

## Factors affecting access to health care facilities in a rural Community: The case of Bali-Nyonga Sub-Division, Cameroun

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### ABSTRACT

Adequate and equitable distribution of health care facilities in rural areas is critical to human capital development. The study determines distance as a factor influencing utilization of health facilities in Bali-Nyonga. The main objective of the research is to evaluate the socio-economic effect of distance to health care in Bali-Nyonga. Data for this were gathered through field observation, face to face interview and questionnaires. Data from secondary sources included publish and unpublished material which was presented in form of related literature review. The data were analyzed using descriptive measures and presented in the form of tables, chart, percentages and graphs. In Bali-Nyonga, where the condition of roads is very poor, distance from the nearest health facility emerges as the most important factor influencing utilization. The vulnerable groups of women, the age, sickly, the illiterate and the poor were not found to be more strongly affected by distance decay. The policy implication arising from this study suggest that distance to improve health care needs to be reduce to enhance accessibility and to improved health service by various socio-economic groups in the area. It was recommended to strengthen the efforts to improve accessibilities of health care facilities in the rural areas by increasing the number of health facilities, transport and sensitization of the rural indigenes

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## RESUME

Une répartition adéquate et équitable des établissements de soins de santé dans les zones rurales est essentielle au développement du capital humain. L'étude détermine la distance comme un facteur influençant l'utilisation des établissements de santé à Bali-Nyonga. L'objectif principal de la recherche est d'évaluer l'effet socio-économique de la distance aux soins de santé à Bali-Nyonga. Les données à cet effet ont été recueillies par le biais d'observations sur le terrain, d'entretiens en face à face et de questionnaires. Les données provenant de sources secondaires comprenaient des documents publiés et non publiés qui ont été présentés sous la forme d'une revue de la littérature connexe. Les données ont été analysées à l'aide de mesures descriptives et présentées sous forme de tableaux, de graphiques, de pourcentages et de graphiques. À Bali-Nyonga, où l'état des routes est très mauvais, la distance par rapport à l'établissement de santé le plus proche apparaît comme le facteur le plus important influant sur l'utilisation. Les groupes vulnérables de femmes, d'âge, de malades, d'analphabètes et de pauvres ne se sont pas avérés plus fortement affectés par la dégradation de la distance. L'implication politique découlant de cette étude suggère que la distance pour améliorer les soins de santé doit être réduite pour améliorer l'accessibilité et l'amélioration des services de santé par divers groupes socio-économiques de la région. Il a été recommandé de renforcer les efforts pour améliorer l'accessibilité des structures de santé dans les zones rurales en augmentant le nombre de structures de santé, transport et sensibilisation des indigènes ruraux

## INTRODUCTION

Health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity (WHO,1998). Inaccessibility to health care varies across continents, countries, communities, groups, and individuals, largely influenced by geographical, social and economic conditions as well as the health policies and systems in place. The World Health Organization (WHO, 1998) defines healthcare accessibility as “a measure of the proportion of the population that reaches appropriate health services” (WHO, 1998). In this line health care inaccessibility is a measure of the proportion of the population that is unable to reach appropriate health service. Research has shown that access to health services is closely linked to the affordability, physical accessibility, and acceptability of services, and is not based merely on the adequacy of service supply (Gulliford al,2002).Health care utilization is the use of health care services by people. The health care utilization of a population is related to the availability, quality and cost of services as well as to social-economic structure and personal characteristics of the users(Chakraborty et al 2003.). The underutilization of health services in public sectors has been almost a universal phenomenon in developing countries (Zwi, 2001). Patients, especially in the rural areas in developing countries , are far away from health facilities, and this affects their utilization of health services. Health facilities, goods and services have to be accessible to everyone without discrimination, within the jurisdiction. Health facilities, goods and services must be affordable for all. Akashi et al. (2004) point out that payment for health-care services, as well as services related to the underlying determinants of health, has to be based on the principle of equity, ensuring that these services, whether privately or publicly provided, are affordable for all, including socially

