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HEALTH DISPARITIES IN NIGERIA: CORE EVIDENCE AND PRACTICAL IMPLICATIONS

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ABSTRACT

This paper focused on health disparities and healthcare disparities among Nigeria population groups. It attempted to explain these disparities with emphasis on their socioeconomic status, geographical locations, distance of travel to a healthcare facility, degree of access to quality health care services, challenges of providers serving in rural communities and other related issues. The present work, though not an original research study, leveraged on existing body of data and on relevant literature to provide an overview of the subjects in focus and an informed analysis on the health and healthcare disparities between different Nigerian population groups -*rural or urban / northern or southern*. Whereas in some instances, data from Nigeria was not available, those available were not as precise as one would like. Nonetheless, the paper highlighted the limitations of the data on disparities presented, while also encouraging a conversation on why such disparities existed, and what might be done to reduce the observed gaps.

Key words: Health disparities, implications, regions, access, Nigeria.

INTRODUCTION

It has long been "recognized that some individuals are healthier than others and that some live longer than others do, and that often these differences are closely associated with social characteristics such as race, ethnicity, gender, location, and socioeconomic status." These health status gaps between groups have been referred to as health disparities (McKenzie *et al*., 2012). The United States National Institutes of Health (NIH) in 2003, defined health disparities as "the differences in the health status of different groups of people. Some groups of people have higher rates of certain diseases, and more deaths and suffering from them, compared to others." Among the factors that affect an individual's ability to attain optimal health in Nigeria can be considered as follows:

1. Ethnicity
2. Geography/regions
3. Socioeconomic (low education level, live in poverty)
4. Residence/distance (medically underserved rural, and slums in urban communities)
5. Cultural barriers and beliefs/religion (NDHS, 2013).

Although Nigeria has diverse ethnic groups with different cultures, it is not a heterogeneous society. Therefore, racial discrimination is not a source of health disparities, instead the source is rather because of poverty, geographic location, distance of travel to a health facility or health post, scarcity of health care providers who want to work in rural areas, government ineffectiveness and inefficiency in its role in the financing of health care particularly at the local levels (Kress *et al*., 2016). In addition to this is the need to improve management, administration, training, and supervision in the public delivery of health services.

The United States Centers for Disease Control and Prevention (2011) and Mead *et al*. (2008) for instance, dwelt on the challenge of health disparities in ways that have bearings on the situation in Nigeria. According to these sources, socioeconomic differences, stigma based on minority or ethnic status, poor access to health care and specialized services, cultural barriers and beliefs, limited education and

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employment opportunities and insurance coverage can all affect health status. Similarly, one's economic status can influence one's health. For example, persistent poverty may make it difficult to buy healthy food or to afford preventive medical visits or medication. Economics also influences access to safe, affordable housing, safe places to exercise, and safe working conditions. Whether one lives in an urban or rural area and have access to high-quality health care facilities or services, public transportation or one's own vehicle can have an impact on what one chooses to eat, the amount of physical activity one gets, and one's ability to visit the doctor or a health care facility.

Health disparities are a significant problem in Nigeria. For example, the World Bank considered this point in all its bearings when it said that "many people in Nigeria especially those who live in the northern region have health status that is on many different measures, is not as good as those who live in the southern regions" (World Bank, 1994). Whatever the reasons associated with these disparities, the people's healthcare needs must continue to be met without the ongoing differences that lead to poor health outcomes, human suffering and a drain on the economy.

What is Health?

The word health means different things to different people (McKenzie *et al*., 2012). Individuals who have a physical disability may say that they are 'healthy' when they are able to function independently (Barr, 2014). Health also can be freedom from disease, feeling happy, or being satisfied with one's current situation (Jirojwong and Liamputtong, 2012).

The World Health Organization (WHO) defined what "health" means for an individual anywhere in the world. The Constitution of the World Health Organization was first adopted at the International Conference held in New York from 19 June to 22 July 1946, signed on 22 July 1946 by the representatives of 61 states, and entered into force on 7 April 1948 (WHO, 1946; 1978). The preamble to the Constitution states: "Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." Jirojwong and Liamputtong note that the continuum of health and illness has been considered in this definition.

The intent of the global community adopting this definition was to make it clear that the health of any individual is measured not simply by the presence or absence of disease. Health involves health of the body, health of the mind and the emotions, and health of the social context in which one lives (Barr, 2014).

The declaration of Alma-Ata was adopted at the International Conference on Primary Health Care (PHC), in 1978. It expressed the need for urgent action by all governments, all health and development workers, and the world community to protect and promote the health of all people. It was the first international declaration underlining the importance of primary health care. The primary health care approach has since then been accepted by member countries of the World Health Organization as the key to achieving the goal of "Health for All" but only in developing countries first. This applied to all other countries five years later (WHO/UNICEF, 1998).

