

COMPREHENSIVE HEALTH CARE IN ENUGU STATE

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Abstract

Comprehensive health care involves sufficient and efficient provision of health care services and facilities useful to the health standard and need of the society. The status and standard of health care in Enugu State is an issue of serious concern to both the government and citizens of Enugu State. The introduction of Information and Communication Technology (ICT) to the health sector gave impetus for Digital Health Technology (DHT) which is reviewed as a veritable tool for comprehensive health care in Enugu State and Nigeria as a whole. DHT makes for achievement of the Millennium Development Goal as well as the objectives of comprehensive health care. The implication therefore is that application of DHT in health service delivery in Enugu State will help in the provision of comprehensive health care service in the State, thus it is recommended that government should make provision for adequate digital facilities and funding of the health care system for comprehensive health care service delivery in Enugu State .

Introduction

The health care system in Nigeria has been plagued with poor conditions resulting from several factors which pose serious challenges to efficient health care assess and delivery as well as meeting the health-related Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs). This alarming situation calls for urgent interventions to strengthen and provide comprehensive health care in the country and Enugu State in particular. The situation of health status in Nigeria has not yet attained the desired level. Data showed that as at 2015, the country recorded 814 maternal deaths/100,000 live births which put her in the same category with the poorest countries in the world such as Sierra Leone, Niger, Chad, Somalia, Angola among others. Furthermore, Nigerian's health profile further revealed that 2,300 under-five year old children and 145 women of child bearing age die every single day (Orji, 2015). Moreover, malaria, pneumonia, diarrhea and other preventable infectious diseases still remain the major causes of under-five year old death in Nigeria. Abimbola (2012) noted that life expectancy in Nigeria stood between 45-50 years and communicable diseases

are one of the major causes of death accounting for about 82% of all deaths as a result of Nigerian's poor standard of health care facilities and services, particularly in Enugu State.

The World Health Organization (WHO) According to Ibeneme (2020) is committed to the highest level of healthcare services across the globe and is committed to facilitating member State to meeting global development goals including the 2030 Development Agenda – The Sustainable Development Goals (SDGs) and the Universal Healthcare Coverage (UHC).

Concept of Health Care and Comprehensive Health Care

Health care is the maintenance or improvement of health through the prevention, diagnosis, treatment, recovery, or cure of diseases, illness, injury, and other physical and mental impairment in people. Sonnier (2017) asserted that health care is delivered by health professionals and allied health fields, such as medicine, dentistry, pharmacy, midwifery, nursing, optometry, audiology, psychology, occupational therapy, physical therapy, athletic training, and other health professions are part of health care. Aleke (2014) noted that health care includes works done in providing primary care, secondary care, tertiary care, public health as well as a comprehensive health care. An efficient health care system can contribute to a significant part of a country's economy, development, and industrialization (Erickson, 2018) Health care is conventionally regarded as an important determinant in promoting the general physical and mental well-being of people around the world.

Comprehensive health care refers to providing for the full range of personal health services for diagnosis, treatment, follow up and rehabilitation of patients. Comprehensive health care is an approach that cares for the whole patient and all his or her needs, not just the medical and physical (American Cancer Society, 2021). Aleke (2014) saw comprehensive health care as standard approach at all major medical centers that treat young people with different illness. Comprehensive health care is a wide range of services for patients and families including education, counselling, support groups, advocacy and other special programmes to help improve the quality of life of patients and their families (Onah, 2015). American Academy of Family Physicians (2021) noted that the practice of continuing comprehensive health care is the concurrent prevention and management of multiple physical and emotional health problems of a patient over a period of time in relationship to family life event and environment. Aleke (2014) stated that comprehensive health care entails adequate provision of health care facilities and services in an environment or society for treatment of patients with all kinds of health and psychological challenges and issues. Aleke (2014) asserted that comprehensive health care is the height of health care service delivery. Aleke further noted that a society without comprehensive health care service delivery is a society at risk as it is often stated that 'health is wealth'. The role of comprehensive health care in a nation or society is indispensable to the growth and development, wealth creation and economic development of every nation.

