



The Distribution of Healthcare Facilities in Mubi North Local Government Area: The Physical Planning Perspective

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Abstract

Health sector service in Nigeria is by far one of the most important part of complex economic service sector. Preliminary investigation revealed that, there are challenges with the distribution of healthcare facilities in Mubi North Local Government Area. From the 212 sample population, information revealed that Healthcare facilities are often located a distance apart from the people they are meant to serve. Hence, people have to travel long distance to access healthcare Infrastructure. Most of the health centre experience absence or inadequacy necessary facilities like beds, doctors, nurse/health personnel, laboratories among others. Essential services like electricity, water supply, ICT among other are also insufficient in some of the healthcare centers as presented on the analyzed tables in the work. Physical planning principles are not considered paramount in the distribution of the facilities. Hence, care should be taken to ensure that, they are evenly distributed geographically so as to address distribution issue. The range concept has been chosen which specified that the maximum walking distance to health facility should be 800m as specified by Obateru, (2004). Hence, to address Healthcare distribution problems in the study area, Healthcare distribution plan is also prepared, (see proposed plan for health care distribution appendix ii) in addition to recommendation outlined to improve healthcare service in Mubi North LGA.

Keywords: *Distribution, Healthcare, Facilities, Physical Planning, Perspective.*

Introduction

The statement that says health is wealth and the wealth of the nation is the health of its citizens has well describe the value of healthy living Adebayo and Oladeji, (2006) stated that health infrastructure is a part of a larger concept of the health system which contains the health policy, budgetary allocation, implementation and monitoring. Physical structure entails the buildings and other fixed structures such as pipe borne water, good access roads, electricity and so on within the healthcare environments, whilst the technology is about the equipment's meant specifically for hospital use including surgeries (Erinosho, 2006). According to Johnson (as cited in Balogun and Henry, 1976) health sector service in Nigeria is by far one of the most important part of complex economic service sector as a way of contributing to each other. The health service sector contributing to each other as promotion in the country. Health facilities also through nursing homes to modern high technical and centralized hospital by implementation, be observed that the health sector in Nigeria could simply be described as a mixed enterprise system involving all level of government federal, state, local government, private practitioners as sole proprietors or partners, missionary, individuals and organizations. As a way of classification, Kuti (1991) categorized health service in Algeria into three main classes viz.

The primary health service which is closest to the people and is for those health problems that can be solved at local level and are delivered under general hospitals for supervision. Difficult cases are referred to secondary health care system and further to teaching hospital and specialist hospitals which are supervised by the federal ministry based on policy statement. In 1987, Nigeria has about 100,000 villages and are autonomous communities but there are about 30,000 health establishment of primary level including maternity center, clinic and dispensaries (Directorate of Food, Roads and Rural Infrastructure ([DFRRI], 2013). The distribution of health facilities in England among the many objection set for health care system by policymakers, the pursuit of concept such as equal access to healthcare facilities or equal health outcomes frequently play an important role. A concern with equal access suggest equal treatment with equity. (Francine 2013). He still put forward that in making health issues operational, geography become important for three reasons, first, many Systems or health care are organized on a geographical basis, issues of territorial equity therefore become central to the distribution of health care resources, secondly whatever system of health care is in place, health care facilities such as hospitals, and clinic are concentrated at specific locations, implying that

geography consideration may be of central important in determining access to health care and health outcomes. Thirdly there is considerable evidence that geographical in equalities in health, in the form of "area effect any exist beyond class and income in equalities.

Doug (2007) stated that through historical and cultural center inheritance and regional price variation. The geographical distribution of health care facilities may affect utilization through differential opportunity of access to service. Equity objective such as retuning equal need or securing equality of health outcome can never be perfectly achievable. In practice inequalities in provision of health care will always exist if only because of geographical variation in the cost of reaching Services and equity of health outcome can be parallel only in part by redevelopment of health resources.

STATEMENT OF THE PROBLEMS

The distribution of health facilities in various parts of the country is one of the main objectives of health care delivery system so that a greater percentage of the people will have access to health care services. Preliminary investigation revealed that, there are challenges with the distribution of healthcare facilities in Mubi North Local Government Area. Healthcare facilities are often located a distance apart from the people they are meant to serve. Hence, people have to travel long distance to access healthcare Infrastructure. Must of the health centre experience absence or inadequacy necessary facilities like beds, doctors, nurse/health personnel, laboratories among others. Essential services like electricity, water supply, ICT among other are also insufficient in some of the healthcare centers. Physical planning principles are not considered paramount in the distribution of the facilities.

