
NEED FACTORS FOR HEALTH CARE FACILITIES UTILIZATION AMONG RURAL DWELLERS IN BAUCHI STATE

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ABSTRACT

This study as aimed at determining the need factors for the utilization of Health Care services among rural dwellers. A cross sectional design was used for this study. The targeted population of the study is the 2,196,533 adult, which make up 42.06% of the adult living in the rural areas of Bauchi state. Simple random sampling technique was used to select three local government areas from each senatorial district; the LGAs selected were Bauchi L.G.A, Tafawa-balewa L.G.A and Alkaleri L.G.A (Southern zone); Katagum L.G.A., Shira L.G.A, and Jama'are L.G.A (Northern zone); and Ningi L.G.A, Misau L.G.A and Darazu L.G.A. (Central zone). A total of 1344 respondents were sampled for the study. 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 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 need factors in order of importance are: inexpensive/ cheap healthcare cost, ease of reaching by transport, peer group influence and excellent attention in all emergency situation (26.7%); followed by treatment (18.8%); nearness to residence and friend among the staff (26.7%); referral by other doctors (17.9%); experienced paramedical staff (11.8%). In conclusion, the need factors recognized for the utilization of healthcare facilities in Bauchi Sate are: health insurance; closeness of healthcare facilities; cost of transport and means of transport, while the enabling factors in order of importance are: inexpensive/ cheap healthcare cost, ease of reaching by transport, peer group influence and excellent attention in all emergency situations, followed by treatment, nearness to residence and friend among the staff, referral by other doctors, and experienced paramedical staff.

Keywords: *Need Factors, Healthcare, Utilization, Transport, Patience*

INTRODUCTION

The choice of health facility to use varies from person to person and from place to place. It also depends on factors predisposed to the persons to use the facilities (Oluyemi et al., 2018). According to Girma et al. (2011), the utilization of health services in developing countries is not satisfactory, owing to the importance in public health policy issues of any country. Anderson (1995) identified three (3) classes of factors that are associated with utilization of health services, they include; enabling factors, need factors, and predisposing factors. Need factors such as perceived health status and chronic illness have been included in several investigations, and have been shown to have a significant effect on use of health care services. A need for healthcare concerns the diagnosis, treatment, rehabilitation, or compensatory regime for supporting or restoring well-being once compromised. Need describes an array of medical and personal care services, environmental modifications, and medical equipment, supplies, and medications. Need is multidimensional and is inferred from either the patterns of service use or the behavioural consequences of ill health (Gooch, 1991). Several studies have shown that rural communities have higher mortality rate and increased financial burden caused by chronic diseases, limited financial reimbursement for healthcare costs; higher percentage of people at the poverty level, demographic aging and depopulation (Fang, 2014; Moa and wu, 2007; Gooch, 1997). The need factors are those factors that are imperative and require action to be taken. There are several need factors. They include emotional problems, Disease and symptoms, health status and disability etc. (Oladipo, 2014). According to Girma et al. (2011), intensity of illness significantly affects utilization of health care services. MACPAC (2016) stated that persons with disabilities often have health and medical needs stemming from their disability or from an underlying condition, co-occurring conditions, or common risk factors. Therefore, they may have greater need for both general and specialty care than adults without disabilities. They found that in general, adults with a disability reported more barriers to care than adults without a disability. Understanding the factors that determine the demand for 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.

Objectives

The broad objective of this study is to determine the factors that affect the utilization of Health Care services by rural dwellers in Bauchi State.

Research Question

- i. What are the need factors that necessitate the utilization of health care services by rural dwellers of Bauchi State?

Research methodology

Study Design

This study engaged a cross sectional design study, using simple random sampling techniques. For the purpose of this study, the questionnaire based survey research was conducted

Study Area

Bauchi State is one of the States in northern Nigeria with its capital in Bauchi. Formed in 1976, it originally involved Gombe State, which became distinct State in 1996 (Bauchi State Government, 2018). The State occupies an area of land totaling 49,119 km²(18,965 sq²) representing about 5.3% of Nigeria's total land mass and is located between latitudes 9° 3' and 12° 3' north and longitudes 8° 50' and 11° east (Bauchi State Government, 2018).