disadvantaged groups. The costs of attending health services may be known or unknown, but in either case may prevent the poor from attending facilities. Even where costs are known they may not be affordable. However, it is the uncertainty about costs that is perceived as the main financial barrier. The introduction of official fees removed some uncertainty and reduced costs by using a well-published fee schedule. Nonetheless, the continued prevalence of some under-the-table charges means that the uncertainty about what patient costs will be are a barrier for those who lack an immediate source of cash income to meet health costs (Dalton and Peacock, 2005). Awoyemi et al., (2011) showed that distance is also an important limiting factor to health care access in the Northern Nigeria. The policy implication arising from this study suggests that distance to improved health facilities and the total cost of seeking health care need to be reduced to enhance accessibility to improved health services by various socio-economic groups in the area. Princeosei-wusuadjeib.a (2008) conducted a research on the impact of poverty on the health of rural communities in Ghana: a case study of the Amanesi a west district, Ashanti region. the survey analyses the poverty situation and how poverty impacts ill health in the rural communities in the District. Hypotheses tested were that, poverty is the root cause of poor health; and that, adequate income and knowledge ensure better health for the rural communities of the Amansie West District.

The numerous alarming healthcare problems in Cameroon, in general and in Bali-Nyonga in particular are causes for concern. The need to overcome distance problems is one of the greatest challenges of most rural communities. Bali Nyonga is a rural community and exhibits a number of problems which seem not to have been addressed and thus threatens healthcare utilization. The goal of this study was to access the accessibility to health care in Bali-Nyonga

Subdivision, a typical rural community in the North West Region of Cameroon.

**Methodology**

**Location of the Study Area**

The study was carried out in Bali-Nyonga a subdivision located in Mezam Division in the North West Region Cameroon, found at the transition between the grasslands and the forest to the South West. Bali-Nyonga is one of the 32 sub-divisions of the North West Region. It is situated some 20kilometers from Bamenda, which is the regional headquartering of the North West Region. Bali-Nyonga is located between latitude

5°54' North of the Equator and longitude 10° East of the Greenwich Meridian. It has a basin shape and covers a surface area of about 191km<sup>2</sup>with a population 85058 inhabitants (Bali rural council monographic study, 2005). Bali-Nyonga is of the Chamba Leko group who migrated from Chamba around the 1600. The language is Mungaka and it is found in the Western part of Mezam. Bali is bordered to the North East by Bamenda, to the South East by Santa subdivision, to the West by the Mbengwi and to the South by Batibo Subdivision. Bali-Nyonga lies at the foot of the Bamboutos plateau. From the Bamenda