Healthcare Delivery in Nigeria

Most of the literature on health and economic development emphasizes the need for improvement in the health system performance. In fact, one can described the health system of Nigerian economy to be in crisis. Access to quality health care should be seen as a fundamental human right because of the enormous benefit it will have on the individual and the economy of the nation. For instance, improved health has a direct link with productivity of labour force. Bloom and Canning (2000), Castro-Lea, et al (2000), Hamoudi and Sachs (1999) and Barro (1996) are among a few of the authors who have established a link between

health and economic growth of a nation. Although varying approaches and models have been proposed, there is a consensus of opinion by these authors on the importance of an efficient health care delivery system. For instance, Hamoudi and Sachs (1999) argue that there is a cycle of simultaneous impact between health and wealth. Similarly, Castro-Lea, et al (2000) is of the opinion that health care is the most essential service in any effort to reduce poverty and achieve sustainable development. By the definition of the World Health Organization (WHO), good health is a state of complete physical, mental and social well-being and not just an absence of disease or infirmity. This means that exposure to an unhealthy environment, stressful living and working conditions can cause ill-health and thereby reducing the productivity of labour. It can therefore be inferred that the “wealth of nations” depends on the “health of individuals in the nation”. Source: Kandala (2011).

LEVELS OF HEALTH CARE DELIVERY IN NIGERIA ARE:

Primary Health Care Service: The provision of health care at this level is largely the responsibility of local government with the support of state ministry of health and within the national health policy frame work. It provides whole-person care for health needs throughout the lifespan, not just for a set of specific diseases (WHO, 2021).

Secondary Health Service: The secondary health care service is provided by the state government according to the national health policy (NHP) and provide specialized services to patients referred from the primary health care through outpatient and inpatient services or hospital for general medical district division and zonal level of state *(Science direct, 2020).

- Tertiary Health Care Service: Teaching hospital and other specialist hospital which provide care for specific disease condition of specific group of person e.g. orthopedic, eye, psychiatric, maternity and pediatrics hospital, shall provide tertiary healthcare services which consist of highly specialized services (Federal ministry of Health, 2007).

PLANNING STANDARD FOR THE DISTRIBUTION OF HEALTH FACILITIES AND SERVICE

Planning standard for distribution of health facility is a common frame/accepted guideline for planning and analyzing the provision and spatial distribution of public

health facilities and service. They guide the provision of public facilities and service and they specify under what condition or circumstance certain provision is to be served, all with the view of achieving optimum functions through theories like central place theory. Lever (1994).

Study reveals required conditions including population to be served Health centre, Dispensary/Health Clinic, and Comprehensive health center and the maximum distance to each health infrastructures.

CENTRAL PLACE THEORY.

This theory was developed by Chrisaller (1966). The theory was derived from planning standards that recognize three concepts, threshold population, range of good feeling and accessibility concepts. Lever, (1974). These standards recognized three broad relationships between settlements of different sizes, therefore consider the follows; the threshold population, Range of a good feeling and Accessibility.

The standard derived from this concept consists of estimated population required to support primary school, secondary school, Maternity, cinema, a shopping center, a gymnasium just to mention but a few. For instance the population of 20,000-30,000 people has been recommended to support health centers (Falade, 1998 and Onokerhoraye, 1982). This concept is related to the service radius which refers to the zone of the area being served by facility and services.

The table above reveals the estimated population for each sample ward in Mubi north from 2013 in which the total estimated population in 2013 is 184,282 and the population projection for each ward in which the total population projection in Mubi North to 2021 will be 313,277 and the total number of healthcare infrastructure is 38 in the study area.

Methodology

Preliminary investigation revealed that, there are challenges with the distribution of healthcare facilities in Mubi North Local Government Area. Healthcare facilities are often located a distance apart from the people they are meant to serve. The paper presents discussion on the type of data required for the study such as questionnaire survey where 212 copies are administered. Library search for secondary data and field investigation among others were also used. Data presentation methods and simple random sampling data analysis tools were used, see summary of findings.

Table 1: Population wards in Mubi North

<i>Ward</i>	<i>2013 Population</i>	• <i>2021 Projected Population</i>
<i>Bahuli</i>	16,108	27,384
<i>Vimtim</i>	13,758	23,389
<i>Lokuwa</i>	19,171	32,591
<i>Kolere</i>	15,088	25,649
<i>Digil</i>	16,604	28,226
<i>Muchalla</i>	18,029	30,649
<i>Mijilu</i>	14,765	25,100
<i>Yelwa</i>	17,336	29,471
<i>Betso</i>	18,261	31,043
<i>Mayo Bani</i>	14,952	25,418
<i>Sabon Layi</i>	20,210	34,357
<i>Total</i>	184,242	313,277

Source: National Population Census, (2013).

- Projected by the researchers

Summary of Findings

Table 1 entails the number of health facility in every ward in detail three (3) in Bahuli ward, three (3) in Betso ward, three (3) in Digil ward, one (1) in Kolere ward and Ten (10) in Lokuwa ward, three (3) in Mayo Bani ward, three (3) in Mijilu ward, three (3) in Muchalla ward, two (2) in Sabon Layi ward, three (3) in Vimtim ward, and lastly four (4) in Yelwa ward with all the thirty eight (38)'s facility UID (unique number), date of establishment, facility code, facility name, longitude and latitude, the facility level with thirty three (33) for primary level and five (5) for secondary level, also with thirty two (32) are for public ownership and only six (6) are for private ownership.

The above also reveals that there are thirteen (13) primary health centres, seven (7) primary health clinic, one (1) child health centre, eight (8) health clinic, four (4) health centres, two (2) clinics and three (3) dispensaries. Field survey,(2020).

