HISTORICAL DEVELOPMENT OF GENERAL HOSPITAL MINNA UP TO 2019

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Finally to my friends and course mates who in one way or the other contributed to my program,. I say thank you and God bless you all.

DEDICATION

This project is dedicated to Almighty Allah, our beloved parents and the entire class of 2020

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Hospital is an institution that is built, staffed, and equipped for the diagnosis of disease; for the treatment, both medical and surgical, of the sick and the injured; and for their housing during this process. General hospital can be defined as an institution providing medical and surgical treatment and nursing care for sick or injured people (WHO, 2010). Health care in Niger State as in many other states or even countries is confronted with growing demand for medical treatment and services, due to factors such as growing population and higher standard for the quality of life (Opeyemi *et al.*, 2016). Miller (2014), say that health care has been an issue of growing importance for national government. Many national and regional health care plans have been developed in the past decades, in order to control the cost, quality and the availability of health care for all citizens.

It would seem from available accounts that the earliest form of Western-style health care in Nigeria was provided by doctors brought by explorers and traders to cater for their own wellbeing. The services were not available to the indigenes. It was the church missionaries that first established health care services for the people (WHO, 2010). In this regard, tribute must be paid to the Roman Catholic mission, the Church Missionary Society (Anglican) and the American Baptist Mission. It is stated that the first health care facility in the county was a dispensary opened in 1880 by the Church Missionary Society in Obosi, followed by others in Onitsha and Ibadan in 1886. However, the first hospital in Nigeria was the Sacred Heart Hospital in Abeokuta, built by the Roman Catholic Mission in 1885 (WHO, 2010).

General Hospital Minna was established in 1946 in order to provide quality healthcare services. During this period the hospital was controlled by the regional and native authorities as well as missionaries'. The hospital is now controlled by Niger state ministry of health and it serves as medical center for medical internship (houseman-ship) for medical students from other institution. The general Hospital Minna is located at the metropolitan part of Minna the Niger state capital which gives easy access to people around its environment (Opeyemi *et al.,* 2016). The hospital is headed by Chief Medical Officer (C.M.O) and is made up of the following specialties and departments;

a) Surgical: pertaining to or involving surgery or surgeons.

b) Medical: relating to the science or practice of medicine. Is the applied science or practice of the diagnosis, treatment and prevention of disease? It encompasses a variety of health care practice evolved to maintain and restore health by the prevention and treatment of illness in human beings. The word medicine is derived from the Latin arts medical, meaning the art of healing.

c) Pediatrics: the branch of medical dealing with children and their diseases.

d) Gynecologist: is the medical practice dealing with the health of the female reproductive system.

e) Dental: of or relating to the teeth. The dental section deals with general dental illness and the overall dental health of patient. This section also develop initial treatment plan and refers to specialist when more specialized treatment is required.

f) Ophthalmic: pertaining to eye and its diseases.

g) Nursing: the protection, promotion, and optimization of health and abilities, prevention of illness and injury.

h) Pharmacy: the science or practice of the preparation and dispensing of medicinal drugs. The pharmaceutical section gives out the prescribe drugs to patients. This implies that a patient's must

first visit the doctor for complains before coming to this section to obtain drugs needed for the cure of illness.

i) Laboratory: a room or a building equipped for scientific research, or teaching, or for the manufacture of drugs or chemicals. Is section is responsible for conducting laboratory tests on patients e.g. blood and urine test. For a test to be conducted on a patient, it has to be requested by the doctor.

j) Medical records: contain sensitive information and increasing computerization and other policy. This section form an essential part of the patient's present and future health care. It provide the written collection of information about a patient's health and treatment, which are essential for the present and continuing care of the patient.

k) Maintenance: is the process of keeping or preserving something in good condition.

l) Social welfare: governmental provision of economic assistance to persons in need, which is the well being of the entire society.

m) X-ray: electromagnetic radiation of short wavelength produced when high speed electrons strike a solid target.

n) Public health: is the health service to improve and protect community health, sanitation, immunization and prevent medicine.

o) Admin: an abbreviation of system operator. Hospital administration is the management of the hospital as business. It is made up of medical and health service managers. It is evident that the number of patient being treated is on the increase, therefore for a speeding and easier handling of patients medical records at this rate, requires some technology which brought about the need to computerize the patients records and medical history electronically in order to enhance operation effectively (Opeyemi *et al.*, 2016).

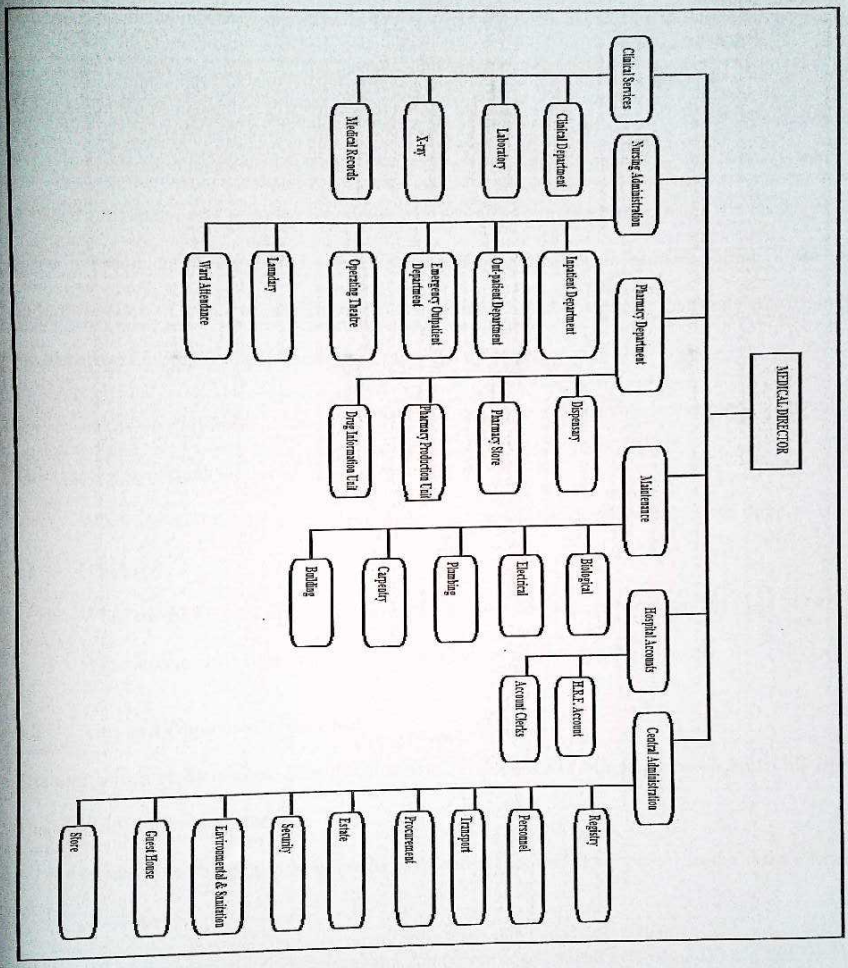

Figure 1.1: Organogram of departments and units in Minna general hospital

1.2 Statement of the Research Problem

General hospital Minna like other general hospital in the country has undergone some infrastructural and manpower development over the past decades since its establishment in 1946. The hospital has undergone some challenges both physically, infrastructural and manpower. For example, up till 2019, the hospital outpatient record exhibited a lot of difficulties in the system which is manual and is based on paper cards to collect an outpatient record. So it needed Information Technology (IT) based solution, an evaluation of alternative appointment systems to reduce waiting times and underutilization of an outpatient database system in the hospital. Therefore, this study will examine the historical development of Minna general hospital till 2019.