Objectives of Comprehensive Health Care

Comprehensive health care represents the basic approach of Orthogeriatric comanaged care with the overall objectives of improving results regarding physical and psychological functions and reducing hospitalization, long-term care placement and mortality. Rex (2018) stated that the objective and goals of comprehensive health care include;

1. To provide essential health services and introduce innovative strategies of care.
2. To provide the highest quality of health care to client and patients
3. To provide qualified, skilled and non-skilled services focusing on preventative, rehabilitative and therapeutic care in the society.
4. To assist family to maintain as normal lifestyle as possible while maintain the family unit.

5. To address the unique physiological, safety, self-esteem and self-actualization needs in each client's individualized plan of home health care.

6. To provide home health care services that promotes the patients value of life by;

- Minimizing patient illness and disability.
- Maximizing patient's potential level of independence.
- Restoring, maintaining and promoting patient health.

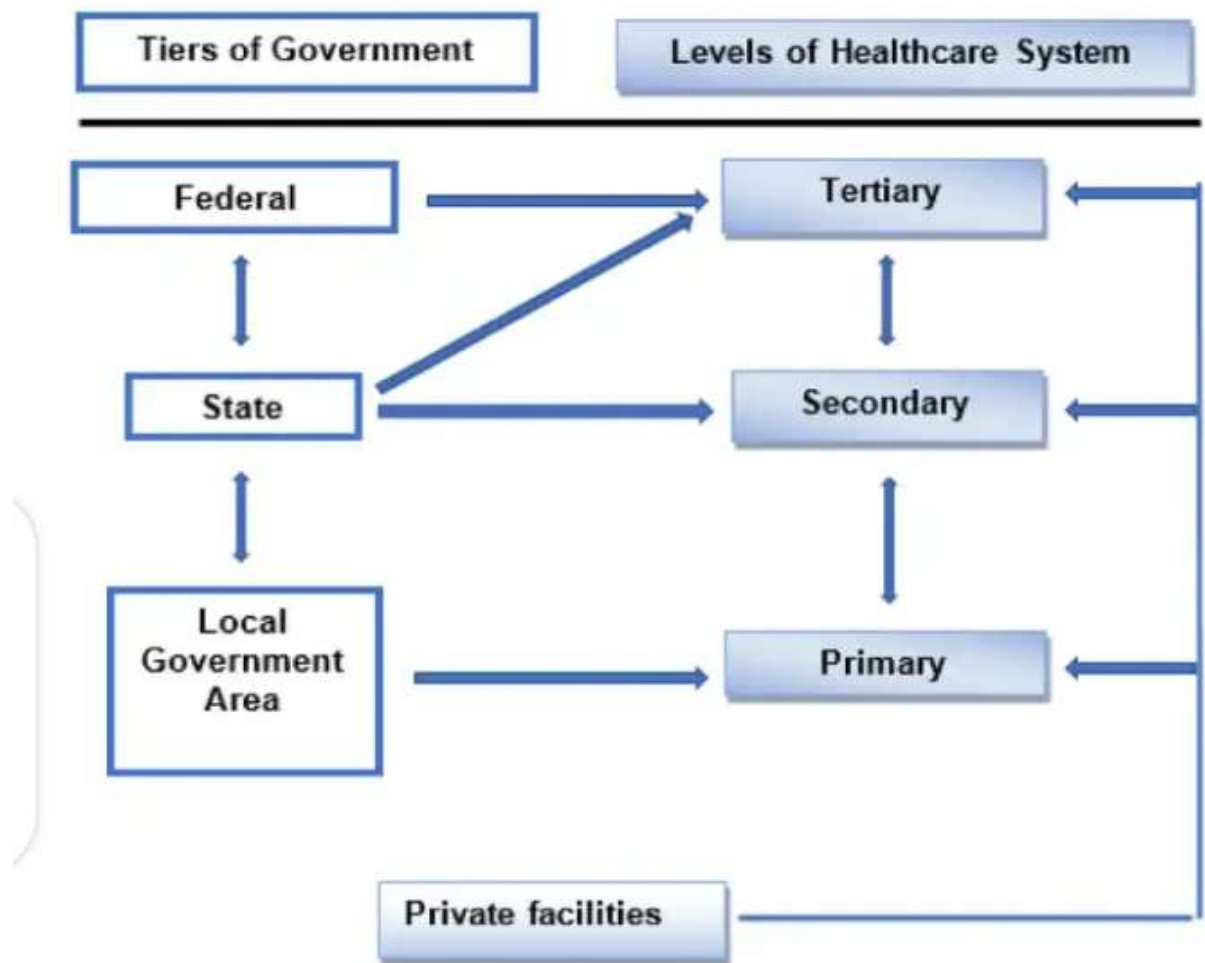
The Health Resources and Service Administration (2019) outlined the objectives of comprehensive health care to include among others ;