Article II of the declaration expresses concern about the existing gross inequality in the health status of the people particularly between developed and developing countries as well as within countries which it states as "politically, socially, and economically unacceptable and is therefore, of common concern to all countries" (WHO, 1978). The concept of Health for All by the year 2000 was that health resources should be distributed in a way that essential health care services are accessible to everyone (McKenzie *et al*., 2012). In Nigeria, while the goal of Health for All by the year 2000 was not reached, it was nevertheless abandoned.

Assessment of Health Trends

The assessment of health trends uses two common measures of population health status, such as life expectancy and mortality and morbidity (WHO, 1998; Barr, 2014). The global strategy for health for All by the year 2000 (HEA, 2000) set the following guiding targets:

1. Life expectancy at birth above 60 years
2. Infant mortality rate below 70 per 1,000 live births

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3. Under-5 mortality rate below 70 per 1,000 live births (WHO, 1998).

No one expected Nigeria to reach the goal of "Health for All" by the year 2000. Rather than make progress towards these targets, the country's health system is said to have performed poorly in the recent past. The dismal performance of the health system is illustrated by the Nigerian Demographic and Health Survey of 2003 (Federal Ministry of Health, 2006). The health status and trends report, and the maternal health and newborn health disparities report in Nigeria compiled by the United Nations Maternal Mortality Estimation Inter-agency Group (WHO, UNICEF, UNFPA, United Nations Population Division, and the World Bank, 2015); United Nations Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, United Nations Population Division and the World Bank, 2015), show that life expectancy at birth (Table 1), maternal mortality ratio per 100,000 live births (Table 2) and under-5 mortality rate (deaths per 1,000 live births (Table 3), are still above the guiding target of Health for All by the year 2000. However, the infant mortality rate showed some improvements (Table 4).

Life expectancy at birth estimates how many years, on average, a baby born today can expect to live. Given consistent difference between males and females, this figure is typically broken down by gender (Barr, 2014). As studies have shown, the higher the life expectancy at birth for a country, the better the health status of that country. However, estimates of life expectancy prefer instead to focus on healthy life expectancy, which is the number of years the average person born into the population can expect to live without disability (Jacobsen, 2014). The life expectancy at birth (in years) for female in Nigeria in 2013 as depicted in Table 1 was 55 years, and for male, it was 54 years.

While life expectancy at birth total (in years)-column 5 (horizontal), represents the total number of years an average person in Nigeria is expected to live for, column 3 (horizontal) shows the number of years the average person in Nigeria is expected to live a healthy life (disability free). Column 4 (horizontal) shows that an adult who has survived to age 60, can expect to live into his or her 70s or beyond and a person who has survived to age 70 can expect to live until about age 80. Jacobsen asserts that this has become a concern in all countries, even those with comparatively low life expectancy at birth (WHO, 2011; Jacobsen, 2014).

Table 1: Health Status and Trends Indicators-Life Expectancy at Birth (in years) and Healthy Life Expectancy at Birth in 2013

	1990			2013		
	Both sexes	Female	Male	Both sexes	Female	Male
Healthy life expectancy at birth (years)				47	47	47
Life expectancy at age 60 (years)	15	15	14	16	16	15
Life expectancy at birth total (years)	46	47	45	55	55	54

Source: World Bank (2015). Data from the World Bank- Life Expectancy at Birth Total (years).

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Maternal Mortality Ratio

Maternal mortality ratio is a measure of the risk of death that is associated with childbirth. Because these deaths are rarer than infant and child deaths, the maternal mortality ratio is measured as "the number of women who die because of pregnancy and childbirth complications per 100,000 live births in a given year" (Skolnik, 2016). As depicted in Table 2, for some inexplicable reasons, about 814 women died for every 100,000 births in the year 2015 even

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though, some steady progress was made in the previous years running up to 2015.

Table 2: Nigeria: Impact Indicators of Maternal Mortality Ratio between 1990 and 2015

Maternal Mortality	YEARS					
	1990	1995	2000	2005	2013	2015
Maternal Mortality Ratio (per 100, 000 live births)	1,200	1,100	950	740	560	814

Source: United Nations Maternal Mortality Estimation Inter-Agency Group (WHO, UNICEF, UNFPA, United Nations Population Division, and the World Bank, 2015)

Under-5 Child Mortality Rate

The under-5 child mortality is also called the child mortality rate. This is "the probability that a newborn will die before reaching age five, expressed per 1,000 live births (World Bank mortality rate, under-5 (per 1,000) (2015)." Table 2 shows that some progress was made between years 2000 and 2015 in the reduction of under-5 mortality rate, nevertheless, the gain still did not help the country meet the MDGs target for 2015.

Infant Mortality Rate

The infant mortality rate is the number of deaths of infants under age 1 per 1,000 live births in a given year. This rate is expressed in deaths per 1,000 live births. It measures how many children younger than 1 year of age will die for every 1,000 who were born alive that year (Skolnik, 2016). It is in this area that Nigeria made a significant progress. In Nigeria as in most African countries, diarrheal diseases, acute respiratory infections, malaria and under nutrition, which is a contributing factor to many children's deaths, are the leading causes of mortality in children during their first five years of life (Jacobsen, 2014). This problem however, falls disproportionately on children whose mothers have little or no education and are economically disadvantaged.