1.3 Research Questions

The research questions for this include the following:

1. What are the hospital past infrastructural and manpower development in the three decades (1980s)?
2. What are the hospital infrastructural and manpower development between 2015 and 2019?
3. What are the challenges impeding the expected development in the hospital?

1.4 Aim and Objectives of the Study

The aim of this study is to examine the historical development of Minna general hospital till 2019.

The specific objectives include

i. Examine the hospital past infrastructural and manpower development in the three decades (1980s),

ii. Assess the hospital infrastructural and manpower development between 2015 and 2019, and

iii. Examine the challenges impeding the expected development in the hospital.

1.5 Significance of the Study

In spite of the important function of Minna general hospital to the residents of Niger State, it has come under severe threat by the inadequate attention from successive administration in Niger State. The implication of this is that there is delay in health care provision and delivery which makes this study relevance to study. Finally, it will serve as a guide to academicians, institutions, researchers and the Niger State Government in formulating policies that will help curb the menace of under development in Minna general hospital.

1.6 Scope of the Study

The scope of this study is to examine the historical development of Minna general hospital. This study will be limited to the challenges impeding the expected development in the study as well as the infrastructural and manpower development the study area has enjoyed.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 History of Public Health and Hospitals in Nigeria

There exist a variety of health-care types and services in Nigeria. There are traditional, bio-medical or western orthodox, synthetic healers, bone settlers, etc (Erinosho, 2016; Owumi, 2015). This variety provides insight into its history, infrastructure in terms of delivery, maintenance and management. The existence of the various types is a constant source tension, conflict and mistrust among the practitioners (Owumi, 2015). This however, is outside the purview of this discourse.

To recollect, the 19th century Industrial Revolution had a profound influence not only on the development of modern healthcare delivery, but also on other areas of socioeconomic development. The Revolution occasioned a shift from rural/community subsistence economic patterns and strategies which were rooted in particularism that is, face to face relationship to urban/metropolitan specialized economy based on universalism or what is known as bureaucracy where relationship is basically official. Here, there is emphasis on division of labour, specialization, bureaucracy and expansive skill acquisition through long training and higher studies (Park, 2010; Onokerhoraye, 2012). This shift impacted and later informed the progressive development of public health, hospital and its infrastructure. Fendall (2016) recalled that: Public health is believed to have developed formally though, progressively, as a consequence of the excesses on Industrial Revolution. The excesses resulted in abysmal poor quality of health and life chances owing to the failure of industrial environment to assuage sustainability. Thus, a huge array of diseases and injuries unknown to rural people emerged with its burden on new urban governments. This led to far-reaching social and public health decisions that eventually culminated in Public Acts of 1848, 1875 and 1936 in Britain

(Fendall, 2016). The bills essentially were brought about to compile social and medical statistics and to analyze social pathology of the times with specific focus on environmental, social and economic conditions of the working population (Gill, 1995). At same time, it was also meant to control, prevent and care for diseases, illnesses and sicknesses.

From the above, the state, that is, Britain [including all the colonies] had automatically assumed direct responsibility for the health of the individuals. This led to the vision of basic health services through the medium of health centres or hospitals (Park, 2010). The evolution of health centres brought into effect tremendous specializations in responses to advances in medical technology, new development and the nature and distribution of health and disease pattern. However, prevalence of diseases in this regard was not uncommon, all because of convergence of people with different backgrounds in the urban centres to work in the factory.

Development in Nigeria as one of the British colonies reflects the above, that is, colonization foisted this epoch on us until its termination in October, 1960. Also, our developmental strategies for growth have not departed significantly from those bequeathed to us by the former colonial masters. Thus, from the colonial period, the pattern of the medical care delivery favours the urban population in particular at the expense of the rural settlers (Pearce, 2011). This is because health services are hospital-based with its technology being propelled by two main factors, namely bureaucracy and specialization. Bureaucracy spells out rules and mechanism of its operation while specialization entails acquisition of expertise and mastery of specific areas in health care dispensation. Although the first medical centres in Nigeria were established in the rural areas by Christian mission (Onokerhoraye, 2012), this however, was not without surreptitious support from the colonial masters to expand Christianity.

The medical centres established by the missionaries were largely concentrated in the rural areas because of the goal of evangelism, which was to get the rural "pagans' to embrace the new religion. These medical centres, however, were merely mobile clinics and at most community dispensary out-posts to treat primary health problem, snake bites and minor injuries. It was in later years, when the British rule had been well established that the administrators promoted the creation of medical centres in the real sense of hospitals to take care of epidemics, such as sleeping sickness, small pox, malaria and other primary health concerns (Onibonoje, 2015; Aluko-Arowolo, 2016).

However, hospitals were concentrated only in the urban areas where there was a high concentration of Europeans and government officials (Akin-Aina, 2010; Home, 2013). Official residential quarters such as Government Reserved Areas (GRAs) Ikoyi in Lagos, Jericho in Ibadan, etc. were reserved for government senior workers. Such reserved areas were also called European Quarters. Such quarters existed in Lagos (Ikoyi/Victoria Island), Ikeja, Ibadan, Kaduna, Jos, Enugu and other major towns. Two distinct spin-off effects could be deduced immediately from this particular arrangement, first a total neglect of rural areas in matters of healthcare and second, an established inequality in the urban centres between the colonialists including their black associates and general citizenry.

Even in spite of independence, almost fifty years ago, these residential patterns are still very glaring in our towns and cities (Mabogunje, 2007; Home, 2013). Apart from these, there was no emphasis on the traditional healthcare type(s) and a huge vacuum was created that further entrenched inequality between the haves and havenots and between the rural and urban settlements. The dichotomy brought to the fore, the challenges in the healthcare system and other associated services, in that infrastructure and personnel that are very essential to efficient hospital system like food, roads, pipe-borne water and electricity for storage of drugs and surgical operation, etc were not

provided for (Aluko-Arowolo, 2015). This later influenced the health policy of subsequent governments in Nigeria (Mabogunje, 2007). From the above, a 'roadmap' was designed for health system and sundry services in Nigeria which placed health services specifically on three pedestals: the primary, secondary and tertiary institutions for rural, mixed population, and urban elite respectively.

2.2 The Strata of Health Care Institutions

There are three health structures in Nigeria, which are arranged in a hierarchical order. These are primary, secondary and tertiary health institutions. Primary Health Care (PHC) by policy arrangements is within the purview of Local Government, based on the residual operation of Local Government Authority. Primary health structures are unarguably the first points of call for the sick and injured persons. They undertake mild healthcare cases like treatment for malaria, fever, cold, nutrition disorder, among others. They are specially for milder health problems and health education. They also handle infant, maternal and pregnancy matters.

Other health issues in their care are family planning and immunization (Badru, 2013). Finally primary health centres emphasize health care and are involved in record keeping, case reporting and patients referral to higher tiers. Primary health centres are known within the system by content of health centre, maternity home/clinic and dispensaries.