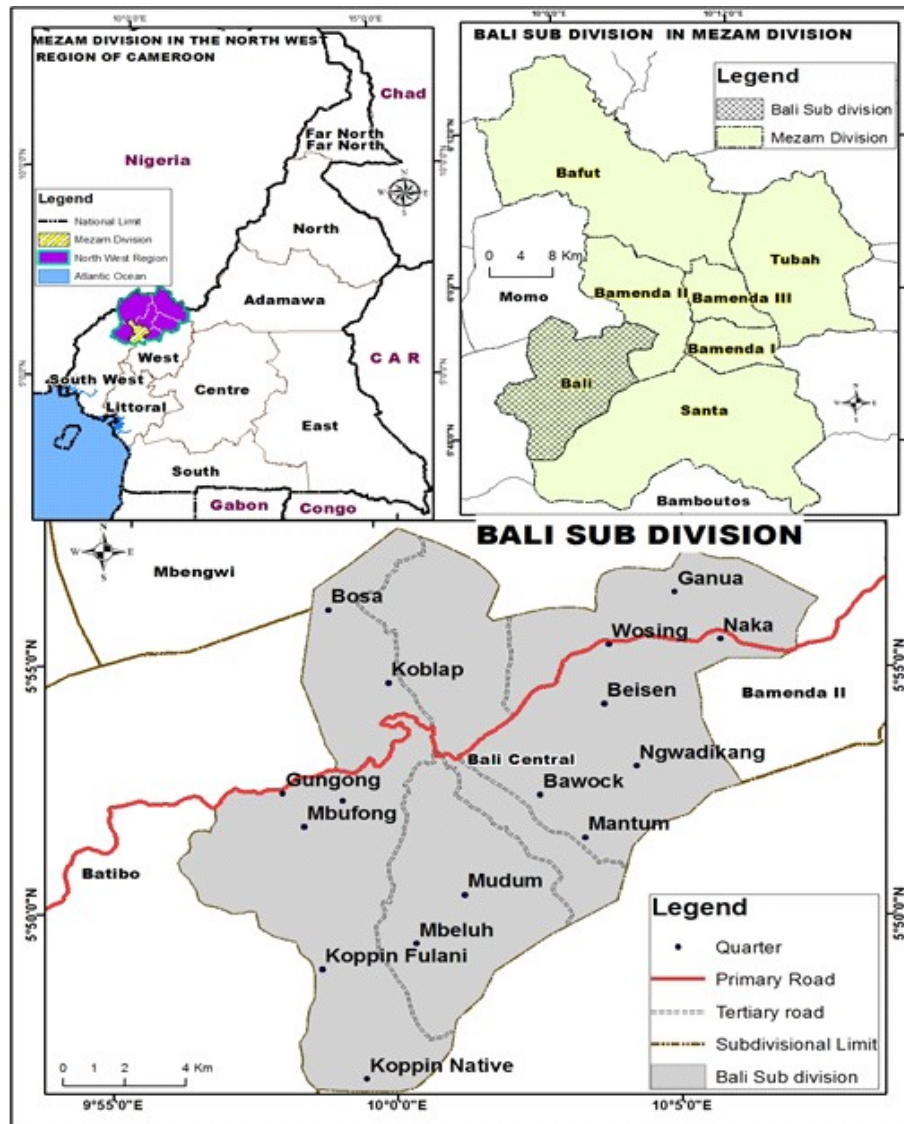


Figure 1: Location of Bali-Nyonga sub-division  
 Source: Adapted from the Administrative Map of Cameroon

Descriptive survey research was used to gather information on factors affecting access to health care facilities in Bali-Nyonga Sub-Division. Target population and sampling size in the framework of our study, our target population consisted of all people living in the urbanized. The purpose sampling technique was used to select willing participants for the study in Bali-Nyonga Sub-Division. The primary sources include face to face interviews; the use of 200 questionnaires and field observations. The secondary sources included information from published and unpublished textbooks, journals, articles, and open access journal online. Data from the field was analyzed with the use of: SPSS, Excel and Quantum, GIS. All participants responded orally to a structured questionnaire provided by the investigating team. Data collected were included socio-demographic characteristics, socio-economic information, socio-cultural information, factors of accessibility and inaccessibility to health facilities. The geographical coordinates of health facilities were obtained using a Global Positioning System. Field observation was important for the description of health facilities. Free software such as Quantum SIG (version 1.6) has made it possible to georeference health facilities in the area.

S/N	Health Facility	No of Personnel
1.	Bali Integrated health centre	10
2.	Bossa Integrated Health Centre	4
3.	Gungong health centre	6
4.	Saint Elizabeth's Catholic health centre	22
5.	Acha Annex Health Centre	12
6.	Bawock Integrated Health Centre	4
7.	Wosing Integrated Health Centre	4
8.	Mantum Integrated Health Centre	4
9.	Naka Integrated Health Centre	3
10.	Bali District Hospital	34
	Total	103

