., 2021).

The design for this study is a cross sectional design study, using the questionnaire based survey research was conducted.

The State as at the last census of 2006 has a total population of 4, 653,066, but in 2016, the projected population rose to 6,537,300. The state is divided into the Northern and Southern region. The states consist of 20 Local government areas. About eighty percent (80%) of the people in most of the LGAs lives in the rural areas, and are still dependent on farming [] (Abdulbaqi et al., 2021). The study population consists of all adult (18 years and above) living in the three senatorial district of Bauchi State: Southern zone (Bauchi, Tafawa-balewa, Toro and Alkaleri L.G.As) Central zone: (Darazo, Ningi and Misau L.G.As) Northern zone (Katagum, Shira, Jamaare, and Gamawa L.G.As). The study location will involve all adult living in State, aside these urban areas mentioned. The Data below shows the Local Government Areas and their population based on the 2016 population projection conducted.

Sample size for each LGA

$$n / 1 + (n_o - 1 / \text{pop})$$

$$\text{For southern zone} = 150 / 1 + (150 - 1) / 164169 = 150$$

$$\text{For 3 affected Local Government} = 150 \times 3 = 450$$

$$\text{For northern zone} = 150 / 1 + (150 - 1) / 10142 = 148$$

$$\text{For 3 affected Local Government} = 148 \times 3 = 444$$

$$\text{For central zone} = 150 / 1 + (150 - 1) / 164169 = 150$$

$$\text{For 3 affected Local Government} = 150 \times 3 = 450$$

$$\text{Total} = 1344$$

A total of 1344 respondents were sampled for the study. The procedure used was simple random sampling procedure

Research Instrument

A well-structured questionnaire as well as focus group discussion with community leaders, religious leaders, and health care workers was used to elicit data for the study. The Instrument is divided into Four Section.

Method of Data Collection

The questionnaires were administered to adults in rural areas in Bauchi State. This questionnaire were administered by the researcher and some research assistants that were trained to evaluate them and interpret the content of the questionnaire to the respondents in the local dialect (for those who cannot read or understand English Language). The questionnaires were collected personally by the researcher and assistants immediately the questionnaires were filled by the respondents. All questionnaires collected from the respondents were received by the researcher, and data retrieved from the questionnaires were collated for analysis.

Validity and Reliability of the Research Instrument

To determine the validity of the instrument, the researcher gave the questionnaire to the supervisor and other experts in related fields to ascertain the face validity of the instrument.

The reliability index was determined using Cronbach's alpha test of internal consistency.

Method of Data Analysis

The data from the study were presented using descriptive statistics of mean and percentages for the research questions. The analysis was carried out using SPSS version 25.

3. Results

Research objective: Does the quality of health services provided influence the utilization of primary health care facilities in the rural areas of Bauchi State?

Table 1: Influence of Quality of health care workers on the utilization of health care services.

Items	Mean	Std. Deviation	N	R	R2	Remark
Utilization total	1.61	0.11	1344	0.29**	0.08	Significant
Quality of healthcare services	2.73	0.66	1344			

The results presented shows that the quality of healthcare services influences the utilization of health care facilities by rural dwellers in Bauchi State. However, the r^2 value of 0.29 indicates that the quality of healthcare services have 8% influence on the utilization of health care facilities by rural dwellers in Bauchi State.

4. Discussion

The outcome of the present study showed that the quality of healthcare services influenced the utilization of health care facilities by rural dwellers in Bauchi State. This outcome agrees with many other findings reported in literatures. For instance, [6] reported that among other factors, quality of health facilities influences the choice of healthcare facilities utilized. [7], in rural areas, utilization of several primary cares services (antenatal care, postnatal care, and vaccination) was associated with both infrastructure and quality of service delivery, with stronger associations for service delivery. Poor quality of care may deter utilization of beneficial primary health care services in rural areas of Haiti. Improving health service quality may offer an opportunity not only to improve health outcomes for patients, but also to expand coverage of key primary health care services. According to [8], who studied the utilization of healthcare facilities among the urban respondent. They reported that factors associated with quality of services such as waiting time and availability of drugs was found to be strong predictors of utilization among urban respondents.[9] in a study on ‘The impacts of Quality and Quality of Health Clinics on Health behaviors and outcomes in Nigeria’, also reported there is a strong link between the utilization of health clinics and the quality of services available in the clinics.

5. Conclusion

Summarily, this study has shown that, quality of healthcare services has a major impact or influence on the level of utilization of the healthcare facilities by rural dwellers in Bauchi State. More clearly put, the study showed that the better the quality of healthcare services showed, the more the people in the rural areas will patronize the facilities. Therefore, the stake holders in the health sector, in collaboration with Government and healthcare workers should ensure that the quality of services offered in the health care facilities is improved upon. This will in turn encourage the rural dwellers to regularly visit healthcare facilities in Bauchi State.

References

- [1] A. J. Abiodun. Patient’s satisfaction with quality attributes of primary health care services in nigeria. *Journal of Health Management*, 12(1):39–54, 2010.
- [2] World Bank. Decentralized delivery of primary health services in nigeria: Survey evidence from the states of lagos and kogi. African Region Human Development Working Papers Series, 2003.
- [3] WHO. Technical series on primary health care: Quality in primary health care. 50pp, 2018.
- [4] A. Onokerhoraye. Access and utilization of modern health care facilities in the petroleum-producing region of nigeria: The case of bayelsa state. Research Paper 162, Takemi Program in International Health Harvard School of Public Health 665 Huntington Avenue Boston, MA 02115 (617) 432-0686. 27pp, 1999.
- [5] S. Chandra and K. Patwardhan. Allopathic, ayush and informal medical practitioners in rural india- a prescription of change. *J. Ayurveda Integr Med.*, 9(2):143–150, 2018.
- [6] K. O. Aboaba, A. A. Akamo, T. O. Obalola, O. A. Bankole, A. O. Oladele, and O. G. Yussuf. Factors influencing choice of healthcare facilities utilisation by rural households in ogun state, nigeria. *agricultura tropica et subtropica*, 56:143–152, 2023.
- [7] A. D. Gage, H. H. Leslie, A. Bitton, J. G. Jerome, J. P. Joseph, R. Thermidor, and M. E. Kruk. Does quality influence utilization of primary health care? evidence from haiti. *Globalization and Health.*, 14(59):1–9, 2018.
- [8] A. K. Ahmed, O. Y. Ojo, A. I. Ahmed, T. M. Akande, and G. K. Osagbemi. A comparative study of predictors of health service utilization among rural and urban areas in ilorin east local government area of kwara state. *BUMJ.*, 4(2):120–132, 2021.

- [9] R. Sato. The impacts of quality and quality of health clinics on health behaviors and outcomes in nigeria: Analysis of health clinic census data. *BMC Health Service Research.*, 19(377), 2019.