Primary healthcare centres refer complicated cases to secondary general hospitals. According to Medical and Dental Council of Nigeria (MDCN) in Badru [2013], primary health centres are also to undertake such functions as health education, diagnosis and treatment of common ailments, through the use of appropriate technology, infrastructure and essential drug list.

Secondary health centres are involved with not only prevention but also all treatments and management of minimal complex cases. However, the more complicated cases are referred to the tertiary or specialist hospital. Examples of secondary types are comprehensive health centres and general hospitals. The comprehensive health centres are often owned by private individuals(s) or a group of individuals e.g. Gold Cross Ikoyi, Lagos; Victory Hospital, Ijebu-Igbo etc, while general hospitals are owned and funded by government. Examples are general hospitals in Ijebu-Ode, Ikeja, Ilesa, Oluyoro in Ibadan, Abeokuta etc. General hospitals have provisions for accident and emergency unit and diagnosis unit [including X-ray, scan machines and other pathological services] among other services (Badru, 2013). The status of being a second layer of health institutions imposes certain acceptable standards and level of infrastructure.

According to Medical and Dental Council of Nigeria, there should be a minimum of three doctors who are to provide medical, surgical, pediatric and obstetric care in any general hospital. Furthermore, the general hospital incorporates the facilities of the primary healthcare into its own to play its role as a second tier health institution. As a matter of fact, to be so qualified, it should provide simple surgical services, supported by beds and bedding for minimum of 30 patients. There should also be ancillary facilities for proper diagnosis and treatment of common ailments. General hospitals are often within the control of state governments and private individuals or group of individuals.

A tertiary health institution, also called specialist/teaching hospitals, handles complex health problems/cases either as referrals from general hospitals or on direct admission to its own. It has such features as accident and emergency unit, diagnostic unit, wards units, treatment unit and out patient consultation unit. All these units are to be equipped with the necessary facilities and staffed by skilled personnel. Teaching hospitals also conduct researches and provide outcomes to the

government as a way of influencing health policies. This explains why this type of health institution is often a university-based. Examples are Lagos University Teaching Hospital [LUTH], University College Hospital (UCH), Ibadan, The National Orthopedic Hospital, Igbobi Yaba, The Psychiatric Hospitals in Aro, Abeokuta and Yaba in Lagos. Others are National Hospital in Abuja, University of Nigeria Teaching Hospital, Enugu, etc.

Furthermore, teaching hospitals are supposed to be fully developed and accredited for teaching of various medical disciplines. They are to conform to international and acceptable standards. It should be stressed also that apart from the provision of infrastructure for health matters, there is also the need for availability of teaching materials and specialists in such fields as surgery, general medicine, pediatrics, obstetrics, dentistry, otolaryngology and psychiatry among other disciplines (Erinosho, 2015; Badru, 2013). To this end, each department should have a certain number of consultants with its own out patients, consultation sessions, ward units, surgical sessions and skilled personnel and auxiliary staff to man these units. As a point of emphasis, the primary type of health institutions are associated with rural and semi-urban environments or mixed population, while general hospitals are located in the state capitals and a few other big towns. Tertiary health institutions are controlled and funded by the Federal Government and by some states that have and run state universities. Therefore, specialist or teaching hospitals are mainly urban-based.

From the study of Adebayo and Oladeji (2016), the total number of all types of hospital including dispensaries, psychiatric hospitals, leprosaria and others was about 23,616. The general hospitals and maternity centres alone had 897 and 3349 respectively. We can compare these figures with number of infrastructures provided for effective delivery services. To take beds, for instance among others,

there were 106,946 beds. However, with 56,688 bed spaces, this translates to 63 spaces for each hospital in 1991.

This is far above the minimum number of 3 spaces recommended by Medical and Dental Association of Nigeria (MDLAN). But this may be far away from reality because the 987 general hospitals would be served with a minimum of 2691 medical doctors (that is, 877 x 3) but between 1991 and 1992 only 17,788 doctors were available to service the hospitals and attend to patients. This calculation however, does not include the primary and tertiary health institutions. It is therefore, unlikely, that all the doctors for this period would be working in the general hospitals only. The inadequacy of personnel is also noted to be an offshoot of inadequate general hospitals with only 53% of the populace being served. As Adebayo and Oladeji (2016) noted: professional medical personnel are disproportionately distributed to teaching hospitals, urban based hospitals are relatively better stocked with different kinds of medical practitioners, which are far above the average obtained.

Though, there was negligible increase in subsequent years (Adebayo and Oladeji, 2016) the trend, however, shows that apart from primary health workers and nurses including midwives who may likely work in the rural areas and in general hospitals, others are specialists working mainly in the urban centres. Professional healthcare workers like doctors and other highly skilled ones would prefer to stay in the urban areas, especially where there are infrastructures, to practise their trade. Apart from this, life chance resources like water, energy (electricity) good roads, shelter, school for children, employment for spouses which are likely to attract these personnel to sub-urban and rural areas, shanties/ghettos in urban outskirts and blighted environments or slum areas in the urban areas, are not generally provided. And where they are provided, they are grossly inadequate (Akin-Aina, 2010; Aluko-Arowolo, 2015).

The present lopsided distribution of health facilities between urban and rural areas in Nigeria is a carry-over from colonial era. The urban areas where the educated, the rich and the powerful live, received the lion share of the infrastructure. The irony of it is that majority of Nigerians live in the rural areas. This therefore suggests that there is the need to redistribute the infrastructure in such a way that all Nigerians have a chance of benefiting maximally.

2.3 Health Development at Various Periods in Nigeria

Nigeria is made up of at least 250 linguistic groups (which some describe as ethnic groups), of which 3 are major groups comprising over 60% of the total population. Although all of these groups share common major macro-culture and macro-traditions, each evolved its own micro-culture and micro-traditions in response to prevailing environmental circumstances. Traditional medicine and healing constituted part of the microcultural evolution (Aluko-Arowolo, 2015).

In pre-explorers and pre-western trader's Nigeria, traditional medicine was the system of health care delivery. Traditional healing and medical practices included herbalists, divine healers, soothsayers, midwives, spiritualists, bone-setters, mental health therapists and surgeons. In spite of more than 150 years of introduction of Western style medicine to Nigeria, traditional healing and medical practices remain a viable part of the complex health care system in Nigeria today. In 1988, a casual survey in Benin City revealed that for every sign-post that indicated a Western-style clinic or office, there were 3 that indicated a traditional doctor. Although this traditional system of health evolved separately in different micro-cultures, there is a great deal of philosophical and conceptual similarities. The origin of diseases in Africa was simplistic. It is either an enemy had cast a spell on you or you are being punished by divine powers for your sins. Although the Arabs have had the distinction of early-organized medical services, there is no recorded evidence of the introduction of

such services to Sub-Saharan Nigeria during trade interactions of the fifteenth century. The same thing is true of the early Portuguese and English traders in their interactions with the Delta/Riverine areas of Nigeria during the later part of the fifteenth century (Aluko-Arowolo, 2015).

The first record of modern medical services in Nigeria was during the various European expeditions in the early-to mid-nineteenth century. The earlier explorations of Mungo Park and Richard Lander were seriously hampered by disease. In the expedition of 1854, Dr. Baikie introduced the use of quinine, which greatly decreased mortality and morbidity among the expeditioners. It is still a subject of considerable debate whether the use of quinine by Dr. Baikie was his original discovery or whether he borrowed the idea from traditional herbalists with whom he had interacted in the course of his expeditions. Whatever is the true situation, the use of quinine both as prophylaxis against and as therapy for malaria fever, expanded exploration and trade (Akin-Aina, 2010).