Study Population

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.

Target Population and based on 2016 projected population by National Population Commission, 2016.

Regions	LGAs	Total population	population of rural dwellers	Targeted population of Adult
Southern Region	Bauchi	693,700	554960	233083
	Tafawa-Balewa	310,900	248720	104462
	Dass	126,600	101280	42538
	Toro	486,100	388880	163330
	Bogoro	117,700	94160	39547
	Ningi	542,300	433840	182213
	Warji	161,500	129200	54264
	Ganjuwa	391200	312960	131443
	Kirfi	204,600	163680	68746
	Alkaleri	461,200	368960	154963
Northern Region	Darazo	351,200	280960	118003
	Misau	367,300	293840	123413
	Giade	219,200	175360	73651
	Shira	328,800	263040	110477
	Jama'are	165,100	132080	55474
	Katagum	411,700	329360	138331
	Itas/Gadua	321,100	256880	107890
	Zaki	266,500	213200	89544
	Gamawa	399,600	319680	134266
Dambam	211,000	168800	70896	
Total		6,537,300	5229840	2196533

Media Nigeria (2016)

The targeted population of the study is the 2,196,533 adult, which make up 42.06% of the adult living in the rural areas of Bauchi state.

SAMPLE SIZE AND SAMPLING TECHNIQUE

Using a simple random sampling technique, 3 local government areas were selected from each senatorial district; the LGAs selected are presented in Table 3.2

Table 3.5.1 Sample size Determination for the Three LGAs selected from each Senatorial Districts

S/N	ITEMS ZONE	AREA CONCERNED	TARGETED POPULATION	AVERAGE
1.	Southern zone	Bauchi L.G.A	233083	164,169
		Tafawa-balewa L.G.A	104462	
		Alkaleri L.G.A	154963	
		Total	492508	
2.	Northern zone	Katagum L.G.A	138331	101427
		Shira L.G.A	110477	
		Jama'are L.G.A	55474	
		Total	304282	
3.	Central zone	Ningi L.G.A	182213	141210
		Misau L.G.A	123413	
		Darazu L.G.A	118003	
		Total	423629	

Kish Leslie formula (1965) was used to determine the sample size of quantitative data

$$n = z^2 pq / d^2$$

d = degree of precision of the study

z = standard normal deviation corresponding to 95% confidence interval which is 1.96

p = population of 89.04% Level of Primary Health Care Utilization from a previous study q = (1-p)

$$n = (1.96)^2 \times 0.8904 \times 0.1096 / (0.05)^2 = 150$$

$$n = 150$$

Sample size for each LGA

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

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

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

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

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

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

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

$$\text{Total} = 1344$$

A total of 1344 respondents were sampled for the study. The procedure used is the 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 Titled "Questionnaire on Factors Affecting the utilization of Healthcare Facilities in Rural Areas. The Instrument was divided into Four Section. The First Section (Section A) deals with the demographic and general information of the respondents. The Second Section (Section B) addresses the living condition of the respondents. The Third Section (Section C) addresses the health utilization of the Health care facilities (men, women, and children), while the Fourth Section (Section D) addresses the various factors that can influence the respondent use of health facilities around them.

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 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.

Reliability of the Research 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 23.

RESULTS

Specific research objective 3: What are the need factors that necessitate the utilization of health care services by rural dwellers of Bauchi State?

The need factors recognized for the utilization of healthcare facilities in Bauchi State are: health insurance; closeness of healthcare facilities; cost of transport and means of transport. (Table 1, Fig. 1, 2, and 3)

Table 1: Healthcare Insurance as a need factor

S/N	Item	N	%
1	Knowledge/Awareness of health insurance	350	26.0
2	Having health insurance	359	26.7
3	Willingness to be insured	1344	100.0
4	Health insurance will encourage health facilities utilization	1344	100.0

Table 1 shows that the availability of health insurance is a need factor for the utilization of healthcare facilities. As noted in the table, 100.0% Of the respondents agree that they are willing to have an health insurance, and that the health insurance will encourage them to use healthcare facilities.