Table 3: Nigeria: Impact Indicators of Under-5 Mortality Rate Between 1990 and 2015

Infant Mortality	YEARS		
	1990	2000	2015
Under- 5 mortality rate (deaths per 1,000 births)	639	188	109
Infant mortality rate (probability of dying between birth and age 1 per 1,000 live births)	126	113	69

Source: United Nations Inter-Agency Group for Child Mortality Estimation (UNICEF, WHO, United Nations Population Division, and the World Bank, 2015)

Sectorial Overview

The health of Nigeria's population is poor, so is the quality of the health services it receives. Yet Nigeria has over four times as many doctors per capita as

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other sub-Saharan African countries, and the government spends a comparable amount on health (World Bank, 1994; Nigeria- Pharmaceutical Country Profile, 2011). Compared to other low-income countries with similar per capita GNP, Nigeria has made poor use of its limited resources allocated to health. A sharp decline in real per capita expenditures on health in the late 1980s because of a fiscal crisis and decline in the country's oil revenues (Gupta *et al*., 2004), had impacts on the availability of medical supplies, drugs, equipment, and personnel. In the rapidly growing cities, inadequate sanitation and water supply increased the threat of infectious diseases, while health care facilities were generally not able to keep pace with the rate of urban population growth. There were many serious outbreaks of infectious diseases in the early 1980s, including cerebrospinal meningitis and yellow fever, for which, especially in rural areas, treatment or preventive immunizations was often difficult to obtain (Metz and U.S. Library of Congress, 1992).

Many of the problems remained in the 1990s. For example, sharp disparities persisted in the availability of medical facilities among the regions, rural and urban areas, and socioeconomic classes. In the 1970s and 1980s, child death rate before their fifth birthday was 1 in 5. The under- 5 mortality rate was 192 deaths per 1,000 live births. In Nigeria, as in several other countries in West Africa, mortality is relatively higher during childhood (age 1 to 4) than infancy. Of every 1,000 babies born, 87 died during their first year of life. And for every 1,000 children alive at their first birthday, 115 died before reaching their fifth birthday (Nigerian Demographic Health Survey, 1990).

While the demand for health care is high, the availability is scarce. Even for those who could pay, access to doctors is a challenge. As in the 1980s, health conditions today are worst among the poor, in rural areas and among those who live in the slums of urban centers, and in the northern region of the country (NDHS, 2013). Moreover, health care's disparities, that is, the differences in access to, or availability of facilities and services (Health Services Research, 2009), are more tilted at urban areas of the more affluent south.

The overall health status indicators which are considered as some of the worst in Africa (USAID, 2017), show that the northeastern and northwestern parts of Nigeria have substantially higher under-5 mortality rates than the southern regions. Also, by geography, children in the northern regions have a higher probability of being malnourished, stunted and suffering from diarrhea. Figure 1.1 depicts the total fertility rate by zone. Women in the northern regions, that is, Northwest 6.7, Northeast 6.3, and North-Central 5.3; bear more children than women in the Southwest 4.6, South-South 4.3, and South-East 4.7. These differences in fertility reflect not only regional zones but also educational attainment as well. Because women in the northern regions are less likely to have formal education, so they tend to marry early at a median age of 15. In the southern regions, however, women are more likely to have completed secondary or higher schooling and are therefore marrying later (NDHS, 2013).

With 5.5 live births per woman and a population growth rate of 3.2 percent annually, it is projected to reach 440 million people by the year 2050. "With this kind of rapidly growing population and development challenges, the implications of this is that Nigeria could drag down the socioeconomic indicators for the entire African continent" (USAID, 2017)