It would seem from available accounts that the earliest form of Western-style health care in Nigeria was provided by doctors brought by explorers and traders to cater for their own well being. The services were not available to the indigenes. It was the church missionaries that first established health care services for the people. In this regard, tribute must be paid to the Roman Catholic mission, the Church Missionary Society (Anglican) and the American Baptist Mission. It is stated that the first health care facility in the county was a dispensary opened in 1880 by the Church Missionary Society in Obosi, followed by others in Onitsha and Ibadan in 1886. However, the first hospital in Nigeria was the Sacred Heart Hospital in Abeokuta, built by the Roman Catholic Mission in 1885 (Akin-Aina, 2010).

There are several anecdotal reports of practices within these missionary health care facilities to suggest that they were primarily used as tools for winning converts and expanding their

followership. Consequently, these facilities were competitive rather than complementary. In spite of this fact, they were of such high quality that, by Independence in 1960, Mission-owned hospitals were more than Government-owned hospitals (118: 101). This high quality is also evidenced by the fact that the Seventh Day Adventist Hospital in Ilesha as well as the Wesley Guild Hospital in Ile-Ife became the nucleus of the teaching Hospital complex of a major university in Nigeria. Even today in Nigeria, the Baptist Hospitals in Ogbomsho and Eku function as referral centers in the health care delivery matrix. Because of the evangelical functions of these health care facilities, it was left for the government to organize and develop policies for general health care. It is well known that towards the end of 19th century, European powers were at war with each other for ownership of the vast rich land of Africa. They established frontiers needed to be secure and so there was a powerful British military presence in Nigeria. For the military, which was located in Lokoja, the British for therefore established medical services there. Under the Governor, Lord Lugard, Lokoja was the military headquarters in 1900. Aside from military health services, civilian services were also established and it is known that the first government hospital for civilians, the St. Margaret's Hospital, was built in Calabar in 1889. At the time World War I (1914- 1918) was ending, present day Nigeria was being born by the amalgamation of the Northern and Southern regions. This war produced a lot of military activities in Nigeria, leading to the establishment of several military health care facilities, some of which were left to function as civilian hospitals after the war. With time, several government-owned health care facilities were established, ranging from rural health centers to general hospitals (Akin-Aina, 2010).

2.4 Challenges of Hospital Development in Nigeria

The provision of healthcare facilities is needed to sustain life on earth. Unfortunately, in Nigeria today, the provision of health care facilities seems to be at low ebb as many Nigerians are vulnerably

exposed to the danger of death (Abel, 2014). Indeed, poor healthcare services in the country have contributed to increase in mortality rate in the country. Statistics of health indices from international agencies point to the fact that 58 years after independence, Nigeria is still far from achieving the minimum required health standard. A recent World Health Organisation (WHO) report shows that 466,000 Nigerian children die at birth out of the 4.1 million infant deaths recorded globally (WHO, 2017).

The provision of health care in Nigeria remains the functions of the three tiers of government: the federal, state, and local government. The primary health care system is managed by the 774 local government areas (LGAs), with support from their respective state ministries of health as well as private medical practitioners. The primary health care has its sublevel at the village, district, and LGA (Adeyeye *et al.,* 2010). The ministry of health at the state level manages the secondary health care system. Patients at this level are often referred from the primary health care. This is the first level of specialty services and is available at different divisions of the state. The state key health care comprises laboratory, diagnostic services and rehabilitation.

Teaching hospitals and specialist hospitals provide the tertiary primary health care. At this level, the federal government also engage the voluntary and nongovernmental organizations, as well as private practitioners (Ahmed and Gidado, 2010).

The World Health Organization in 2010 reported that the growth of performance measurement uses in FM amongst public hospitals in Nigeria is very slow compared to other developing countries. It ranked Nigeria 187 out of 191 in health system performance. Nigerian government is seeking ways to improve the position. Most public hospital buildings in Nigeria suffer from inadequate physical conditions (Pati *et al.,* 2010).

Many hospital organisations are transforming their culture as a means by which they may improve performance. FM has a positive role to play in enabling the transformation either by supporting the hospital organisation as part of the holistic drive for change or by acting as a catalyst, leading the way for others to emulate (Becker, 2010). For these benefits to be realised it is necessary for hospital organisations to implement an effective performance measurement system (Neely, 2018). Public hospital buildings in Nigeria are often in a poor state so it is essential for every hospital district to have an effective FM performance measurement plan of its facilities. The hospitals in Nigeria have poor maintenance culture and are faced with many other challenges. Research conducted by the Amaratunga and Baldry (2012) concluded that hospital organisations use performance measurement systems as the basis for management to perform better. However, the lack of proper performance FM system in public hospitals in Nigeria is caused by problems of various nature (Orubuloye, 2018; Abukhder and Munns, 2013).

There is a major challenge that arises from government subvention due to the irregular flow of funds. This implies that the hospitals must rely on the other sources of finance for running the healthcare facilities (Nutt, 2010). There are delays in the payment of the subvention confronting the hospital and at times, the subvention for some periods is not received (Anderson and McAdam, 2014). There is also a gradual reduction in the amount of subventions received exacerbated by the fact that the monies received from government are often 'ring fenced' for only health workers' salaries and administrative expenses (Bell, 2012). There is no component of the subvention directed specifically for investments and the delivery of FM services (Kirkham *et al.*, 2012). The inability of patients to pay fees and charges is another problem and some patients often default in settling their hospital bills (Ilozor, 2013). There are additional problems including government's influence in determining the fees to be charged (Pitts and Goyal, 2004).

Other challenges include exploitation largely around control of resources and lack of accountability for resources in the hospital creating crisis. Poor accountability and the control of financial resources flowing around various units of the hospital is always a cause of friction (Okoroh, 2012). There is also the problem of incompetence due to poor recruitment practices. When appointment to management/administrative positions are made based on entry level qualifications and specialty, regardless of experience and further training, the best candidate may not be favoured (Ahmed and Gidado, 2010). While entry qualification and specialty are basic, it must be appreciated that further training and experience are required in order to function effectively in a top management position (Adeyeye *et al.*, 2010). There is a widespread culture of government sponsoring public officials abroad for treatment at the expense of investing and modernising the healthcare infrastructure delivery system (Okoroh, 2012). Even the leaders who ought to show their commitment by example are guilty of this practice demonstrating a lack of faith in the Nigerian healthcare system, which is why they support health tourism by flying themselves and their cronies to other countries with highly developed healthcare systems (Orubuloye, 2018).

Finally, there are also inadequate tools for measuring output. Most government hospitals have no tools for measuring the work output of their staff (Ilozor, 2013). Significant latitude is therefore given to individual staff to work as expected, but this is largely abused, creating divided loyalty and double-dealing. Measuring outputs should be linked to the inputs that are required to deliver the standard of healthcare facilities, hence the need for an FM system redefining the standards for both soft and hard FM and developing performance benchmarks that would support the delivery of key outputs expected of public hospitals. However, the poor understanding of FM performance measurement in public hospitals in Nigeria is major barrier to healthcare service delivery (Ilozor, 2013).

