Lapai Journal of Economics; Volume 3, No.2; 2019
Print ISSN: 2659-028X
Online ISSN: 2659-0271
Published by Department of Economics, IBB University Lapai, Niger State, Nigeria

Human Resources for Health (HRH) in Sub-Saharan Africa: Issues, Challenges and Possible Solutions

Saheed Akinmayọwa Lawal

Department of Sociology, Olabisi Onabanjo University, Ago-Iwoye, Nigeria

Correspondence Email: akinmayowa.lawal@oouagoiwoye.edu.ng or sakinlawal@gmail.com

Abstract
Across Sub-Saharan Africa (SSA), shortage of health workers is persistent. That is, the region's human resources for health are not enough. Across the SSA region, health systems are weak, and this affects both the structures and the agents of health care. Although several studies have shown that the human resource for health (HRH) challenge affects Africa mostly amongst other continents of the world, however, possible solutions lie within the SSA region itself. This paper examines human resources for health challenges in SSA with examples from Nigeria, Uganda, and South Africa. These countries share similar human resources for health challenges with other countries in the region. The paper highlights existing social and structural determinants of health and how it affects the lives of Africans. It also argues using a resilient health system framework and the need for public-private partnerships for health as alternative to proffer useful solutions to the human resources for health challenges. The paper concludes that to address the human resource for health challenges in SSA, these alternative solutions can be used to strengthen the health systems of countries and improve health care delivery across the region.

Keywords: Human Resources for Health, SSA, Structures Of Health, Agency of Health, Africa
JEL Classification: I11, I18, O15, P36

1. Introduction

In sub-Saharan Africa, there exist several challenges which affect effective and efficient delivery of healthcare services. These challenges range from social to economic, from cultural to structural, from political to religious and from natural resources to human resources. Human resources for health challenge continue to persist in the health sector of many African countries. This challenge has been shown to affect healthcare quality and health systems performance. Also, the human resource for health problem in SSA undermines optimum population health and the ability of many governments to achieve universally agreed sustainable development goals that relate to health. That is, come 2030, if the existing challenges are not adequately addressed, SSA may not achieve the SDG's goal on health. Although the SSA region is facing other challenges that impede development, the human resource for health challenge remains one of the most daunting. A large number of physicians leave Africa when they complete the medical degree to other parts of the developed world in search of a career (Hagopian, Thompson, Fordcye, Johnson and Hart, 2004). Across the continent, there is a deficit in the number of both doctors and nurses and midwives causing a critical shortage of health care workers (Naicker, Plange-Rhule, Tutt and

Eastwood, 2009). The continent has only 3% of the worlds health workforce (WHO, 2006), while in Kenya a recent study showed that the shortage of health workforce is likely to affect the country's attainment of the Sustainable Development Goals (SDGs) of 2030 (Miseda, Were, Murianki, Mutuku and Mutwiwa, 2017). Hence, the inadequate human resource for health across Africa has been shown to affect health service delivery, universal health coverage, primary, secondary and tertiary health care services of many countries. Hence, the human resource for health challenge is real and also it affects health interventions that have been introduced into the continent to strengthen Africa's health system.

Addressing the human resource for health challenge in societies of SSA region as argued in this paper requires adopting other perspectives such as public-private partnership (PPP) for health which has worked in Europe (Roehrich, Lewis and George, 2014). To build Africa's human resources for health, the PPP initiative can be incorporated into health systems of various countries on the continent. This paper further argues that increased public-private partnership, based on its advantages, can be used to address the HRH challenge. Therefore, revitalising health systems in many African countries is required to adopt new models for health care delivery more so, by putting the health work force into consideration. Using a resilient health system framework approach, the paper states that Africa must begin to train its workforce to be *aware, diverse, self-regulated, integrated and adaptive* to their immediate environment. These two approaches as stated in next section of the paper can be used to advance the existing *structures of health* and the performance of *actors of health* across the SSA region.

2. Literature Review

2.1 Human Resources for Health: A Global Overview

Globally, health workers are vital for the holistic development of a country's health system, because health workers remain important to health system. These human resources cut across the broad spectrum of health service delivery from the primary level to the secondary unto the tertiary level of healthcare. Human resources for health are defined as "all people engaged in actions whose primary intent is to enhance health" (WHO, 2006: 1). For example, in the United Kingdom, 1.3 million people make up the National Health Service (NHS) workforce.

In other parts of the developed world (global north), human resources for health challenge is minimal when compared to what exists in the global south. Better working conditions are readily available to health care workers in the global north compared to their counterparts in the global south. In USA for example, the health system is formed and run based on a capitalist model with health insurance companies actively engaged in the business of health care delivery. They charge customers to contribute a certain fee and pay out all health care costs. The health system in the US operates a single-payer system centered on the principles of a free market economy which allows for high level of competition and cost for the delivery of care. Yet, health workers from SSA remain attracted to the American health system and migrate to work in it (Hagopian, et al, 2004; Cometto, Tulenko, Muula and Krech, 2013).