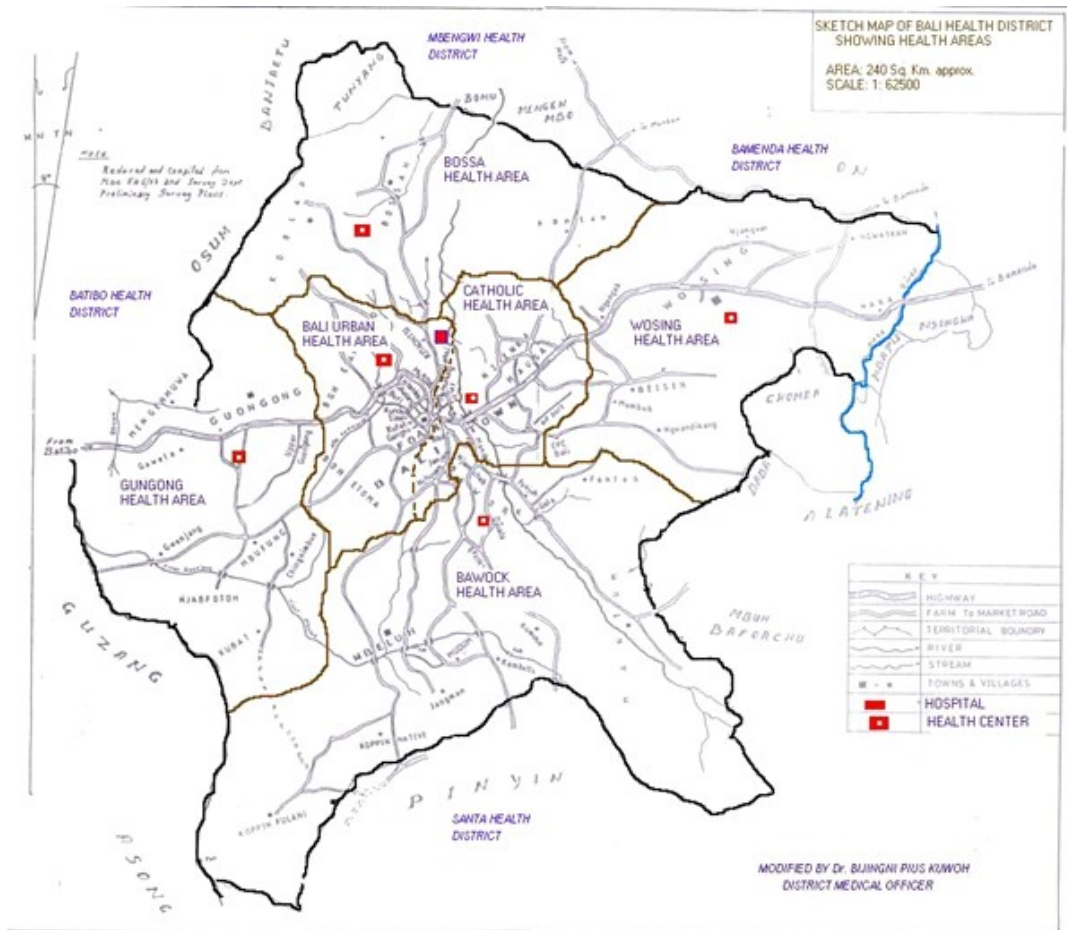
Source: Field Survey, 2019

## RESULTS

### SPATIAL DISTRIBUTION OF HEALTHCARE FACILITIES IN BALI

According to the Bali district hospital statistics department, the total population of the health district is estimated at 85,804 inhabitants. Bali health district constitutes 5 health areas with 9 health centers and a district hospital (table 1) with 103 health care personnel with only one generalist medical doctor.





**Figure2: Spatial distributions of health facilities in Bali Nyonga**

**Source: Fieldwork, 2019**

Figure 2 shows that Bali Nyonga, sub division has nine public health facilities and three faith based-health facilities which are not centrally placed with regards to the road network and distances from the scattered settlements. They are located in the following areas: Bali district hospital at Sang, the Catholic Mission Health Centre at Won, PMI situated at Ntankoh, Bawock Integrated health center at Bawock, Naka Integrated health center at Naka, Wosing integrated health center at Wosing, Mantum integrated health center at Mantum, Bossa integrated health center at Bossa, Gugung integrated health center at Gugung and Koppin integrated health center.

**Characteristics of health facilities and accessibility to healthcare in Bali Nyonga**

Health facilities include the buildings, equipment and human resources used in providing health services to people. Some of these facilities are laboratory, pharmacy, ward, delivery room, administrative block, theatre, restaurant, bed, personnel’s just to name a few. The sanitary nature of the hospital and health centers though not the best is generally good. Information from the field shows that most of the health centers in Bali-Nyonga have limited facilities. Some are using structures not initially constructed for a health centre. Mantum health centre can admit just six patients and has no consultation room. Bali District Hospital, Saint Elizabeth’s Catholic Health Centre and Bali Integrated Health Center health facilities’ characteristics are exemplified below (Table 2).

**Table:2 Bali District hospital health facilities**

No	Facility	Quantity
1.	Laboratory	1
2.	Casualty	1
3.	Pharmacy	2
4.	Nurse station	2
5.	Consultation room	1
6.	children ward	1
7.	Women ward	1
8.	Men ward	1
9.	Private ward	8
10.	Delivery room	1
11.	Maternity	1
12.	Labor room	1
13.	Physiotherapy centre	1
14.	Theatre	1
15.	District health service	1
16.	Administrative block	1
17.	Restaurant	1
18.	Conference hall	1
19.	Mortuary	1
20.	Bed	54
21.	Personnel	34
22.	Dental centre	1

Fig:3 shows the various equipment available at the Bali district hospital. Research from field shows that Bali district hospital is equipped with the necessary facilities. Some of the equipment shown in the figure 3 below.