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

This chapter dealt with the procedures used in carrying out the study which included the design for the study, population, sample and sampling technique, instrument for data collection, validation of instrument, reliability of the instrument, method of data collection and method of data analysis.

3.1 Design for the Study

This study employed the explanatory research design. The explanatory research design seeks to establish relationships between variables through the collection of quantitative data, in-depth study of the phenomena and statistical analysis of data to draw conclusions and make recommendations (Osaze & Izedonmi, 2008; Otokiti, 2010).

3.2 Population of the Study

The population of the study was 110 made up of both the staff and patients of Minna General Hospital. These patients were those that visits Minna General Hospital diagnoses and treatment over time.

3.3 Sampling and Sample Technique

The sample size was drawn using Yard's formula. This formula is concerned with applying a normal approximation with a confidence level of 95% and a limit of tolerance level (error level) of 5%. To this extent, the sample size was determined as follows:

$$n = \frac{N}{1+Ne^2}$$

Where: n = the sample size

N = population of the study area

e = the limit of tolerance (0.05)

Therefore, $n = \frac{110}{1 + 110(0.05)^2} = \frac{110}{1 + 110(0.0025)} = \frac{110}{1 + 0.275} = \frac{110}{1.275}$

The study's sample size was 86.

3.4 Instruments for Data Collection

The instruments for data collection in this study was the questionnaire. According to American Statistics Association (2012), a questionnaire is a measuring device used on a population/sample in order to obtain information for analysis. The authenticity and validity of questionnaire as tools for collecting information is responsible for the choice of the method. A structured questionnaire was designed to collect useful information from the respondents. The questionnaire contained multiple choice questions that respondents were required to selecting the option that appealed to them. The questionnaire was structured in order to find out historical development of Minna General Hospital.

3.5 Validation of Instrument

Miller (2015) opined that reliability and validity are the two most important and fundamental characteristics of any measurement procedure/instrument. Consequently, any research outcome was only as good as the reliability and validity ascribed to the instruments used in generating such a result. To that end, this study carried out both validity and reliability checks. A validity test was necessary to ensure that our instrument and data collected measured what they were supposed to measure. In that regard, the face validity was done by an expert through corrections and comments which were used to produce the final copy.

3.6 Reliability of Instrument

The reliability of an instrument, relates to the degree to which a measuring instrument produces consistent outcomes when it is repeated. For both the primary and secondary data, the stability and or consistency was guaranteed by the fact that the documents and data were sourced from publicly available sources, hence, can be retrieved at any time without any fear of losing their value.

Reliability of the study instrument was determined from scores obtained from a single test administered by the researcher to a sample of respondents during pilot test. A score got from one item was correlated with scores got from other items in the instrument. Cronbach's Coefficient Alpha was then computed to determine how items correlate among themselves.

3.7 Method of Data Collection

Eighty six (86) copies of the instrument were administered to the respondents personally by the researchers. The instruments for the collection of primary data were structured questionnaire and direct interview.

3.7.1 Structured Questionnaire

The questionnaire used in obtaining primary data was structured and divided into two sections. Section 'A' contained six items relating to the respondent's personal data, which include respondent's gender, office affiliation, highest qualification, length of service, discipline as well as professional affiliation. Sections "B" covered areas relevant for the achievement of the research objectives and addressing the research questions for this study. Eighty six (86) questionnaires were administered to the respondents of the study area and which was used for data analysis. The respondents were made up of people of eighteen (18) years and above and from all works of life.

3.7.2 Direct Interview (discussions)

The direct interview (one on one discussion) was embarked to achieve objectives I, II and III which included: examine the hospital past infrastructural and manpower development in the three decades (1980s); assess the hospital infrastructural and manpower development between 2015 and 2019, and examine the challenges impeding the expected development in the hospital.

3.8 Method of Data Analysis

To achieve objective I, II and III, structured questionnaires data and information gathered from several direct interview were employed. Structured questionnaires were administered to the residents of the study area with a section of questions about the issues of the objectives and research questions as they were in section 1.3 and 1.4 of the study. The information and results generated from questionnaire and direct interview was subjected to statistical treatment using descriptive statistics (frequency-percentage) and presented in figures with analyzing comments so as to demonstrate the effectiveness of the responses.

$$\text{Frequency-percentage} = \frac{\text{Number of observed}}{\text{Total Number}} \times \frac{100}{1} \quad \text{-----(i)}$$

CHAPTER FOUR

4.0 RESULTS AND DISCUSSIONS

4.1 Examine the hospital past infrastructural and manpower development in the three decades (1980s)

General Hospital Minna was established in 1946 in order to provide quality healthcare services. During this period the hospital was controlled by the regional and native authorities as well as missionaries'. The hospital is now controlled by Niger State Ministry of Health and it serves as medical center for medical internship (houseman-ship) for medical students from other institution.

As revealed in Table 4.1, past infrastructure of the hospital were inadequate. 57 respondents affirmed that the study area has less hospital infrastructural development during past three decades while 19 respondents said the available infrastructural development were adequate to the corresponding patients visiting the study area.

Table 4.1: Past Infrastructural Development

Options	Frequency	Percentage (%)
Highly adequate	11	14.5
Adequate	8	10.5
Inadequate	57	75.0
Total	76	100

Source: Field Survey, 2021

As revealed in Table 4.2, the manpower is adequate during the past decades. Highly adequate ranked the highest with 35 respondents, adequate ranked second with 29 respondents and inadequate ranked the least with 12 respondents. This revealed that the manpower development during the last three decades were highly adequate but as time goes, the manpower stated droping which was later complimented between 2015 and 2019.

Table 4.2: Past Manpower Development

Options	Frequency	Percentage (%)
Highly adequate	35	46.1
Adequate	29	38.2
Inadequate	12	15.7
Total	76	100

Source: Field Survey, 2021

4.2 Assess the hospital infrastructural and manpower development between 2015 and 2019

Figure 4.1 showed that 100% of the respondents are of the opinion that General Hospital attends to emergencies which is one of the basic functions of the hospital. All types of emergencies are seen which includes medical emergencies like hypertensive, diabetic, respiratory, gastroenteritis etc and surgical emergencies like fractures, severe burns and trauma, operate able and non operate able emergencies as shown in Figure 4.2, where all respondents agree that both medical and surgical emergencies are seen in the hospital.