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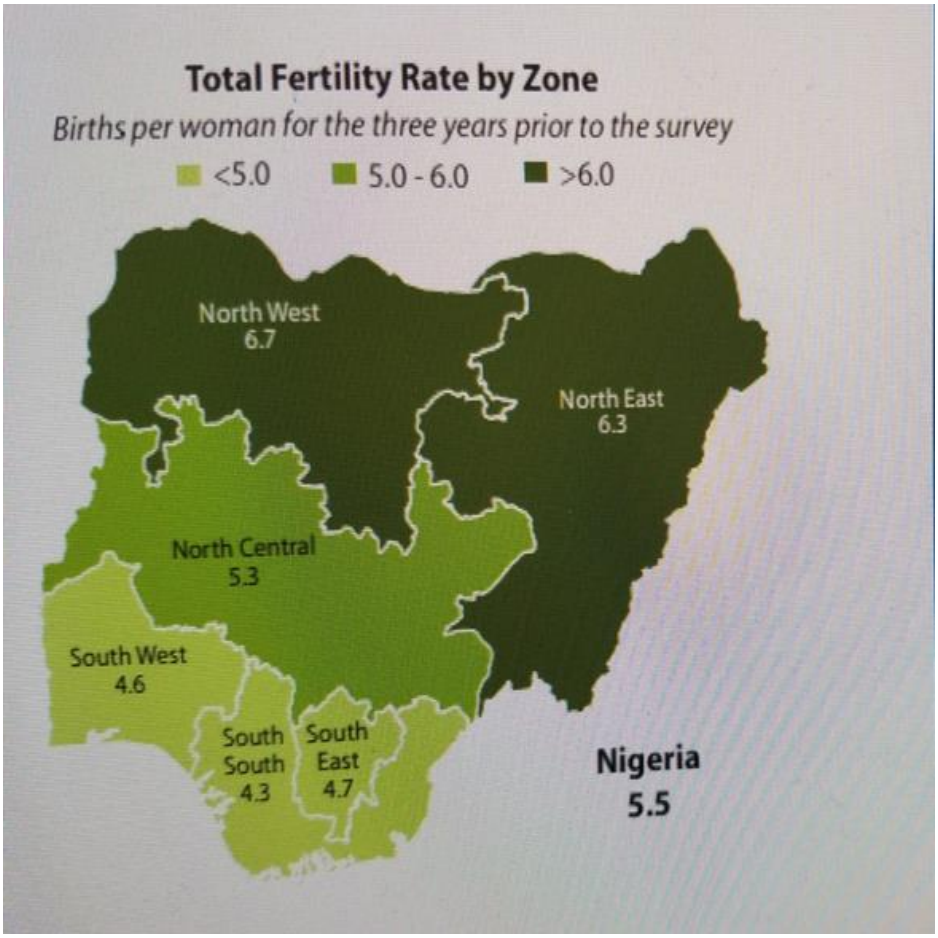

Figure 1: Map of Nigeria Showing Total Fertility Rate by Zone
(Source: Reproduced from Nigeria Demographic and Health Survey, 2013).

Regional health status indicators reflect the result of disparities in health care services. There are significant disparities in key maternal and newborn health interventions. For example, the antenatal (prenatal) care policy in Nigeria follows the World Health Organization's guideline to promoting safe pregnancies, recommending at least four antenatal visits for women without complications. This guideline calls for focused antenatal care, emphasizes quality of care during each visit rather than focusing on the number of visits. However, women with complications, special needs, or conditions beyond the scope of basic care may require additional visits (NDHS, 2013).

The number of women who made the recommended number of antenatal visits and timing of the first visit varies significantly by mother's education, residence, geography, and household wealth. Eighty percent of mothers with education made at least four antenatal care visits, compared to 28% of mothers with little or no education. By residence, in the rural areas, about 38% of women made at least four antenatal care visits compared to 75% in urban areas. In terms of geography, Southwest saw the highest rate of antenatal care coverage of at least four visits at 87%, compared to the lowest coverage of 30% in Northwest. The role household wealth plays in antenatal care visits is remarkable. Most mothers

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among the richest household, 86% made at least four ANC visits, compared to only 18% of mothers from the poorest household (UNICEF, 2013).

Similar patterns are evident in indicators of regional, educational, residence, and household wealth services. Coverage care for newborns that include postnatal care of newborns within two days, early initiation of breastfeeding, vaccination received, birth registration, and coverage for mothers such as demand for family planning satisfied by modern methods, skilled attendant at birth, institutional delivery, postnatal care of mothers within two days follow similar patterns (UNICEF, 2013). These differences to some extent have to do not only with differences in cultural traditions and religious practices, but also with differences in the availability of services.

Pregnancy and Childbirth

In a World Health Organization (WHO) survey of WHO African Region done from 2000-2010, the result showed that access to skilled care among pregnant women tends to be determined by wealth and geography. The survey found significant differences in access to a skilled attendant during child birth for the richest and the poorest women. The widest gap (more than 70% difference) between the poorest and the richest was in Nigeria and two other countries in the region. While levels of antenatal care have increased in most regions of the world, that is not the case in Nigeria. Mother's education, living in rural areas, household wealth, and mother's age are all factors associated with poor antenatal care outcome. Among the countries with the widest gaps, Nigeria ranks highest on the list. The coverage for Nigeria was 31% among the non-educated and 80% among the highest educated. In some countries in the region such as Rwanda, the survey result shows very little difference in coverage between the wealth quintiles. The coverage for Rwanda for example, was 97% and 99% in the poorest and richest quintiles, respectively (WHO, 2010; Nigeria Demographic and Health Survey, 2013).

The National Health Policy and Strategy to Achieve Health for all Nigerians (NHP).

As a broad statement of policy, the National Health Policy and Strategy to Achieve Health for all Nigerians, is excellent. Published in 1988, its main goal is to help all Nigerians lead socially and economically productive lives and declares that Primary Health Care (PHC) is the way to achieve it (World Bank, 1994). Because of emerging issues and the needs to focus on realities and trends, a review of the policy became necessary. The revised version, referred to as the Revised National Health Policy and launched in September 2004, outlined the goals, structure, strategy, and policy direction of the health care delivery system in Nigeria (Federal Ministry of Health, 2004). The revised policy clearly stated the roles and responsibilities of each level of government, including those of the nongovernmental organizations (NGOs). In Nigeria, there is no single government; rather there are multiple governments with distinct roles in a federal system. The nation (Kress *et al*., 2016) has one national government, but 36 states and 774 units of local government areas (LGAs) within the states, and 9,596 wards. The policy's overall long-term goal is to provide adequate access to primary, secondary, and tertiary health care services for the entire Nigerian population through a functional referral system (NDHS, 2013).