- to foster and encourage the use of health care delivery models that utilize team-based approach where each member practices at the full scope of their training.
- expand access to health care services in underserved and rural areas.
- strengthen health care provider's ability to plan, coordinate and manage services across the continuation of care.
- expand and improve access to preventive services, home and community based services, social supports and care management.
- provision and equipment of primary health care centres.
- access to health insurance and digital health care services.

Ibeneme(2020) noted that the WHO Africa Region has continued to use innovative approaches to provide comprehensive healthcare and promote better health outcomes among member countries. Among such innovative is the application of Information and Communication Technology (ICT) services for health, referred to as Digital Health (DH).

Levels of Health Care and How They Tend to Promote Comprehensive Health Care

Following Nigeria's independence in 1960, there have been several attempts to improve healthcare delivery. Successive Nigerian government that adopted different National Development Plans (NDP) to help address development challenges in the country at different periods. Some of the notable landmark in the NDP for the health sector were the 1975-80 NDP which witnessed the proliferation of healthcare facilities within communities and villages through the Basic Health Service Scheme (BHSS). The 1981-85 NDP further segmented healthcare services to be delivered across three levels of care within the public sector. There are primary, secondary and tertiary healthcare system. This structure also reflects the three tiers of government in Nigeria, namely Local, State and Federal Government. Despite significant progress during these periods, there were notable deficiencies such as lack of clear policy framework, lack of manpower development and resource generation. Current issues within the health sector include incessant strikes among health workers, dilapidated hospital buildings, ill-equipped laboratories, lack of healthcare financing and remuneration for the health workers. These levels of health care no doubt will impact comprehensive health care through adoption of digital health



Levels of health care in Nigeria

Concept of Digital Health

Digital Health (DS) is the intersection between technology and healthcare. It looks at how technology can be used to improve the quality of treatment given to a patient. According to the World Health Organization (WHO) digital health includes all concepts and activities at the intersection of health and ICT. The Australian Digital Health Agency (2016) define digital health as any application of information and communication technologies in order to improve healthcare and health outcomes. The Canada Health Infoway (2018) saw digital health as the use of information technology/electronic communication tools, service and processes to deliver healthcare services or to facilitate better health. Digital health is the range of services and technologies that allows patients to seek help without physically going to a hospital or clinic (Erickson, 2018). Sonnier (2017) described digital health as the convergence of the digital and genomic revolutions with health, healthcare, living and society. From the perspective of Sonnier's definition, digital health is seen not just as technology-driven and enabled, but as health and healthcare in the context of a society which has evolved to rely on and use digital information and technologies in virtually every facet of life. Digital health is not how we do health, it is what we do in and with regard to health (Bradley and Toole, 2016).

Digital health care delivery has the potential to provide a needed breakthrough in achieving access to high-quality care to everyone no matter where they live (Siwicki, 2018). Digital health provides medical information online or through telemedicine and medicines can

be delivered to homes through online pharmacies (Bashshur, 2016). Zuniga (2013) stated that through digital health patients have access to their own medical records and may communicate with their health providers using emails or online portals rather than needing to visit a facility. Recent work by the World Health Organization has described some functions of digital health/health technology to include:

- Providing better and more direct information to everyone about health and illness.
- Providing direct support to health workers and supervisors regarding verifiable and searchable encounters.
- Providing health manager at every level with operational and strategic information about drug availability, finances, and human resource management.

Mitchell and Lena (2019) noted that impacts on these functions will fundamentally change the delivery of healthcare in ways that we may not fully anticipate. Mesko, Drobni, Benvei, Gergely, and Gyorffy, (2017) asserted that medical professionals and policy makers have a huge responsibility in involving patients as partners in designing healthcare and decision making: and guiding them in using the myriad of digital health technologies. Otherwise, patients may either turn to non-proven services or technological solutions they might not be able to interpret alone. Abimbola (2012) noted that policy makers globally face the challenge of keeping up with the fast pace of innovations: innovators find it hard to integrate their solutions into the over-regulated healthcare system. To make digital health fill the gaps and function properly, there is need to build knowledge and attitude. Thus, one of crucial task of the stakeholders of healthcare is to assist both patients and caregivers in implementing digital health into everyday medicine especially in Primary Health Care (PHC) in Enugu State (Orji, 2015).