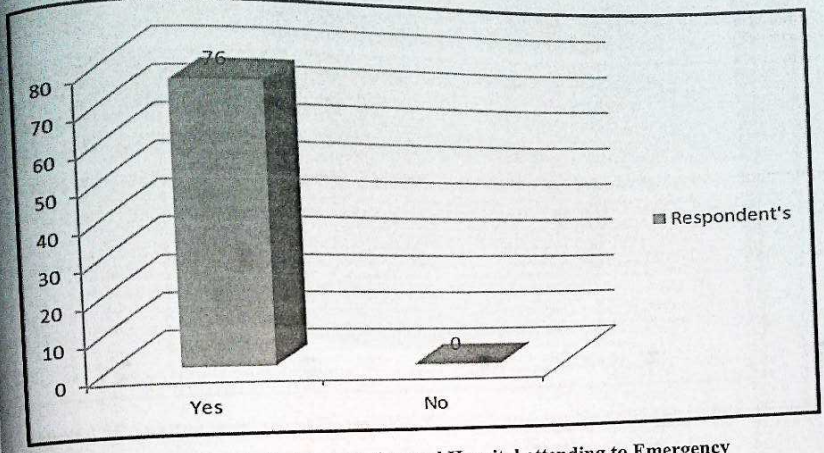

Figure 4.1: Respondent's Opinion on General Hospital attending to Emergency

Source: Field Survey, 2021

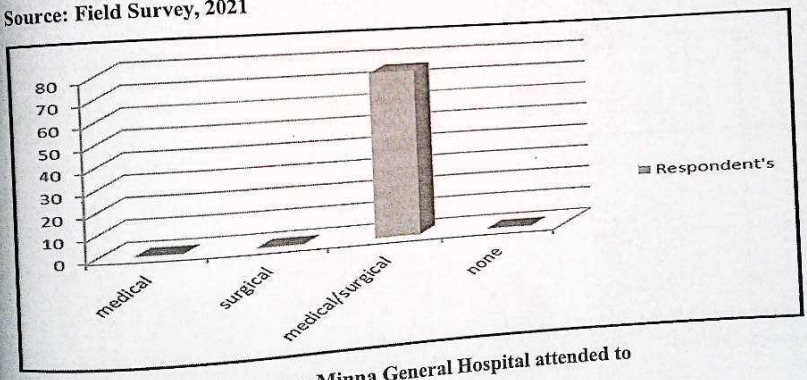

Figure 4.2: Types of Emergency Minna General Hospital attended to

Source: Field Survey, 2021

Figure 4.3 showed the number of medical doctors that are station in EOPD per duty. 76 (100%) of the respondents' affirm that 1-2doctors are available per duty.

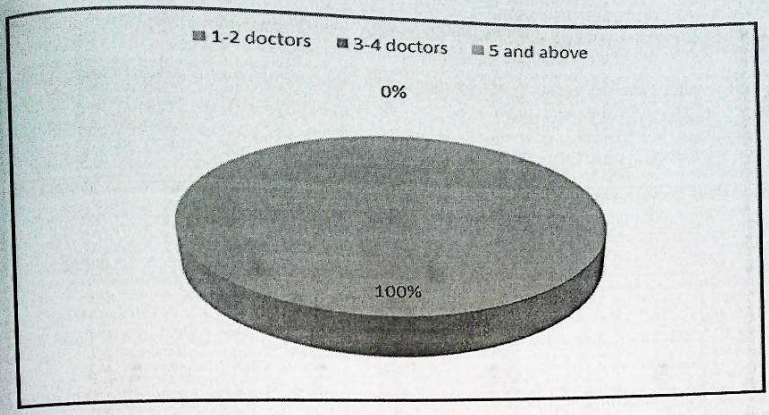

Figure 4.3: Number of Medical Doctors/duty

Source: Field Survey, 2021

In term of functional trolleys which are used to move emergency patients to EOPD, Figure 4.4 showed that 99% of the respondents' were of the view that they only have 1-3 trolleys which is not enough in terms of number of emergency patients seen in EOPD/day.

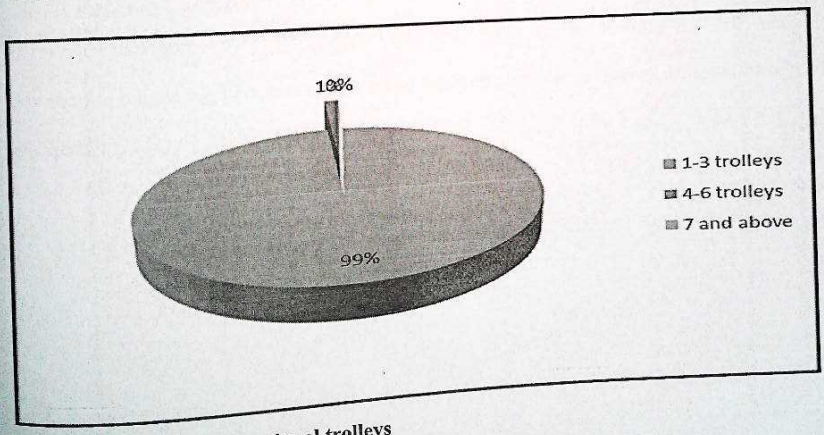

Figure 4.4: Number of functional trolleys

Source: Field Survey, 2021

The result showed that 74 respondents' responses were of the view that EOPD have 4-6 functional wheel chairs which are fairly enough in respect to the number of emergency seen per day as indicated in Figure 4.5

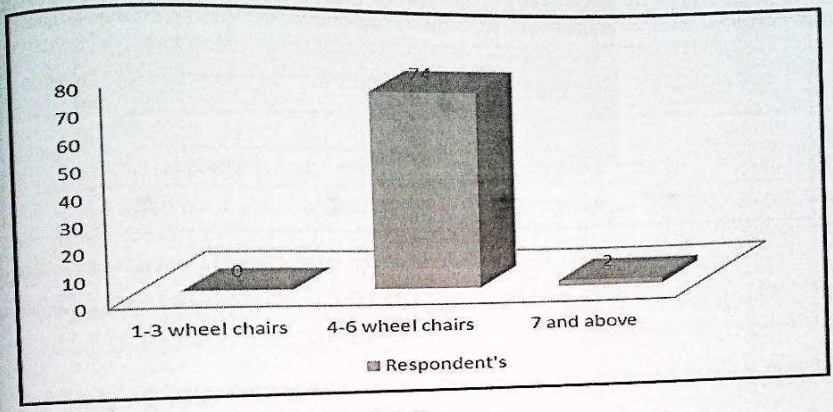

Figure 4.5: Number of functional wheel chairs

Source: Field Survey, 2021

As revealed in Figure 4.6, 73 respondents' said that Minna General Hospital have 101 and above beds and the remaining 3 respondents' were of the view that Minna General Hospital have 61-100 beds space.

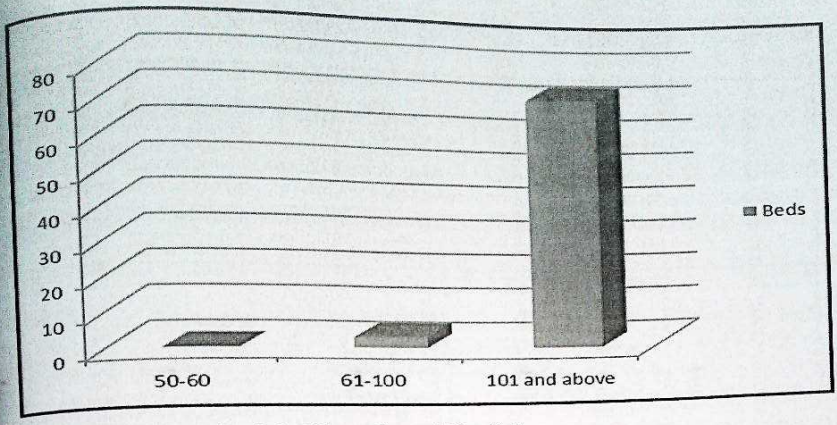

Figure 4.6: Number of beds in Minna General Hospital

Source: Field Survey, 2021

Based on the number of wards available in Minna General Hospital, Figure 4.7 revealed that 59 respondents' of the sample population were of the view that Minna General Hospital have 11 and above wards, 14 respondents' said it has 7-10 wards and 3 respondents'which were the least have the opinion that Minna General Hospital have 5-6 wards.

