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SPECIAL ARTICLE

Creating a Functional Health System for Nigeria

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Keywords

Health systems; Determinants of health; Building

ABSTRACT

Background: Health systems are more than static health facilities. The World Health Organization has identified six building blocks of the health system namely: human resources for health, service delivery, medicines, vaccines and technology, health information, health financing and leadership and governance. This paper examines the Nigerian health system and posits that it is not functional.

Discussion: The dysfunctional state is a result of chronic neglect of both the building blocks of the health system and the wider determinants of health such as education, sanitation, and food security in addition to the lack of synergy between the health and non-health sectors.

Conclusion: Creating a functional health system in Nigeria does not require fresh policies rather the political will and commitment of resources to improve the quality of life of the citizens in the non-health sector and the implementation of the numerous policies and strategies in the health sector. Adequate attention should be paid to primary health care.

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INTRODUCTION

Health as defined by the World Health Organization (WHO) is not just the absence of disease or infirmity but complete physical, mental, and social welbeing.[1] Thus the Nigerian health system (NHS) must produce more than absence of disease but should promote and provide physical, mental, and social well-being for the citizens. Functional may be defined as designed to be practical and useful rather than attractive.[2] Therefore, the NHS should be practical and useful in advancing the health of the citizenry. Health must be seen as a resource for living and not as an end itself. Health is not produced primarily within the health sector. Health is a complex state and a result of several factors or determinants. Most of the determinants are social in nature such as education, work, nutrition, water supply, sanitation, all working together to produce health.[3] A nation that ignores the social determinants of

health by not investing adequately in food security, water supply, sanitation and education cannot have healthy and productive citizens. The determinants of health need to be tackled within a broad framework of national goals and objectives to promote health. For example, the decline in death rates in England from tuberculosis from 1915, almost thirty years before streptomycin was discovered was due to improvements in nutrition, housing, and work conditions in coal mines. [4] These actions showed clearly that these social factors are as important as availability of drugs, curative care, and hospitals.

Building blocks of the health system

A health system is the sum total of all the institutions, organizations, and individuals whose primary purpose is to improve health.[5] It requires staff, finance, medicines, and leadership. A well-functioning health system works to improve the health of the people by: protecting against threats to health, restoring health, treating people decently, protecting against consequences of financial hardship and making it possible for the people to participate in their health. The World Health Organization (WHO) has produced a building framework for understanding and strengthening health systems. The framework has six blocks namely: human resources for health, service delivery, medicines, vaccines, and technologies, health financing, health information system, leadership, and governance.

The Nigerian health system

In determining whether the NHS is functional, an assessment of its structure, organisation, and performance in these six domains is critical. Nigeria runs a federal structure with three levels of governance namely federal, state (36 plus the Federal Capital Territory) and Local government (LGA, n=774). The Nigerian 1999 constitution explicitly states that health is a fundamental right (although not justiciable) and function of government.[6] Health is on the concurrent list which allows each level of government to determine its priorities and actions albeit within a broad framework of national goals. Primary Health Care (PHC) is the strategy for the health system of the country. PHC is scientific health care based on sound health technologies. It implies available, accessible, affordable, and culturally acceptable

healthcare provided as close as possible to where people live and work.[7]

The Federal government through the Ministry of Health is responsible for managing the Medicines and Poison Act, the implementation and regulation of international health and several federally owned tertiary hospitals and research agencies such as the Nigerian Centre for Disease Control (NCDC) and the National Primary Health care Development agency (NPHCDA). The State governments provide the bulk of secondary health care through general hospitals, give direction and guidance to the Local Governments through the State PHC Boards. The Local Governments provide direct services for PHC including recruitment of staff, construction of facilities, provision of medicines, funding, and implementation of component services of PHC. PHC although constitutionally assigned to the LGA is managed by the weakest level of governance. There is considerable overlap as both Federal and State governments intervene in PHC, and this may be in recognition of the severe limitations of the LGA. Some notable strategies for improving the health of the citizens include PHC under one roof, the Mid-wives Services Scheme, the National Health Act with the allocation of 1% of consolidated federal revenue set aside for health, establishments of PHC boards and the ward health system.[8] Nigeria has never been short of grand strategies and proposals to improve health services, but the implementation and sustainability have been problematic.

A nation's health system is not assessed primarily by the number of health facilities or the number of health care workers as important as they may be but rather by outcomes the health system produces. Some of these outcomes are population-based parameters and include life expectancy at birth, maternal mortality ratio, immunization cover-age rate, proportions of births attended to by skilled birth attendants. A summary of the demographic and health indices of Nigeria shows that the country is not a very healthy nation, and that the health system is not functional. These indices are shown in Table 1 along with the WHO African regional and global average. Nigeria's health indices are worse than the average for

Table 1: Some indicators of health in Nigeria[9]