To achieve its objective, the National Health Policy identified Primary Health Care (PHC) and Health Promotion (HP) as the framework designed to achieve improved population health. The initiatives as developed are meant to adopt primary health care components like health education, adequate nutrition, safe water and sanitation; reproductive health, including family planning, immunization against five major infectious disease, the provision of essential drugs and disease prevention. The Policy emphasizes that a comprehensive health care system delivered through PHC centers, must incorporate maternal and child health care, including family planning services (National Health Care Development Agency, 2012). Despite the strength of this approach, implementation at the three levels of government; that is; federal, state and local government areas is said to have been weak in part because of lack of

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resources from the federal government to carry out the planned functions (Federal Ministry of Health, 2006).

The Revised Health Policy emphasizes the strengthening of the national health system such that it will be able to provide effective, quality, accessible and affordable health services that will improve the health status of Nigerians through the achievement of the Millennium Development Goals (MDGs). Though the MDGs overall were about general socioeconomic development, most of the goals had bearings on health. Not only did the MDGs provide a blueprint for national- and international- level priority setting, they were accompanied by 18 targets that laid out benchmarks for success (many of which used 1990 as the baseline year for comparison), and 48 specific indicators that were used to evaluate progress toward achieving those targets (Jacobsen, 2019). To that end, the main health related policy targets were as follows:

i. Reduce the under-5 mortality rate (U5MR) by two-thirds between 2000 and 2015
ii. Reduce the maternal mortality rate by three-quarters between 2000 and 2015
iii. Reduce the spread of HIV/AIDS by 2015
iv. Reduce the burden of malaria and other major diseases by 2015 (U.N., 2000).

However, as shown in the Tables below, while some progress was made in each area, the country was not able to achieve most of the health policy targets.

Table 4: Nigeria Progress on the MDGs -4 (Reduced child mortality)

	990	015	MDG Target 2015	Reduction %	Progress on the MDGs
Under-5 mortality rate (deaths per 1,000 live births)	13	09	67	49	Not achieved
Measles (MCV) immunization coverage among 1-year-olds (%)	54	51	100	-6	Not achieved

Target 4.A: Reduce by two-thirds, between 1990 and 2015 the under-five mortality rate (Source: United Nations. The Millennium Development Goals Progress Report, 2015. UN: New York.

Table 5: Nigeria Progress on MDG-5 (Improved maternal health)

	1990	015	MDG Target 2015	Reduction %	Progress on the MDGs
Maternal mortality ratio (100,000 live births)	1,350	14	75	40	Not achieved

Target 5.A: Reduce by three-quarters between 1990 and 2015 the maternal mortality ratio (Source: United Nations: The Millennium Development Goals Progress Report, 2015. UN: New York).

The United States government, through the President's Emergency Plan for AIDS Relief (PEPFAR), the United States President's Malaria Initiative (PMI), and the USAID's support for quality tuberculosis treatment for adults and children by linking them to primary health care centers and resources, including laboratory test kits and anti-retroviral medications (USAID, 2017), have all been helpful to the country, and to all those who are affected even though progress on the MDGs in some of these areas, except for incidence of HIV, have not been achieved as depicted in Table 6, MDG-6: Targets 6. A; 6. B; and 6. C.

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Table 6: MDG – 6 (Combat HIV/AIDS, malaria, and other diseases)

	1990	2000	2007	2014	MDG Target 2015	Reduction %	Progress on the MDGs
Incidence of HIV (%)		0.47		0.20	0.00	57.45	Achieved
Antiretroviral therapy coverage (%)			26.0	22.00	80.00		Not achieved
Malaria incidence (%)				4.30	75.00		Not achieved
Tuberculosis mortality rate (per 100,000 population per year)	5.00			94.00	50.00	0.00	Not achieved

Target-6A: Have halted by 2015 and begin to reverse the spread of HIV/AIDS; Target- 6B: Achieved by 2010, universal access to treatment for HIV/AIDS for all of those who need it; Target-6C: Have halted by 2015 and began to reverse the incidence of malaria and other major diseases. Source: United Nations. Millennium Development Goals (MDGs) Progress Report (2015). New York: United Nations, 2015 (http://www.un.org/millenniumgoals/)

Primary Health Care System Sectorial Assessment

A look back to the 1980s and early 1990s shows that Nigeria has not made uninterrupted progress towards the plan of lessening the health disparities gaps among its population. As noted previously, the Nigerian health sector is characterized by wide regional disparities in health status, health services, use, and health resources availability, with the population of Southern states in a considerably more advantageous situation than those living in the North (World Bank, 1994). An acknowledgement, somewhat, on the part of the government, that the worsening regional health disparity between the Southern and Northern region demanded attention and resources, led to the development of various initiatives which were implemented and the new federal government's instructions that Primary Health Care (PHC) programs be started at the local Government Area levels. This was an effort to address emerging health issues, the enormous gap in health disparities, and the worsening health conditions in the country. This according to (Alenoghena *et al*., 2014) in citing Obionu, 2007 and Cueto, 2005, has made Nigeria as one of the few countries in the developing world to have systematically decentralized the delivery of basic health services through local government administration. That being the case, it is important that the federal government gives them the help they need to oversee affectively the delivery of these very important services.