Fig:3 shows Bali district hospital delivery room. Here, 4 important elements labeled A, B, C and D are comment on. The first element A is a modern delivery birth donated to the Bali district hospital by a philanthropist. The second element B is a scale used to know the weight of a newly born. The third element C is a staircase used by pregnant women to get on the delivery bed. The fourth element is a white tile floor. This white floor is for sanitary purpose and to easily trace any object on the floor.

**Source: Field work 2019**



**Fig3: Bali district hospital delivery room**  
**Source: Field work 2019**



**Fig .4: Bali district hospital laboratory**  
**Source: Field work 2019**

Figure 4 shows a photo of Bali district hospital laboratory. Three elements labled A,B and C can be identify. The first element A is an electric heater with a drum sterilizer on it. They are used to heat and disinfect or sterilize slides and other instruments used in the laboratory to collect spa cements. The second element B is a microscope used in examining spa cements. Then C are some laboratory technicians examine a spa cement with the microscope.



**Fig 5: Bali district hospital administrative block**  
**Source: Field work 2019**

Figure 5 shows a photo of the Bali district hospital administrative block. Here we have the district head's office and other offices. This block also harbours two phamarcies, a laboratory, casualty, consultation room and the district hospital's restaurant.





**Fig -6: Bali district hospital mortuary**

**Source: Field work 2019**

Fig 6 shows a photo of Bali district hospital mortuary. On this photo, three variables can be noticed; that is A, B, C and D. A is a viewing hall where corpses are presented for viewing. B is the room where corpses are being preserved. C is a water tank that supplies the hospital. D is some community members waiting for the mortuary attendant.

**Characteristics of health facilities in Saint Elizabeth’s Catholic health Centre**

The Saint Elizabeth’s Catholic Health Centre is one the oldest health Centre in Bali-Nyonga. This sophisticated health centre was created by the Roman Catholic mission to carter for health needs of the Bali-Nyonga people. This health center is well furnished. Here, some important facilities are available like the ultrasound and echography unit. Table 3 shows some of the pieces of equipment available.

**Table :3 Saint Elizabeth’s Catholic Health Centre’s facilities**

No	Facility	Quantity
1.	Laboratory	1
2.	Casualty	1
3.	Pharmacy	1
4.	Nurse station	1
5.	Consultation room	1
6.	Waiting room	1
6.	children ward	1
7.	Women ward	1
8.	Men ward	1
7.	Private ward	3
8.	Delivery room	1
	Maternity	1
	Ultrasound and echography unit	1
9.	Labor room	1
11.	Theatre	1
14.	Canteen	1
15.	Conference hall	1
17.	Bed	43
18.	Personnel’s	22

**Source: Field work 2019**

Table 3 shows the various facilities available at the Saint Elizabeth’s Catholic health centre. Research from field shows that Saint Elizabeth’s Catholic health centre has the necessary facilities needed by a health centre. Below is the photo of the entire health centre.



**Fig7: Saint Elizabeth's Catholic health Centre**  
**Source: Field work 2019**

Fig 7: shows Saint Elizabeth's Catholic health centre Bali-Nyonga taken from the sky using a drone. Building A is the doctors' house. The doctor is resident in the centre for emergency. Building B harbors the children, women, men and private wards. Here there is a small conference hall, nurse's station, consultation, laboratory and the matron's office. Building C contains a labor, delivery room and maternity. In building D, we have a canteen and an ultrasound and echography unit. Building E kitchen and F an external toilet. Buildings G, H and I is the residence of the health centre's matron and some sisters. From the photo, the Saint Elizabeth's Catholic health center Bali-Nyonga has an organized structure.

### **Characteristics of health facilities in Bali Integrated health Centre**

Information from field shows that, Bali Integrated health centre is the oldest health institution in Bali-Nyonga. With the creation of the Bali district hospital, some of its services were reduced. It now handles mostly antenatal care and delivery service. It also treats small ailments, while severe ones are being referred to the Bali district hospital. The plateau technique of Bali-Nyonga integrated health center (IHC) is as presented in table 4 below.