Table 2: Other challenges that may be facing the health centre

<i>Status</i>	<i>Frequency</i>	<i>Percentage %</i>
<i>Insufficient drugs</i>	147	69.3%
<i>Unmaintained toilet</i>	4	1.9%

<i>Insufficient bed space</i>	16	7.5%
<i>Insufficient health personnel's</i>	45	21.2%
<i>Total</i>	212	100%

Source: Field survey, 2021

Table 2 reveals that 69.3% of the respondents suffers insufficient drugs, 21.2% suffers from unmaintained toilet, and 7.5% lacks insufficient bed space and 1.9% lack sufficient health personnel's. Revealing from researchers point of view, the area of study suffers mostly from insufficient drugs and insufficient health personnel's.

Table 3: Suggested ways to improve health facilities in the study area.

<i>Status</i>	<i>Frequency</i>	<i>Percentage %</i>
<i>Involvement of government</i>	113	53.3%
<i>Private sector participation</i>	30	14.2%
<i>Community participation</i>	69	32.5%
<i>Total</i>	212	100%

Source: Field survey, 2021.

Table 3 shows that 53.3% of the respondents said that to improve health facilities by the involvement of government, 32.5% for community participation and lastly 14.2% for private sector.

DISCUSSION OF FINDINGS

On this account, the findings on this survey indicates that all the existing health care infrastructure in Mubi North Local Government Area are thirty eight (38) with a revelation of almost all the thirty eight (38) health centers are not registered. Only two (2) out of the thirty eight (38) health centers which are Bil med clinic and Ndotti dispensary are registered but not licensed. Having it that thirty eight (38) health centers for Mubi north is considered enough for the population of 313,277 (Falade 1998, and Onokerhoraye, 1982).

The findings of this survey on Mubi North LGA with a population of 313,276 shows the spatial distribution of healthcare infrastructures. 86.3% of the respondents lived 16 year. The study reveals more than half (75.7%) of the population has access to health care. Availability and adequacy at the health centres has 65.1%, for water, 65.6% for

electricity and it's considered more than half, and a lesser percentage for toilet facilities to be 24.3%.

The study indicates that the furthest distance one travelled to access health care infrastructure is over 1km and is more than half with a percentage of 62.5%. Most of the challenges faced from the respondents' point of view and again from the researchers' observations are considered to be insufficient drugs, unmaintained toilets and lastly insufficient health personnel's.

My study entails the detail of all the days/hours of operation for the thirty eight (38) health care infrastructure, the status, the services and detail list of all the health personnel's for all the health care infrastructure in Mubi north LGA.

PROPOSAL

The existing health care facilities in the study area are not adequately distributed and the few available are not enough to cope with the rapid growing population. There is lack of adequate attention both on the part of government and community members. No real attention has been given to the distribution of health care facilities by urban physical development. To address distribution issue health care distribution plan is prepare. The range concept has been chosen which specified that the maximum walking distance to health facility should be 800m as specified by Obateru, (2004). See the existing healthcare facilities and the proposed healthcare facilities distribution. The local communities should also be involved in the execution of projects.



APPENDIX: Proposed Healthcare Infrastructure In the study area (Mubi North
Source: Initiative from Map in Action, 2021.

POSSIBLE SOLUTIONS TO THE PROBLEM OF HEALTHCARE FACILITIES.

The problems of the distribution of health facilities can be addressed through the following ways as suggested by Hamid, (2014).

There should be equality in the distribution of health facilities i.e. the concentration of health care facilities should not be concentrated to in urban centers but rather it should be equally distributed in rural areas, the migration of health care personnel to other bigger and more developed communities should be reduced. The local communities should be involved in the executing of projects, the maximum Wait to attain health facilities should be 800m, commercialization of public health facilities should be reduced, the health sector should advocate for increased budgeting allocation.

RECOMMENDATIONS

- (1) The local government council should ensure that demographic and socio-economic data are always available for physical plans so as to update such when necessary.
- (2) Physical planning attention and tools should always be sort in other to avoiding waste of resources.
- (3) Qualified health personnel should be employed. This is because some primary healthcare centres cannot boast of a single doctor or enough nurses and other health personnel's in it healthcare service centre.
- (4) The condition of service and staff welfare should also be improved in terms of wages, accommodation and other incentives.
- (5) Health facilities should have periodic maintenance in every three (3) to five years to keep and prolong the life span of the structures at all times, that is for sustainable purpose.
- (6) Drugs and other hospital equipment should be provided at all times and staff re-training should be pursued with all seriousness. This is because health is truly wealth.
- (7) The local communities should also be involved in the execution of projects.
- (8) Regards should be given to health care policy there by making provision of health facilities a priority.
- (9) The local communities should also be involved in the execution of projects. The People's participation should be move pronounced in the development and distribution of health facilities, so as to fulfill the democracy adage that says "planning for the people with the people."
- (10) The maximum walkable distance to attain health facility should be 800m as specified by Obateru (2004). Therefore, health care sector should advocate for increased in budgeting allocation.

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