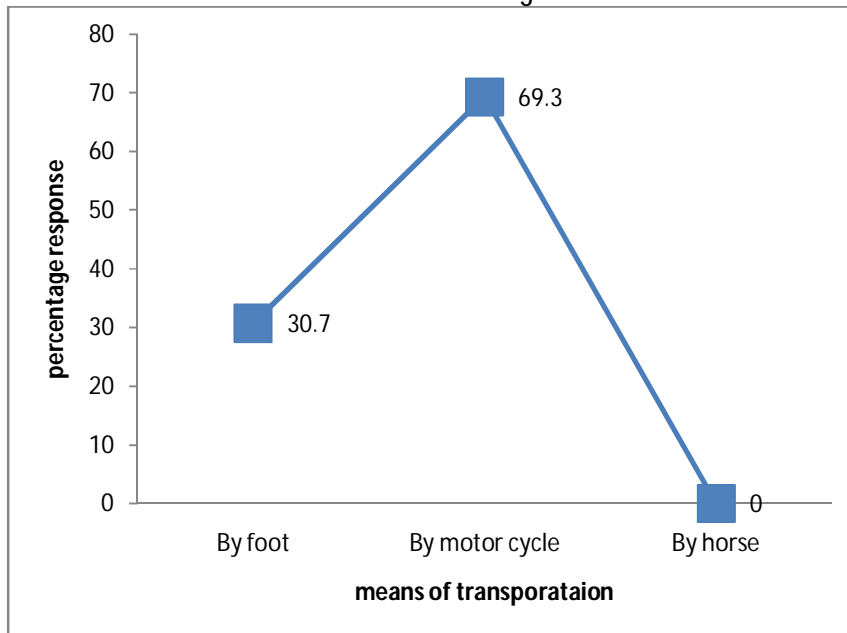


Figure 1: Means of transportation to Healthcare facilities

The data presented in Figure 4.6 shows that most of the respondents (69.3%) use motor cycle as means of transportation to the healthcare facility, while 30.7% go to the healthcare facilities on foot. No respondents agree to go by horse.

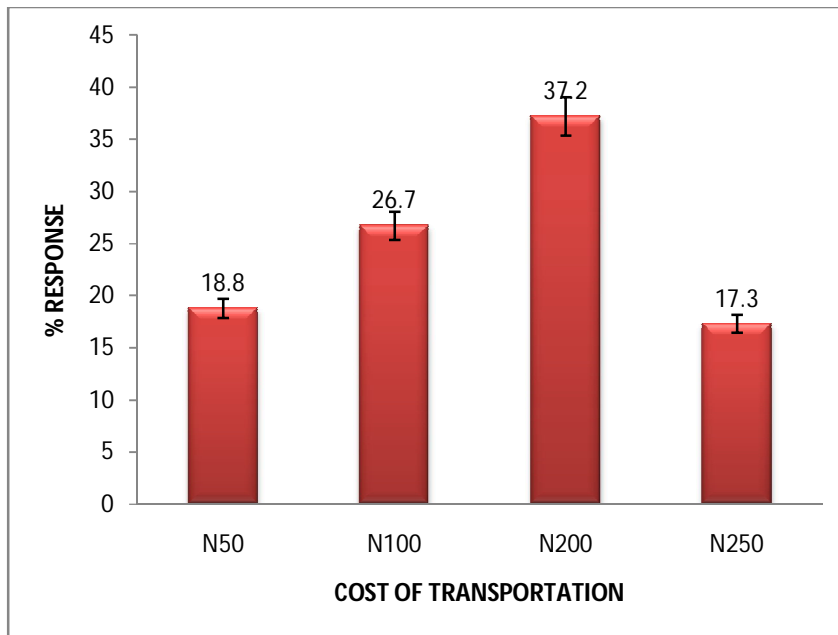


Figure 2: The cost of Transportation to healthcare facilities

The data presented in Figure 4.7 shows the various what it cost most participants to get to the healthcare facilities. Most of the participants (37.2%) spend N200; followed by those who spend N100 (26.7%); those who spend N50 (18.8%); and those who spend N250 (17.3%).