Indicator	Nigeria	African regional average	Global average
Maternal mortality ratio	917/100,000 live births	525/100,000 live births	211/100,000 live births
Under-five mortality rate	117/1,000 live births	74/1,000 live births	38/1,000 live births
Neonatal mortality rate	36/1,000 live births	27/1,000 live births	17/1,000 live births
New HIV infection rate	0.52/1,000 uninfected population	0.94/1,000 uninfected population	0.22/1,000 uninfected population
Tuberculosis incidence	219/100,000 population	226/100,000 population	130/100,000 population
Malaria incidence	303.3/1,000 population at risk	225.2/1,000 population at risk	56.8/1,000 population at risk
Hepatitis B prevalence	2.94% among under-5 children	2.53% among under-5 children	0.94% among under-5 children
Probability of dying from the four major non-communicable diseases	16.9% between ages 30 and 69	20.8% between ages 30 and 69	17.8% between ages 30 and 69
Suicide mortality rate	3.5/100,000 population	6.9/100,000 population	9.2/100,000 population
Alcohol consumption	6.2 litres of pure alcohol per capita ≥15years	4.8 litres of pure alcohol per capita ≥15years	5.8 litres of pure alcohol per capita ≥15years
Road traffic mortality rate	20.7/100,000 population	27.2/100,000 population	16.7/100,000 population
Universal health coverage service coverage index	42	46	66
DPT3 immunization	57% among 1-year-olds	74% among 1-year-olds	85% among 1-year-olds
MCV 2 immunization	9% among 1-year-olds	33% among 1-year-olds	71% among 1-year-olds
PCV 3 immunization	57% among 1-year-olds	70% among 1-year-olds	48% among 1-year-olds

the continent and show that Nigeria is not a leader in health.

Human resources for health

Nigeria has several cadres of health workforce such as medical doctors, nurses and midwives, pharmacists, physiotherapists, laboratory scientists and many categories of community health workers. These are formal or orthodox workers found mainly in urban areas, in both government and private health facilities. Private health facilities provide services to about 60% of the population.[10] There is a large army of traditional health providers and quacks who seem to be more trusted by the public. There is much licensing and regulation amongst the formal

health sector workers but virtually no regulation or standard setting for the informal sector. The basic training of the health workers is of good quality.

The problems facing the health workforce include inter-professional rivalry, unresponsiveness, slower pace in the acquisition of up-to-date and new skills because of limited opportunities for training and exposure, mal-distribution of health workers with many more being in urban areas, low morale, poor compensation and emigration.[11] The government has not paid sufficient attention to the welfare of health care workers and this has resulted in many frequent industrial actions with disruption of services.

Service delivery

Available services in a functional health system should be comprehensive, continuous, effective, efficient, safe and of high quality. These services should be offered in health promoting environments, with the right kind of equipment, with a network of facilities making two-way referral feasible and easy. In Nigeria, health facilities are often cited for political reasons, some are duplicated, many are understaffed and lack basic equipment, running water and adequate levels of sanitation. Challenges to service delivery amongst others include long waiting time, bureaucratic bottle necks, bypass of lower-level facilities, and unavailability of bed space for in-patient care. [12,13]

Medicines, vaccines, and technology

Nigeria has largely been a net importer of medicines, vaccines, technologies and other medical equipment and devices. There is very little research and development in the country anymore and vaccines are not produced despite numerous approaches to stimulate vaccine production. These problems are the results of long-term unfavourable investment climate, unreliable electricity supply, government policy somersault, and high cost of doing business. Other problems include lack of standardisation, quality assurance, fake and adulterated medicines with increased morbidity, mortality, and huge socio-economic costs.[14] Chronic underfunding has crippled the many research institutes and universities in the country. As a result, the country does not have the state-of-the-art research and develop-

ment facilities that will advance health care science and health.

Health information system

The health system in Nigeria has a rich collection of data, in technical reports, and bulletins, most of which are produced largely for persons with some science background, are not available to the public and are not designed to inform or educate the lay person. Moreover, publications in scientific journals are not accessible to the public and often their relevance and usefulness is debatable. There is some degree of information hoarding and administrative difficulty in data sharing rather than open access. It may be easier to obtain data from a partner non-governmental organisation (NGO) or United Nations (UN) agency than from a government organization. In addition, much of research findings are largely unknown to policy makers, unused and the relevance unknown. The level of health literacy is low even though some studies rate it as high,[15] but the real-world picture is that patients delay seeking help, present late and resort first to alternative practitioners.[16] There is a huge gap on the supply side as funding to maintain a vibrant and functional health information system in terms of software, computers, and expertise is often not available within government agencies responsible for producing health information.[17]

Health financing

This is probably one of the greatest problems of the NHS. Although Nigeria has signed up to the Abuja declaration which commits African nations to allocating 15% of their Gross Domestic Product (GDP) to health, the country continues to underfund health care at all levels of governance.[18] The continuous underfunding is a severe limitation to the functioning of the NHS.[19] The National Health Insurance Scheme (NHIS) which is to improve both funding and access [20] has a very low coverage mainly amongst the formal sector but inadequate funding and corruption have beset the scheme. The out-of-pocket expenditure is about 70% and many families experience catastrophic health expenditure which pushes them into poverty.[10] Cost recovery is almost impossible especially in the public sector due to aging infrastructure, lack of incentives, high maintenance costs and corruption. Mechanisms to improve funding such as health insurance, the Bamako

Initiative and performance-based funding are still rudimentary.