Categories of Health Care Services and Facilities Available In Enugu State

There are various categories of health care services in Enugu State with facilities alongside. The health care service facilities in Enugu State is said to be insufficient according to Aleke (2014) in the various categories of health care services in Enugu State. In the opinion of Orji (2015), the categories of health care services in Enugu State include primary health care, special clinics for mental health, orthopedic services, counselling services, rehabilitation centers (NCDC) alongside numerous health care services.

The facilities available for health care service delivery in the various categories of health care centers in Enugu State according to Aleke (2014) include among others birth centers, blood banks, clinical and medical offices, dialysis centers, surgical centers, drug stores and pharmacy to mention but few. It is worthy to note that, despite the availability of these facilities Enugu State and her citizens are faced with the challenge of health care service delivery in the various categories. Thus, there is need for improved facilities in the various health care categories so as to improve and attain a comprehensive health care service delivery in Enugu State. This according to Orji (2015), can be achieved through digital health care in the various primary health care centers across Enugu State.

Concept of Primary Health Care

Primary Health Care (PHC) refers to an essential health care based on practical scientifically sound and socially acceptable method and technology, made universally accessible to individuals and families in the community through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination (WHO 2018). It is an approach to health care that promotes the attainment by all people of a level of health that will permit

them to live socially and economically sound (evidence-based) ethical, accessible, equitable, affordable and accountable to the community (Akanov, 2018).

In the opinion of Markaki (2018) primary health care is not only primary medical or curative care, nor is it a package of low-cost medical interventions for the poor and marginalized. On the contrary it calls for the integration of health services into the process of community development, a process that requires political commitment, intersectional collaboration and multidisciplinary involvement for success. In the opinion of Orji (2015) primary health care is a term used to describe the first contact a person has with the health system when he/she has a health problem or issue that is not an emergency. Siwicki (2018) saw primary health care as the provision of health services, including diagnosis and treatment of a health condition and support in managing long-term healthcare, including chronic conditions like diabetes. It include seeing health professionals to help individuals maintain good health, with regular health checks, health advice and support for ongoing care (Gillan, 2016). From the above definitions, it can be deduced that primary health refers to a broad range of health services provided by medical professionals in the community.

Primary health care promotes health and wellness and seeks to prevent injuries and illness (Von, 2020). Stating further Von noted that primary health care is about delivering health care services, creating the conditions that help people to become and stay healthy and well. Yolanda (2019) stated that primary health care help to increase access to health services, which is particularly important for isolated or deprived population group. Primary health care provides increased accessibility to advanced health care system for the community which results in excellent health outcomes and prevention of delay (Abimbola, 2012). Orji (2015) advocated basic social amenities for effective PHC such as safe drinking water, sewage or disposal system, good housing, adequate power supply and good road. Orji further noted that lack of these basic amenities has impeded the development of PHC. Imhonopi and Urim (2018) reported that there is need for the utilization of Information Communication Technology (ICT) in primary health centers (PHC) for comprehensive health care and easy access to health care services.

Challenges of Comprehensive Health Care in Enugu State

The provision of comprehensive health care has been faced with different challenges not only in Enugu State but Nigeria and the world at large. Aleke (2014) asserted that poor funding constituted the major challenges to comprehensive health care. Supporting this assertion Ibeneme (2020) stated that government despite her efforts do not met the financial expectations of funding the health sector which has invariably affected delivery of comprehensive health care services in Nigeria. In the opinion of Rex (2018) the major challenges to comprehensive health care include:

- 1) Poor funding
- 2) Lack of personnel
- 3) Poor personnel motivation
- 4) Inadequate medical/ health facilities
- 5) Poor attitude of citizens to health care services and facilities
- 6) Under development

One of the existing challenges in the health care system in many countries including Nigeria is to reach the whole population with adequate health care services and to ensure adequate utilization of the services provided. Weiss and Leo (2012) stated that primary health care system in developing countries have not responded adequately to people's needs. Meanwhile, health care system are failing in many developing countries, because the systems are not kept abreast of the challenges of a changing world (Victor, 2017) Ashley (2019) noted

that digital health services have been developed in industrialized nations, such as United States of America, Australia, Canada and some developing nations such as India. However, despite the enormous features of digital health, they are hardly been utilized in the Nigerian health sector specifically in the primary health care system. Probably as a result of poor funding and location of the health care system.