**Table :4 Bali Integrated health Centre health facilities**

No	Facility	Quantity
1.	Laboratory	1
2.	Casualty	1
3.	Pharmacy	1
4.	Nurse station	1
5.	Consultation room	1
8.	Delivery room	1
	Mertanity	1
9.	Labour room	1
15.	Hall	1
17.	Bed	7
18.	Personnels	10

**Source: Field work 2019**

Table 4 shows the various facilities available at theBali Integrated health Centre



**Fig 8: Bali Integrated Health Centre**

**Source: Field work 2019**

Photo 8 shows a photo of the Bali Integrated health Centre. It is a part view, showing some external toilets and the building the contains the pharmacy, laboratory, labor room, delivery room, maternity and a hall can be seen with a sign post on its wall.

poor road network limiting health care accessibility in Bali-Nyonga.

### **Factors of accessibility to health care in Bali Nyonga**

According to information gathered from field, the characteristics of health facilities insufficient health personnel's, lack of finance by the people,

**Table 4: Characteristics of health facilities in Bali-Nyonga**

Item	Agree		Disagree	
	Frequency	%	Frequency	%
Many people in Bali-Nyonga do not visit the hospitals due to poor sanitary nature of their facilities.	78	39	122	61
Hospitals in Bali-Nyonga are poorly constructed	48	24	152	76
There is a problem of acute shortage of health personnel's in Bali-Nyonga.	106	53	94	47
<b>Total</b>	232	116	368	184
	38.6		61.4	

**Source: Field work 2019**

Table 4 shows that out of the 200 participants, 78(39%) accepted that many people in Bali-Nyonga do not visit the hospitals due to poor sanitary nature of their facilities, while 122(61%) refused; 48(24%) of the responded affirmed to the fact that hospitals in Bali-Nyonga are poorly constructed, 152(76%) denied; 106(53%) agreed to the fact that there is a problem of acute shortage of health personnel's in Bali-Nyonga, while 94(47%) disagreed.

#### **Financial situation of the respondents**

The financial situation of the respondents is also a limiting factor to health care accessibility in the

study area. The respondents have low incomes which are respected in their occupation, and monthly income.

#### **Income per month**

There is a direct relationship between employment level and income per month. Results from field survey indicated that the level of incomes of the people are too low. Table 5.

**Table 5: Income level of respondents**

Monthly income	Frequency	%
Below 36000FCFA	157	78.5
37000-72000FCFA	24	12
Above 72000FCFA	19	9.5
<b>Total</b>	<b>200</b>	<b>100</b>

From table 5, it is observed that out of the 200 respondents, 157(78.5%) of them earn below the normal 36000FCFA per month; 24(12%) earn between 37000-72000FCFA per month; 19(9.5%) earn above 72000FCFA. With this low incomes, the people are unable to achieve their health needs so income level is a limiting factor to health care accessibility in Bali-Nyonga

#### **Occupation of the people of Bali-Nyonga.**

Results from the field indicated that our respondents are made up of farmers, students, traders, civil servants.



**Table 6 Occupation of respondents**

Occupation	Frequency	%
Farmer	132	66
Trader	27	13.5
Students	25	12.5
Civil servant	16	8
<b>Total</b>	<b>200</b>	<b>100</b>

Source; Field work, 2019

From table 6: shows the occupation of the respondents: 66% of the respondents are farmers and they are practicing subsistence agriculture; 13.5% are mostly small traders; 12.5% are students and 8% of the respondents are civil servants. This illustrates that most of the respondents do not have enough funds that they can use to purchase drugs or receive good medical attention when need arises so the occupation of the population is a hindrance to health care accessibility in the study area

#### **Cultural factors influencing health accessibility in Bali-Nyonga**

Cultural factors play an important role in determining health accessibility in Bali-Nyonga. These factors are the cultural beliefs, of the people, language barrier, as well as the use of traditional medicine in healing. As well as the attitude of the doctors. Table 6 presents the reaction of our respondents with respect to social factors of accessibility in the study area.

#### **Language barrier**

Bali-Nyonga like any other areas in Cameroon is subjected to the use of two official languages English and the French languages. This poses a threat to health care accessibility as patients who cannot express themselves in English or French are not capable expressing their health problems and this is a limiting factor to health care accessibility table 6.

#### **Traditional beliefs**

This is another limiting factor to health care accessibility in Bali-Nyonga. Results from our field survey indicated that some people do not go to the hospital because they believe very much in traditional medicine and as such they do not go to the hospital. They also believe in ancestral healing. Table 7 shows the effects of culture on health accessibility in the study area.