Leadership and Governance

This sums up the challenges of the NHS. There is a large gap between the political and technical leadership of the health sector. Appointments to technical positions are largely influenced by the political reward system rather than technical expertise or merit. Leadership is often top down rather than bottom up and decision making takes a long time. Health workers often lack pre-requisite leadership and managerial skills such as empathy, decision making, budget management, asset management, project management, economic analysis, and human resource management.[21] There is also a high turnover rate of top leadership positions, and many are appointed to these top positions very late in their careers just before retirement. Part of the leadership deficit is lack of effective community participation. Communities are seen as users and beggars for health initiatives rather than partners and often are not involved in the conceptualisation, planning, and execution.

Creating an effective health system for Nigeria

Creating an effective health system for Nigeria requires strong political will particularly on the part of government to prioritise the health of the people. If done, it has huge benefits in improving the health of the citizens and of the larger socio-economic development of the country. The first duty of government is to protect and provide security to its citizens.[6] National security involves more than military hardware but must encompass education, food, and health security. Thus, inter-sectoral and inter-ministerial actions are needed to improve water supply. power supply, food security and development of rural areas, and improve the proportion of children completing secondary school education. Many of these are the basic functions of the LGA but they are weak and urgent actions must be taken to empower them, release funds allocated to them and make them accountable.

One can imagine the quantum leap in health and development that will occur if every LGA in the country faced the issues squarely and provided food security, water supply, access to

schools and infrastructural development to at least 75% of its communities. The impact of education on health is known. When large segments of the community complete secondary school education, the levels of literacy will rise, and maternal mortality will drop. Food security will reduce the health problems associated with malnutrition. In addition, community participation in all these actions must come first. The people need to be mobilised not just during elections but helped to become self-reliant through purposeful engagement, dialogue, and involvement so they can take ownership.

In the health sector, attention must be paid to the building blocks in several ways. The health work force should receive greater motivation through paying living wages, promoting decent work and welfare of staff. Teamwork and industrial harmony should be encouraged to reduce friction. Continuous professional development should be on the front burner to improve skills and competencies of the health work force. Accountability is key to effective service delivery especially to the client with direct access to complaints and seeking redress along with ability to review performance of the system. All aspects of services need to be improved. The requirements needed to empower staff in terms of logistics and other resources should be provided on a sustainable basis. One key component of service delivery is to strengthen PHC. Adequate resources should be provided to deliver the component services of PHC in all the 774 LGAs in the country. Health-related sectors such as agriculture, water supply, the environment, and power must work-in synergy with the health sector to improve the health of Nigerians.

Furthermore, to strengthen the area of medicines, vaccines and technology, Nigeria should as a matter of priority begin to mass produce generic medicines to meet the needs of its citizens and then later for export. Funding and support to indigenous pharmaceutical organizations should be created and sustained. Research and development need to be strengthened. Experts in clinical trials, drug development should be identified and re-trained. The overall socio-economic climate for the country should be made more attractive. Mechanisms to strengthen quality assurance, elimination of

adulterated and substandard medicines need to be invigorated. Rational prescribing and use of medicines should be strengthened. Information generation and synthesis need to be strengthened to enable Nigeria to excel and make use of information to improve the health of the citizens. Working in silos and hoarding of information should be discouraged by all stakeholders. Open data sharing must be the new norm. Social media has come to stay and should be embraced as a way of communicating health information with the public. The citizens need information about the common health problems they encounter, the appropriate actions and solutions to them. A neglected aspect of health information is community surveillance, reporting and notification of priority diseases. This will help detect epidemics early and avoid severe problems associated with them.

Government must improve the funding available to the NHS. Innovative ways of generating new funds are important without overburdening the private sector. Community insurance and other forms of health insurance, better coordination of donor funding and aligning them to national priorities are key. Health insurance should be mandatory. Aggressive mobilisation and information will be needed to increase the coverage of the NHIS. Transparency, accountability, and probity need to be assured to get the best value for money channelled to the NHIS. In the leadership block, technical leadership should be appointed on merit. Leadership skills should be taught at all levels for health workers and upgraded continuously. The mind set of health workers who are not in formal leadership positions must be changed as they often are detached from assuming responsibility for their sphere of influence. Leadership should be decentralised, held accountable and performance measured regularly. The political side of leadership must act as advocates and vanguards for the improvement of the health sector. Working with the community is one aspect of governance that is often neglected and needs to be addressed throughout the country.

Conclusion

Nigeria has enough policies and strategies to improve its health system and make it functional. Attention

must be paid to address the social determinants of health and other broad-based interdependent factors that affect health. Political will is key to promote citizen welfare, enlightenment, and engagement. Focused attention must be paid to the building blocks of the health system to strengthen them. Community participation remains a key element in improving the health of Nigerians.

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