Adler and Stewart 2010 cited in Rose (2018) state that "interest in health disparities has grown geometrically over the past 20 years." One main reason for this is the persistence of health disparities particularly in the developing nations of the world despite improvements in medical care, and public health prevention initiatives; and the 1978 Alma-Ata Declaration which emphasized the importance of providing primary health care for everyone in the developing countries and the need for strong

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community participation in achieving that goal (World Health Organization, 1998).

Despite the good intention of the Nigerian government, there have been numerous issues, such as poor staffing, inadequate equipment, uneven distribution of health workers, poor quality of health care services, poor conditions of infrastructure, and lack of essential drugs, that have led to the inability to provide essential health care services to the people at the community base level (Aregbeshola and Khan, 2017). In addition to this is the local governments' weak technical capacity (Aigbiremolen et al., 2014). Other areas of problems which affect the efficient management of PHC include inadequate supply of transportation for workers to get to the rural areas to perform their duties; and more important, a clear political commitment to health for all and to equity in all sectors which is essential to address the existing inequities in the provision of health care (Abdulraheem et al., 2012).

Rose (2018), cites the U.S. Department of Health and Human Services 2002 definition of health disparities as "the 'differences in [the] incidence, prevalence, morbidity, mortality and burden of diseases and other adverse health conditions that exist among specific population groups' ……." In their observation of some groups of nomads – that is, individuals who live in rural communities in Northern Nigeria, Abdulraheem *et al*. (2012) claim that the health and health-related problems of nomads, migrant farmers and rural people are many. This arguably can be attributed to geographic isolation, lower socioeconomic status, and broad general health beliefs which put them at a disadvantage and therefore lack of access to care. Additionally, there is what one can call the lack of cultural and linguistic appropriate services, which Rose (2018) defines as "standards designed to address the inequities that exist in the provision of health care and to make services more responsive to the individual needs, on a cultural and linguistic basis, of patients/consumers/clients served"; and the rural health workers' ability to respond satisfactorily to identified health problems. Hence, most of the services rendered lack community linkage and because of that, most members of those communities lack knowledge of services available to them. In general, nomadic people, particularly their women and children, who live in the northern part of the country, are the most underserved and chronically neglected segment in rural areas (Abdulraheem et al., 2012).

Health Resources

The supply of health personnel in Nigeria is extremely inadequate. The supply of physicians – numbered 55,376 (3.66/10,000) (WHO, 2010) while low by comparison to other countries like South Africa and Morocco (CIA, 2009), their distribution is characterized by great concentration in large cities like Lagos, the country's center of commerce, Abuja, the federal capital and other larger cities. Physicians who work in the government services – about half of the total - work mainly in hospitals; and that includes teaching hospitals. Other clinical settings including health centers, health posts, and public facilities for ambulatory care are staffed mainly by nurses and trained midwives – 224, 943 (14.9/10,000) (WHO, 2010), and various types of auxiliary health personnel, many of who work in rural areas. There are more trained midwives than there are registered nurses. There are 13,199, a ratio of 0.87 per 10,000 licensed pharmacists (WHO, 2009) of which only 2,051 (0.13 per 10,000) work in the public sector (Nigeria-Pharmaceutical Country Profile, 2011). Most pharmacists who work predominantly in private pharmacies are located in large cities. In addition to licensed pharmacists, there are 5,483 (0.36 per 10,000) pharmaceutical technicians and assistants in all sectors (WHO, 2009).

Of the 74,047 hospital beds (government and private); 19,995 primary health care units and centers, most are in the southern region (WHO, 2010; National Primary Healthcare Development Agency, 2009; Nigeria-Pharmaceutical Country Profile, 2011). Also, the public health sector health staff is concentrated in urban areas. Consequently, the health needs of the rural population – including the elderly population, where most of the poor live, are less well served.

Rural health has been of a concern and a challenge for the government and healthcare workers. For instance, the elderly who live alone, especially in the

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rural areas suffer from low socioeconomic status, low health literacy rates, declining cognitive and physical health and lack of health care facilities. The health status of this population is impacted by rural cultural and social values, health care policy and low funding affecting rural health care facilities including district hospitals, distance, lack of transportation, and shortage of doctors. To improve on low health literacy and consumers' awareness and community involvement, the federal government in its National Health Promotion Policy, called for designing communication programs and building capacity in basic communication skills, development strategies to increase consumers' knowledge and awareness of personal obligation to better health, their rights to quality care and information on health (Federal Ministry of Health, 2006). This could ultimately lead them to gain some social power.