**Table 7: Effects of culture on accessibility to health care facilities**

Item	Agree		Disagree	
	Frequency	%	Frequency	%
Many people in Bali-Nyonga do not visit the hospital because they do not know how to express themselves in English or French language	100	50	100	50
Bad cultural practices have led to increase in the death rate of many Bali-Nyonga people since they believe in their ancestor for treatment and healing	180	90	20	10
Many notables do not like to expose themselves to the doctor because of their supernatural power	160	80	40	20
Because of the believe that medical treatment is the white's own way of treatment many people do not go to the hospital	40	20	160	80
Some Bali-Nyonga indigenes are forbidden by their ancestors not to visit hospitals	160	80	40	20
<b>Total</b>	640	320	360	180
	64		36	

**Source: Field work 2019**

Table:7 shows that out of the 200 participants, an equal number 100(50%) of the responded agreed and disagreed respectively to the fact that English and French languages are a barrier to hospital visits; 180(90%) accepted that bad cultural practices and ancestral beliefs leads to neglect of health while 20(10%) refused; 160 (80%) agreed that notables do not seek modern medical care because they do not want to expose their bodies and fatigue powers to the health personnel while 40(20%) disagreed; 40(20%) accepted that because of the believe that medical treatment is the white's own way of treatment many people do not go to the hospital while most 160(80%) refused; and finally, when asked whether Bali-Nyonga indigents are forbidden by their ancestors not to visit hospitals, 160(80%) agreed while 40(20%) denied the assertion.

#### **The attitude of health personnel**

Attitude also plays an important factor in determining health care accessibility in Bali-

Nyonga. This attitude is demonstrated by the health care personnel that is the doctors to the patients. In some cases patients wait for long before they are being attended to by the health personnel. The doctors on their part are not welcoming to the patients. In some cases, patients are obliged to bribe the doctors before they are being attended to. The health officials also practice discrimination wherein they give much time to the rich at the expense of the poor. In some cases when patients come to the hospital, the doctors do not have time to attend to them as they rather spend time in chatting about their businesses. Also, absenteeism on the part of the doctors is also a big problem as most of the doctors are not always on duty and at times when a patient is admitted in the hospital there is usually no body to attend to the patient because of high absenteeism on the part of the doctors. Table8. The summary of the effects of attitude on personnel health accessibility in Bali-Nyonga.

**Table 8: Effects of the attitude of health personnel on accessibility to health care facilities**

Item	Agree		Disagree	
	Frequency	%	Frequency	%
Many health personnel do not attend to their patients on time	80	40	120	60
Health personnel do not have a welcoming altitude towards patients	60	30	140	70
Health personnel do not treat patients in hospitals equally. They discriminate the poor	160	80	40	20
Health personnel spend time browsing and chatting with friends rather than attending to the needs of their patients	180	90	20	10
Health personnel receive bribe from some patients before given them treatment	60	30	140	70
<b>Total</b>	540	270	460	230
	54		46	

**Source: Field work 2019**

Table 8 shows that out of the 200 participants, 80(40%) of the responded agreed that many health personnel do not attend to their patients on time while 120(60%) disagreed; 60(30%) accepted that health personnel do not have a welcoming altitude towards patients while 140(70%) refused; 160(80%) said Health personnel do not treat patients in hospitals equally. They discriminate the poor while 40(20%) refused; 180(90%) said health personnel spend time browsing and charting with friends rather than attending to the needs of their patients; and 60(30%) affirmed that they receive bribe from some patients before given them treatment while 140(70%) denied the assertion.

**The effect of distance on health accessibility in Bali-Nyonga**

Distance is the amount of space between two points. Here we are referring to the amount of space between homes and the nearest health post

in Bali-Nyonga. According to the Bali district hospital statistics department, the total population of the health district is estimated at 85,804 inhabitants. Bali health district constitutes 7 health areas (Bali Urban, Bossa, Gungong, Won, Njenka, Wosing, Bawork) with 9 health centers and a district hospital. These health centers are located according the various villages in Bali-Nyonga. In order to determine the distance covered by patients to get medical care, the researcher administered a questionnaire to patients and found that majority of the indigenes (70%) live in areas of at least 4km from the nearest hospital as shown on the table9

**Table 9 : Distance from home to health care facilities**

Distance	Frequency	%
0-1km	40	20
1-2km	20	10
3-4km	100	50
above 4km	40	20
<b>Total</b>	<b>200</b>	<b>100</b>