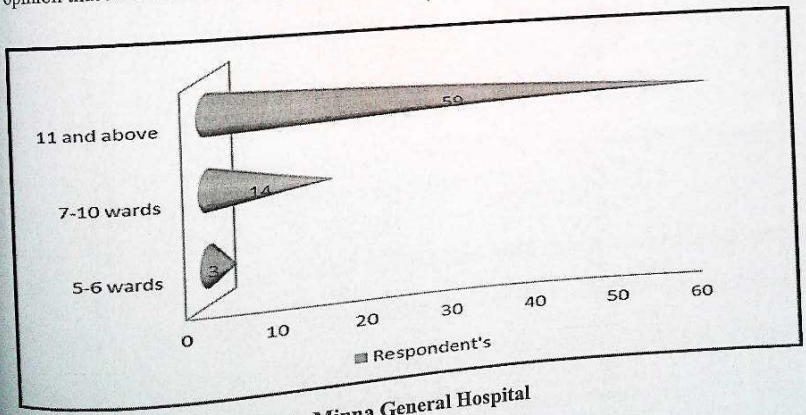

Figure 4.7: Number of wards in Minna General Hospital

Source: Field Survey, 2021

Based on the number of theater available in General Hospital as shown in Figure 4.8, 97% of the respondent affirm that their 4 theaters in General Hospital including that of EOPD; while 3% were of the opinion that General Hospital have 3 theaters. This is a reflection of the Hospital Surgical Capacity (HSC) which is the number of seriouslyinjured patients that canbe operated on within 12hour period : = number of operating rooms x7x 0.25 / 12hours.= 7 which is approximately 7 patients / 12 hours while EOPD which has only one theater has the surgical capacity : 1x7x0.25=1.75cases / 12 hours (average of 3 cases/ 24hours).

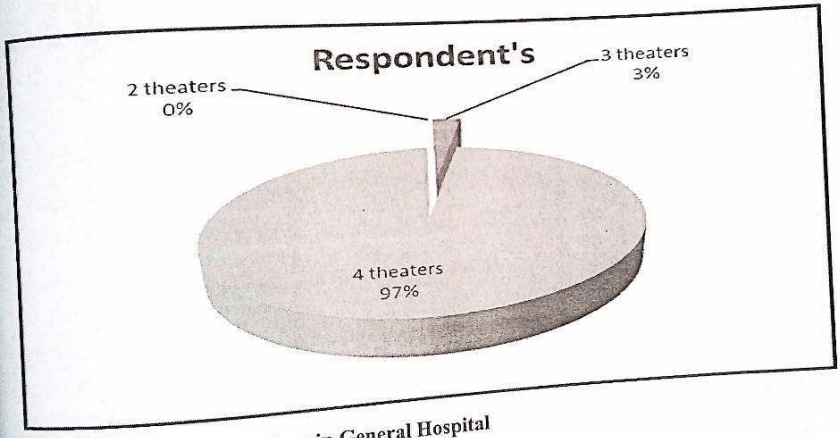

Figure 4.8: Number of theaters in General Hospital

Source: Field Survey, 2021

Figure 4.9 showed General hospital have updated staff contact number/address which make emergency situation flexible in term of locating the medical personnel that will attend to emergency especially where there is a surge of patients or in a mass causality where the number of people

requiring urgent attention outweighs the care givers, then more staff can easily be recalled to assist attend to the emergencies. 95% of the respondents affirms that the Hospital has an updated staff list.

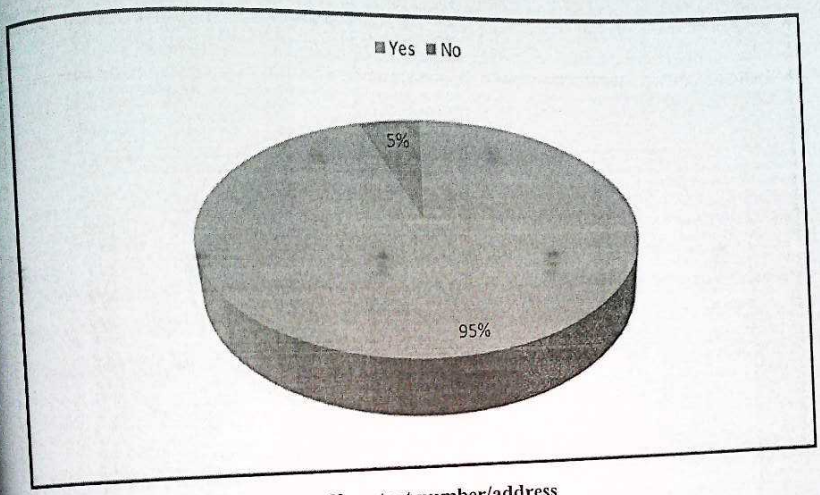

Figure 4.9: Hospital updated staff contact number/address

Source: Field Survey, 2021

In term of hospital wards having functional intercoms or internal telephone, Figure 4.10 showed that 71 (93.4%) of the respondents' affirm the availability of functional intercoms or internal telephone; while 5 (6.6%) of the respondents' says there is no functional intercoms or internal telephone in the Hospital. Functional intercom makes intra and inter hospital communication very easy and fast resulting in quicker response.

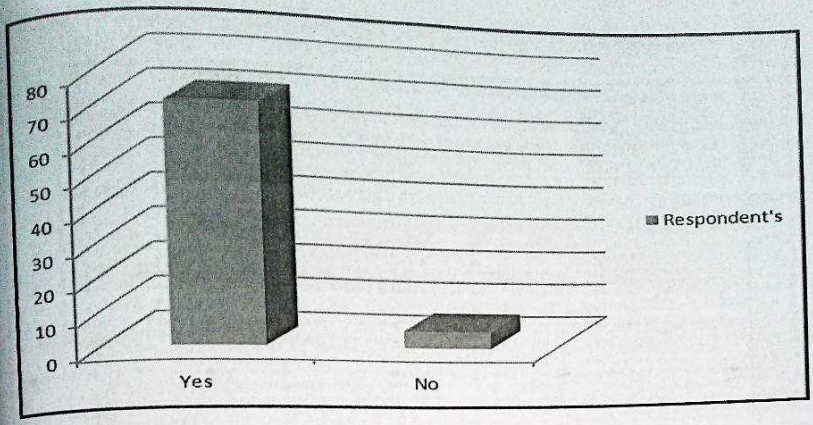

Figure 4.10: Presence of functional intercoms or internal telephone

Source: Authors Field Survey, 2021

4.3 Examine the challenges impeding the expected development in the hospital

The challenges impending the expected development in the hospital include poor maintanance culture, irregular flow of fund, corruption, exploitation largely around control of resources and lack of accountability for resources in the hospital, poor recruitment practices, inadequate support for health tourism, inadequate payment of hospital bills by patients, and inadequate tools for measuring output as indicated in Table 4.3 of the study.

Table 4.3: Challenges Impending the Expected Development in the Hospital

Challenges	Frequency	Percentage (%)
Poor maintanance culture	10	10.4
Irregular flow of fund	7	7.3
Corruption	24	25.0
Exploitation largely around control of resources	4	4.2
Lack of accountability for resources in the hospital	6	6.3
Poor recruitment practices	15	15.6
Inadequate tools for measuring output	5	5.2
Inadequate payment of hospital bills by patients	10	10.4
Inadequate support for health tourism	5	5.2
Total	96	100

As revealed in Table 4.3, corruption ranked the highest with 24 respondents, poor recruitment practices ranked second with 15 respondents and exploitation largely around control of resources ranked the least with 4 respondents. This revealed that the major challenges impending development in the study area were corruption and poor recruitment practices.