Location according to Akanov (2018) refers to whether an institution or facility is in the urban or rural area. It is the place where a particular point or object exists. Researches by Patrick (2015) and Victor (2017) revealed that primary health care system in the urban areas are more equipped than those of the rural areas. According to Orji (2015) there are accepted indices on which the conferment of an urban status depends, they include among others; a good network of usable roads, reliable security, water supply, electricity and the general upliftment of luxury standard. In the rural areas these conditions that improve the condition of life and living and add to the nuances of conflict and motivation are generally not in place. Allocation of medical facilities and the distribution of health works according to Patrick (2015) are largely influenced by location that are imbued by the aforementioned facilities. Patrick further noted that chances are that urban areas predominantly attract efficient medical facilities and their highly motivated human resources as against the rural areas. Imhonopi and Urim (2018) reported that there is no utilization of digital health in primary health care centers (PHC) in both rural and urban area in Enugu State, Nigeria to provide easy and quality access to health care services. Abimbola (2012) stated that digital health reality in the urban center differs greatly from the rural areas. Orji (2015) observed that the urban centers are the beneficiary of most intervention and allocation while the rural are still deprived of the basic health services. The need of comprehensive health care is therefore veritable for an improved health care service delivery both in the rural and urban areas of Enugu State.

Ways to Promote Comprehensive Health Care Through Digital Health

The adoption of (ICTs) in the health sector could enhance the capacity to monitor and report outbreaks of diseases, disseminate guidelines for controlling and treating diseases and share scientific knowledge and research findings among professionals in the health community. ICT according to Temitope (2017) has helped to facilitate efficient health care delivery which is generally regarded as digital health (DH). Digital health for comprehensive health care according to Yolanda (2019) include the application and utilization of robotics, genomics, telemedicine, and Rapidpro. In the opinion of Imhonopi and Urim (2018) Digital health utilization for comprehensive health care involves: Open Medical Record System (OMRS) Telemedicine, Open Health Information System (OpenHIE) . The basic digital health for comprehensive health care include; mobil health (M-health), Electronic Health Records (EHR), Health Information Technology (HIT) and Telehealth among others (Ibeneme, 2020).

M-health has to do with wellness and fitness tracking, and nutrition mobile application. It is a medication adherence mobile application. Tayla (2018) noted that M-Health implies the use of mobile and wireless technologies to support the achievement of health objective. WHO (2018) stated that M-health has the potential to transform the face of health service delivery across the globe and especially in the primary health care. Electronic health records (HER) is the systematized collection of patient and population electronically stored health information in a digital format. Alicia (2020) asserted that EHR allow patients health information to be managed in a digital format and their data can be shared with other providers across multiple organizations. Health Information Technology (HIT) is the application of information process involving both computer hardware and software that deals with the storage, retrieval, sharing and use of health care information, health data and knowledge for communication and decision making (Ashley, 2019). Alotaiba (2017) asserted that health information technology improves

a patient's safety by reducing medication errors, reducing adverse drug reaction and improving compliance to practice guideline. There is no doubt that HIT is an important tool for improving healthcare quality and safety especially in the primary health care. Telehealth refers to the practice of caring for patients remotely when the provider and patient are not physically present with each other (Sadeghian, 2018). Ashley (2019) explained that modern technology has enabled doctors to consult patients by using HIPA complaint conferencing tools. Telehealth is the distribution of health-related services and information and telecommunication technologies. It allows long distance patient and clinical contact, care, advice, reminders, education intervention, monitoring and remote admissions (Orji 2015).

Recommendation

Based on the foregoing discussion, the following recommendations are highlighted;

1. adequate funding of all health care centres
2. adoption and utilization of digital health care in all health care centres in Enugu State
3. review of health care policies and programmes to include digital health
4. digitalization of primary health care centres in Enugu State
5. sufficient provision of digital health care facilities in Enugu State
6. comprehensive health care campaign across all villages and Local Government Areas of Enugu State.

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