**Source: Field work 2019**

From table 9, it is observed that out of the 200 respondents, 40(20%) of them travel about 0-1km; 20(10%) travel about 1-2km; 100(50%) travel about 3-4km; 40(20%) travel above 4km. It was equally revealed that with this distance, 40(20%) of the people take 30 minutes to get to the hospital; 20 (10%) take 30mins-1hr; 100(50%) take between 1-2hrs; while most, 40(20%) take above 2hrs to get to the hospital.

approximately 27km. Most roads are untarred. During the dry season the roads are dusty and in the rainy season they become seasonal posing a problem to road transport. As such poor roads infrastructure is a limiting factor to health care accessibility in Bali-Nyonga as it makes it impossible for patients to get to the hospital on time. Most health centers are located on low land areas as Bali is a basin. Photo 6 shows a situation of poor roads infrastructure in Bali-Nyonga.

**Poor state of the roads**

Main tarred road in Bali-Nyonga is the Bamenda Enugu highway that passes through, covering



**Fig 9: Photo of a degraded portion of a road in Bali-Nyonga**

**Source: Field work 2017**

**Geographical factor**

Geographical factor also plays an important part in determining health care accessibility in Bali-Nyonga. Bali-Nyonga has humid tropical climate with two seasons (rainy and dry season). With this, most of the roads are seasonal. The topography on the other hand is rough in some areas thus making health care inaccessible. At

times patients from the interior have to climb steep slopes and move on rough terrain before getting to the hospital. Just imagining the nature of the terrain discourages some patients from reaching the hospital. The summary of geographical factor in determining health care accessibility in Bali-Nyonga.



**Table 10: geographical factor**

Item	Agree		Disagree	
	Frequency	%	Frequency	%
Most roads in Bali-Nyonga are seasonal	180	90	20	10
Many patients do not reach the hospital due to rough nature of the terrain.	60	30	140	70
<b>Total</b>	240	120	160	80
	60		40	

**Source: Field work 2019**

Table 10 shows that out of the 200 participants, 180(90%) of the responded agreed that most roads in Bali-Nyonga are seasonal while 20(10%) disagreed; 60(30%) accepted that many patients do not reach the hospital due to rough nature of the terrain while 140(70%) refused.

Results from the field revealed that most people in Bali-Nyonga find it difficult accessing health facilities due to financial constraints. Distance also has a role to play. 100(50%) take between 1-2hrs to get to the nearest health Centre. More so,

most roads in the study area are in a poor state and mostly seasonal.

**Level of education**

According to the level of education the population is grouped into those who completed only primary school, those who completed the secondary, high school and graduates of the utilization. The literate tends to utilize healthcare services than the illiterates as shown on the table below.

**Table 11: Education status and utilization of health facilities**

Educational status	Government hospital	Private hospital	Self-care	Traditional care
No formal education	32.9	9.2	19.7	38.2
Adult education	40.0	0	40.0	20.0
Primary education	25.0	7.5	25.0	42.4
Secondary education	37.5	12.5	25.0	25.0
Tertiary education	47.8	8.7	13.0	30.4
Total	33.8	8.8	21.3	36.3

**Source: Field work 2019**

Education has an important impact on utilization of healthcare of health care facilities. The table 11 shows the highest proportion of 25% of rural household heads has primary education. A larger percentage of 56.5% of household heads who have tertiary education utilize modern healthcare facilities while a higher percentage of 57.9% have households whose heads did not have access to formal education do not utilize healthcare facilities. Also, 60% of households whose head have adult literacy education did not utilize health care facilities.

### Discussion and Conclusion

From the findings, the financial status of the people of Bali-Nyonga to purchase for health care services is very low. They have very low income because of the types of activities in which they are engaged. These activities are primary and secondary activities. The primary activities are characterized by small scale farming which will always result in low income thus limiting their power to afford health. About 148 out 200 people of Bali-Nyonga testified that visiting of traditional healers and road side drug vendors is come due to poverty. All these has greatly implicated they health situation of Bali-Nyonga people.

From the findings, the following recommendations were made: The government should provide loans to the people of Bali-Nyonga at a very low interest rate so that they can increase their farm size in order to raise income to afford health care services. Those who are engaged in trade also need to be granted loans at very low interest rate encourage them borrow so that they can increase their business scale which will yield them high income rate that can purchase health care services. Government should increase the capacities of most of the health centers with equipment and personnel. The

Bali Council should grade and rehabilitate the roads leading to hospitals.

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