There is a major challenge that arises from government subvention due to the irregular flow of funds. This implies that the hospitals must rely on the other sources of finance for running the healthcare facilities (Nutt 2010). There are delays in the payment of the subvention confronting the hospital and at times, the subvention for some periods is not received (Anderson and McAdam, 2004). There is also a gradual reduction in the amount of subventions received exacerbated by the fact that the monies received from government are often 'ring fenced' for only health workers'

salaries and administrative expenses (Bell, 1992). There is no component of the subvention directed specifically for investments and the delivery of FM services (Kirkham *et al.*, 2012). The inability of patients to pay fees and charges is another problem and some patients often default in settling their hospital bills (Ilozor, 2013). There are additional problems including government's influence in determining the fees to be charged (Pitts and Goyal, 2004).

Table 4.4 depict clearly what is available to help the emergency patients carted for effectively and efficiently. The result showed that there are digital monitor, suction machine, blood bank with blood and central sterilization unit; while they lack ventilator, defibrillator and oxygen tank with mask by each bed. Obiously there are oxygen tanks but not enough for each bed asthere is no centeral oxygen supply and this could pose a serious challenge when need arises.

Table 4.4: List of require equipments for patients resuscitation and monitoring

Items available	Yes	No
Ventilators	0	76
Defibrillators	0	76
Digital Monitor	76	0
Suctioning machine	76	0
Blood Banks with blood	76	0
Are basic tests fast	0	76
Central (Autoclave) sterilization unit	76	0
Oxygen tank with mask by each bed	0	76

Source: Field Survey, 2021

4.4 Summary of Findings

The summary of findings for this study include the following:

a) As revealed in Table 4.1, past infrastructure of the hospital were inadequate. 57 respondents affirmed that the study area has less hospital infrastructural development during past three decades while 19 respondents said the available infrastructural development were adequate to the corresponding patients visiting the study area.

b) As revealed in Table 4.2, the manpower is adequate during the past decades. Highly adequate ranked the highest with 35 respondents, adequate ranked second with 29 respondents and inadequate ranked the least with 12 respondents. This revealed that the manpower development during the last three decades were highly adequate but as time goes, the manpower stated droping which was later complimented between 2015 and 2019.

c) Figure 4.1 showed that 100% of the respondents are of the opinion that General Hospital attends to emergencies which is one of the basic functions of the hospital. All types of emergencies are seen which includes medical emergencies like hypertensive, diabetic, respiratory, gastroenteritis etc and surgical emergencies like fractures, severe burns and trauma, operate able and non operate able emergencies as shown in Figure 4.2, where all respondents agree that both medical and surgical emergencies are seen in the hospital.

d) In term of functional trolleys which are used to move emergency patients to EOPD, Figure 4.4 showed that 99% of the respondents' were of the view that they only have 1-3 trolleys which is not enough in terms of number of emergency patients seen in EOPD/day.

e) The result showed that 74 respondents' responses were of the view that EOPD have 4-6 functional wheel chairs which are fairly enough in respect to the number of emergency seen per day as indicated in Figure 4.5

f) As revealed in Figure 4.6, 73 respondents' said that Minna General Hospital have 101 and above beds and the remaining 3 respondents' were of the view that Minna General Hospital have 61-100 beds space.

g) Based on the number of wards available in Minna General Hospital, Figure 4.7 revealed that 59 respondents' of the sample population were of the view that Minna General Hospital have 11 and above wards, 14 respondents' said it has 7-10 wards and 3 respondents'which were the least have the opinion that Minna General Hospital have 5-6 wards.

h) Based on the number of theater available in General Hospital as shown in Figure 4.8, 97% of the respondent affirm that their 4 theaters in General Hospital including that of EOPD; while 3% were of the opinion that General Hospital have 3 theaters. This is a reflection of the Hospital Surgical Capacity (HSC) which is the number of seriouslyinjured patients that canbe operated on within 12hour period : = number of operating rooms x7x 0.25 / 12hours.= 7 which is approximately 7 patients / 12 hours while EOPD which has only one theater has the surgical capacity : 1 x 7 x 0.25 = 1.75cases / 12 hours (average of 3 cases/ 24hours).

i) Figure 4.9 showed General hospital have updated staff contact number/address which make emergency situation flexible in term of locating the medical personnel that will attend to emergency especially where there is a surge of patients or in a mass causality where the number of people requiring urgent attention outweighs the care givers, then more staff can easily be

recalled to assist attend to the emergencies. 95% of the respondents affirms that the Hospital has an updated staff list.

j) In term of hospital wards having functional intercoms or internal telephone, Figure 4.10 showed that 71 (93.4%) of the respondents' affirm the availability of functional intercoms or internal telephone; while 5 (6.6%) of the respondents' says there is no functional intercoms or internal telephone in the Hospital. Functional intercom makes intra and inter hospital communication very easy and fast resulting in quicker response.

k) As revealed in Table 4.3, corruption ranked the highest with 24 respondents, poor recruitment practices ranked second with 15 respondents and exploitation largely around control of resources ranked the least with 4 respondents. This revealed that the major challenges impending development in the study area were corruption and poor recruitment practices.

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

In conclusion, the study finds inadequacies in the provision of manpower, medical facilities and equipment. In spite of this, majority of the patients indicated average satisfaction with the performance of the health workers especially doctors and nurses in Minna General hospital. Thus, the level of patients' satisfaction is expected to increase if medical facilities and equipment become more readily available. There was a significant relationship between the infrastructural inadequacies and the quality of health workers' service. There is an urgent need for improvement in human infrastructure (manpower) of Minna General hospital. Also, infrastructure in terms of utilities and adequate, modern diagnostic equipment need to be provided to aid medical investigations.

5.2 Recommendations

The following recommendations were made, based on the findings of this study.

1) Infrastructures in terms of utilities and adequate, modern diagnostic equipment need to be provided to aid medical investigations in Minna General hospital.

2) It is not enough to have facilities and equipment, but the requisite trained technical manpower is also important to keep the equipment in good working conditions.

3) It is equally imperative for Niger State Government as well as Chanchaga and Bosso Local Government Authorities to invest more in Minna General hospital and other health sector in terms of resources. A healthy state will most likely be a productive state, whereas the reverse is

not plausible. Aside from this, provision of good health infrastructure should be seen as public good, which indeed is part of the role of government.

4) Non-government organizations such as social, religious etc and could also support government in improving health infrastructure. This can be done through donations of medical equipment and related items. This would go a long way in reducing the burden of provision of infrastructure by government.

5) The hospital should devote a substantial budget to technological development annually for maintenance of equipment and infrastructure in the hospital.

6) Policies, strategies and decisions to positively support and guide the proper implementation and usage of digital record management system should be upheld and considered very important in the hospital system.

7) Adequate provision should be made for alternative power supply to solve the problem of erratic power supply which makes accessibility to the electronic record difficult for the medical staff.

8) The dearth of unskilled staff in ICT should be urgently addressed. Periodic staff training should be organized for the medical staff to improve their ICT skills and make them relevant in the present day technological-driven health care delivery.

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