Healthcare Financing System and Revenue Collections

An understanding of how health care is paid for is useful for developing an understanding of the overall organization of health care in Nigeria. In explaining how the Nigerian health care financing system operates, Olakunde (2012) states that "health care in Nigeria is financed by tax revenues, out-of-pocket payments, donor funding, and health insurance – (social and community)." It is because of poor economic conditions and meager government revenues allocated to healthcare services that public healthcare financing policy calls for collection of fees for out-of-pocket payment for services in all government hospitals. Larger fees are charged in both mission hospitals and in other voluntary, non-profit hospitals. In the private (proprietary) hospitals, most of which are located in urban centers, the patient must pay full costs upfront. Thus, only the most affluent families and those with the ability to pay, have access-related factors such as insurance status, which Rose (2018) considers as the same, or perhaps with the help of family members, are served. This kind of problem can lead to lack of seeking health care. In some cases, financially indigent people simply forgo seeking medical care for even emergency or life-threatening conditions because they know that they will not be able to pay the charges. Thus, populations at risk for increased morbidity and mortality are least likely to receive preventative health care services because of financial and non-financial barriers. Circumstances such as this could potentially push people deeper into poverty and result to devising means such as selling off assets or incurring more debts at time of medical emergency.

Disparities such as this which exist in clinical settings, including public and private hospitals, teaching and nonteaching hospitals, further worsen the plight of the poor. This ultimately results in a great variation in health outcomes across regions and communities. Hospitals, especially those that are privately operated, and physicians are responding (rationally) to the financial incentives for providing more services under fee-for-service financing. Because the private providers get paid for each service in a fee-for-service scheme, offering more services has become the more desirable option (Roemer, 1991).

It is here that traditional practitioners or herbalists come in. These native "doctors" are widely available in rural areas as well as in some shanty slum neighborhoods of urban areas. These indigenous practitioners are usually members of the culture and therefore follow traditional practices. Today, they often mix elements of Western biomedicine and other traditional system (Merson *et al*., 2012). In some instances, as Roemer asserted, some poor people who cannot afford the small fees charged for government health facility services consider such services being no more effective than care by a traditional healer. In his work on entrepreneurial health system of Ghana, a West African country that has similar characteristics as Nigeria, Roemer (1991), stated that these traditional practitioners or herbalists, while they are wide spread " 'serve for the most part as adjunct to modern health care and not as an exclusive alternative.' "

Practical Implications

Before addressing the practical implications, it is important to emphasize that this study did not address the issues of social determinants of health because the factors that lead to general health improvement – improvements in the environment,

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good sanitation and clean water, better nutrition, higher levels of immunization, good housing – do not always translate into reduced health disparities, because the determinants of good health at the individual level are not necessarily the same as the determinants of disparities in patterns of health at population level (Merson *et al*., 2012). It is therefore, important that Nigeria policymakers understand that, and be able to distinguish between the causes of health improvement and the causes of health disparities. It is noted in this work how different groups respond differently to health initiatives.

As the current trends in health disparities continue, it is important for decision makers to consider comprehensive interventions that address the differences in the population's health because the ways in which health damaging effects operate (Merson *et al*. 2012), need to be specified in any interventions. Therefore, understanding the reasons behind these forces will help policy makers and health professionals design the most effective strategies for reducing disparities.

Although the declared principles of the United Nations and UNICEF are far from being fully implemented, they remain as inspirational goals. "Health for All by the year 2000" was less important as an explicit objective than as an affirmation of the crucial principle of equity in the development of health systems, and the many other conditions contributing to health (Roemer, 1991).

Given that not much research study has been done on this topic in Nigeria, this work hopeful would stimulate interest in a more focused research, including longitudinal study to help better understand the dept of the problem and the underlying causes of health disparities in the country, and to start a discussion about the challenges and opportunities to improve the health and health care of all Nigerians.

Recommendations for Action by the Primary Health Care Community

As stated previously, the main goal of the National Health Policy is to help all Nigerians lead socially and economically productive lives and, the way to do that is through Primary Health Care system (World Bank, 1994). Because health disparities negatively affect groups of people who have systematically experienced greater social or economic obstacles to health, the primary health care community should assist in defining clearly the role of the government about health and the strengthening of the role of the federal, state, and local health agencies. A stronger government health system which ensures the provision of essential primary care services to promote and protect the health of the community will result in improved health and cost efficiency across the nation.

The federal government's role should include the provision of leadership, technical assistance, and funds for the nation; create national standards as needed and a national framework for their implementation; ensure precise data collection and analysis; monitoring, surveillance, engage in research and epidemiological studies and periodically reporting to the proper channels (CDC, 2011).

While national funding can provide resources necessary for improving the public's health as well as assurance of equity across all the states, federal funding programs are competitive and not readily available to all communities. Therefore, reliance on such government financing has sometimes left primary health care agencies with insufficient resources to deal with health threats. Broader long-term funding, such as a general operations budget, will be necessary at all levels to provide the primary health care system with ongoing capacity to monitor and respond to anticipated emerging health problems. Stable funding is necessary and one way of ensuring stable funding could be by requiring states to devise some schemes that will not put unnecessary burden on the poor to raising revenues that could help pay for services to support the provision of primary health care.