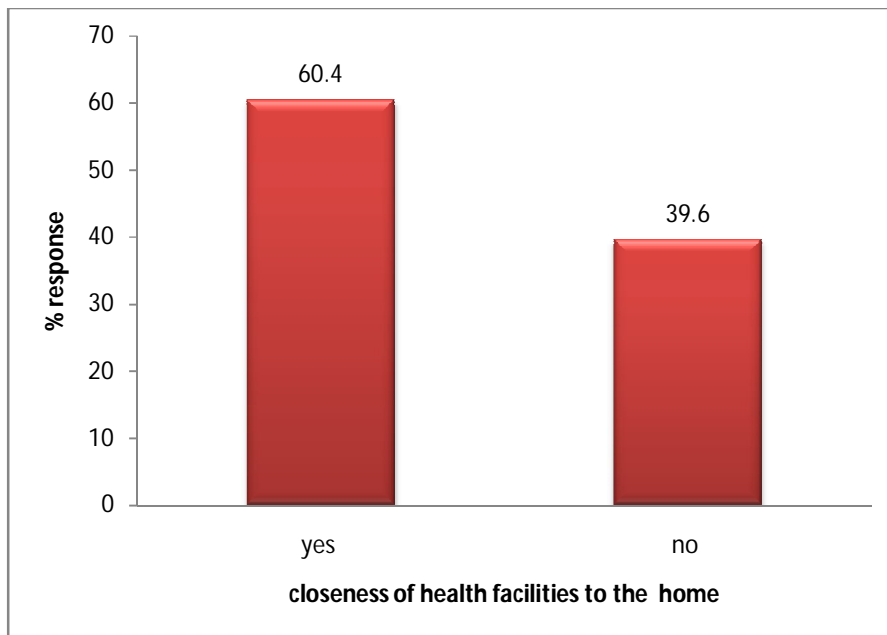


Figure 3: Closeness of healthcare facilities to the homes in Bauchi state.

The data presented in Figure 4.8 shows that majority (60.4%) of the participants claim that they have the health care facilities close to them, while the remaining (39.6%) claim it is far from them.

DISCUSSION

The study revealed that the need factors recognized for the utilization of healthcare facilities in Bauchi State are: health insurance; closeness of healthcare facilities; cost of transport and means of transport. It also revealed that the availability of health insurance is a need factor for the utilization of healthcare facilities. 100.0% Of the respondents agree that they are willing to have a health insurance, and that the health insurance will encourage them to use healthcare facilities. According to Nahu (2002), individual and/or household specific variables such as sex of the patient, severity of illness, monthly income of the household and family size, and distance to reach the nearest health facility (a choice specific variable) are found to significantly affect whether treatment was sought at times of illness. On the other hand, patients' choices of health care service providers are found to be influenced by the age of the patient, sex of the household head and education level of the patient (from the category of individual and/or household specific variables) and by medical cost of treatment per visit and waiting time for treatment (from the choice specific category).

Aboaba et al. (2023), showed that households supplement public healthcare facilities with private clinics, support traditional medical treatment with self-medication, and replace self-medication with public healthcare facilities and private clinics. Similarly, age, gender, household size, cost of drugs, distance to public healthcare facilities, travelling cost, contact with community health workers, total income, awareness of public health facilities, quality of health facilities, and terrain of health facilities influence the choice of healthcare facilities utilised. The study concluded that increased total income, contact with community health extension workers, awareness of health facilities, and perceived quality of services rendered positively influence the choice of healthcare facilities sorted after while the increase in the cost of drugs, distance to health facilities, travelling cost and difficult terrain of health facilities negatively impact the choice of healthcare facilities utilized (Aboaba et al., 2023). The findings in these studies are in agreement with the report in the present study. Ogundipe & Adesola (2022) further reported that price of healthcare

service, the cost of drug, educational qualification and the distance to health centres are statistically significant in determining the demand for health care services among the people in Akinyele local government area while income, age and gender are statistically insignificant.

CONCLUSION

In conclusion, the need factors recognized for the utilization of healthcare facilities in Bauchi State are: health insurance; closeness of healthcare facilities; cost of transport and means of transport.

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