State governments have carried a major responsibility for governmental health activities that varies from state to state (Gupta *et al*., 2004). They range from coordinating small agencies in the rural local government areas. The relationship between local agencies and their state agencies is complementary and varies widely. The local

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government areas' scope remains the point of service for most primary health care programs and functions. Therefore, one of the strategies public health officials could attempt to address the problem of health disparities because of geographic location, poverty, and lack of insurance is the establishment of mobile Remote Area Medical (RAM) clinics. At this kind of clinic, families with little or no health insurance, or money queue up to receive free health care from professionals like primary care doctors, nurses, midwives, and other health workers (Donatelle, 2013).

Federal, state, and local health agencies should define standards for primary health care system that will improve the overall health of the population and provide strategies for achieving greater health system efficiency and effectiveness; promote the most efficient methods of primary health care action based on the political and health traditions of each particular state or locality; have a specific role in monitoring health effects and advising policymakers on the effectiveness of programs in meeting health objectives; develop innovative and effective primary health care programs supported by research-driven questions that are directly applicable to meeting primary health care needs and by evaluation studies which provide support for program planning and quality improvement, and the identification of gaps in primary health care access.

New ways of making policy and of organizing the purchase and delivery of personal health care should be considered, and primary health care officials should have a role in developing them to ensure health promotion and prevention. This will require a centralized role in the allocation of capital resources and in ensuring the adequacy of the primary care infrastructure and the distribution of adequate primary care personnel to currently underserved areas.

State and local primary care agencies should collaborate with providers and consumers of primary health care and with community organizations, tribal leaders and chiefs representing ethnic and other minorities, women, and other vulnerable groups to ensure that appropriate and culturally sensitive health plans and health care delivery meet the populations' needs. Local government area health agencies must define standards to assure that high quality services are provided to all populations and encourage a phased redistribution of available resources to intended targets in a timely manner.

Because some of these disparities can be altered by universal and targeted interventions that might be effective in reducing disparities, a federal law that requires all publicly funded hospitals, including teaching hospitals, to provide care to anyone with a life-threatening condition or injuries, or a condition causing severe pain irrespective of income or ability to pay, should be made the law of the land.

Conclusion

This paper focused on health disparities and health care disparities by explaining the difference between the terms toward different population groups in rural and urban areas and in different regions of Nigeria. The areas that were explored include overall health care sector performance, socioeconomic status, poverty, the geography of health disparities which the data presented in this work reinforce, access to quality health care services, government health care providers that serve in both rural and urban areas. Consideration of changes in the health care system in Nigeria will include strengthening consumer participation requirement and the power structure. Socio-cultural factors influencing patient interaction with the system of care are discussed. The paper touched upon the cultural and socioeconomic environment that affect poor pregnant women and their access to and use of health services. Rural uneducated women, particularly those who live in northern Nigeria, are at a greater disadvantaged social position which is often related to low status and economic value placed on familiar roles which help perpetuate poor health, poor diet, early and frequent pregnancy (Tinker *et al*., 1994).

The government-sponsored health insurance for the general population introduced in 2005 and is available only to federal employees and their dependents at this time, is considered substandard at best (Mohammed *et al*., 2013). However, many Nigerians, particularly the most vulnerable segments of the population who are not eligible for this

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program face severely restricted access to basic health care because of being uninsured. They lack any form of insurance or financial means to assist in paying for needed care. Public health could help address some of these issues through outreach, health education and health promotion, transportation and translation services, and culturally sensitive provision of health services.

Barr (2014) in illustrating the problem of not having health insurance, cites a United States government research literature about the health effects of going without health insurance that states " 'The uninsured are more likely to die early and have poor health status…. The insured report more problems getting care, are diagnosed at later disease stages, and get less therapeutic care. They are sicker when hospitalized and more likely to die during their stay.' "

As noted previously, one of the barriers to not having health insurance is poverty or unemployment. Added to this dilemma is the fact that poor health and lack of financial resources may both be barriers to educational progress. Health disparities because of economic barriers to obtaining needed health care fall disproportionately on those in low SES class as well as on some minority ethnic groups. If the government of Nigeria is to fulfill the mandate of the Universal Declaration of Human Rights (U.N., 1948, Article 25.1), the country will need to take measures to ensure that all its people have access to a basic level of quality health care that includes treatment of chronic conditions as well as emergency conditions. For this to happen, the government should move to more targeted investments and action to increase coverage and equity of services across all states, so that one's health does not suffer because of one's place of residence, to a consistent commitment to health, and to empower communities to make healthy choices.

While all this may not be an easy task because Nigeria is a resource-limited country, the situation demands a compelling need to develop some strategies to guide meaningful interventions that might help lessen disparities in health and health care. Until this happen, there will be little chance of attaining a true reduction in health disparities that is a significant problem in the country.

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