Table 1: Differences and similarities in the human resources for health

Indicators	Global North (High Income Countries)	Global South (Low and Middle Income Countries)
Remuneration	High/Sufficient	Low/Not sufficient
Staff Welfare	High priority	Low priority
Work environment	Conducive/Bureaucratic	Not-conducive/Fairly bureaucratic
Health insurance	Available to workers	Available to health workers
Safety at work	Guaranteed/High priority	Fairly guaranteed/average priority
Doctor to patient ratio	E.g. 2.8 (United Kingdom)	E.g. 0.1 (Zimbabwe) (World Bank, 2016)
Professional development	Given priority	Given priority

Source: Author, 2019

But in countries like Germany, all Germans and permanent residents are entitled to health care. That is, the model of health care delivery is hinged on its national social health insurance system. Based on this model, the state assumes core responsibility of health care delivery to its citizens, but private medical care still persists. In such a model, health care delivery is subsidized to the country's citizenry and their ability to afford it is supported by the state. Irrespective of the model of health care delivery in the global north, the human resources for health in these countries are well catered for when compared to the global south. That is, the challenges facing human resources for health are minimal as workers are guaranteed a regular salary and better working condition unlike their counterparts in the global south (Cometto, *et al.*, 2013).

Human resources of health remain a fundamental aspect for effective global health care delivery. According to the World Health Organization (WHO), the challenge of human resources for health affects mostly countries of the global south and this limits their chances of reducing maternal and child deaths, improving quality of care, and possess the ability to combat infectious diseases by providing vital life-saving interventions (WHO, 2006; Chen, Evans, Anand, Boufford, Brown, Chowdhury, et al, 2004; Narasimhan, Brown, Pablos-Mendez, Adams, Dussault, Elzinga, et al., 2004). More so, to attain global development initiatives aimed at making health available to all persons irrespective of where they live or work, Africa must address its human resources for health challenge.

2.1.1 Human Resources for Health in Africa

There are several works on HRH in Africa (Lucas, 2005; Kabene, Ocrhard, Howard, Soriano and Leduc, 2006; Mills, Kanters, Hagopian, Bansback, Nachega, Alberton et al, 2011) highlight poor skill mix and low investment in health as among the existing challenges affecting Africa. Although HRH in Africa are a small fraction of the total population of the continent's workforce,

they make up a significant proportion of workers because of the sensitivity of their role in their respective countries. According to Anyangwe and Mtonga (2007), the average density of health workforce in Africa is 0.8 to 1000. When compared to that of Asia, Europe or North America, huge disparities exist in terms of doctor to patient ratio or nurse to patient's ratio. In the United Kingdom, the ratio of doctor to patient is 2.8, while in Zimbabwe; the doctor to patient ratio is 0.1. Such disparities continue to persist as this shows the poor state of HRH in Africa.

According to the WHO African region, HRH challenge is enormous due to pressure in training and staff development, health care management, use of health workers and proper motivation for them to remain committed to work in their countries (Nyoni, Gbary, Awases, Ndecki and Chatora, 2006; Kumar, 2007). This is because of several factors which include lack of political will to increase health spending in different countries which affects HRH. As such, Africa is lacking in sufficient manpower which constitutes human resources for health. Beyond these, structural, conflict and environmental factors also determine the nature and availability of health workers. However, the challenge limits the performance of the health systems in Africa. This also affects the composition of emerging markets capitalization in the health sector leading to low investments and reduced private engagements in the sector. The human resources of health challenge in emerging markets of Africa still persist till today. But inherent in these emerging markets are the prospects that are available to build the health sector. The HRH shortage in Nigeria, Uganda and South Africa are examined below.

2.1.2 Human Resources for Health Challenge in Uganda

In Uganda, this HRH challenge affects delivery of health care services across several districts. Uganda has a serious shortage of 1.55 health workers per 1,000 people as against the WHO recommendation of 2.28 workers per 1,000 people (Ugandan Ministry of Health, 2015). Health workers shortage has been reported in some studies as the country faces the challenge of retaining its health workforce (Ramadhan, 2015; Namakula, Witter and Ssengooba, 2014). This shortage adds the continuity burden of disease being high as the number of registered doctors and nurses is few to meet with the country's population. In rural Uganda, the health ministry reports that even where health workers are available they intend to migrate to the urban areas for better opportunities especially for their career development. This affects the performance of the Ugandan health system which relies on foreign assistance to complete its annual budget. As a form of incentive, an allowance for lunch was added as part of the benefits for the workers (Kumar, 2007) in order to remedy the shortage of health workers and reduce brain drain within the country. Job satisfaction remains low and this affects health workforce in Uganda, while task shifting has been introduced into the Ugandan health system as a way to address the shortage of HRH (Hagopian, Zuyderduin, Kyobutungi, and Yumkella, 2009; baine and Kasangaki, 2014).

2.1.3 Human Resources for Health Challenge in Nigeria

According to Lawal (2014), shortage of health workers in emerging communities and urban slums of south west Nigeria, affects performance of the health facilities. He stated that "health facilities in these communities do not have the required amount of manpower to attend to the large population of people that reside within these communities" (Lawal, 2014:212). In developing countries such as Nigeria, shortage of health workers have been found to affect the performance of health facilities (Hongoro and Normand, 2006). This shortage of health workers

remain a challenge facing health systems in developing countries (Ezeonwu, 2013; Awofeso, 2010). Studies have shown that there exists a shortfall of healthcare workers stationed in rural areas worldwide (Hamilton and Yau, 2004; Grobler, Marais, Mabunda, Marindi, Reuter, and Volmink, 2009), due to their preference to work in urban areas (Awofeso, 2010). In addition, shortage of health workers in informal settlements is also high (Ziraba, Mills, Madise, Saliku, and Fotso, 2009; Mutua, Kimani-Murage, and Ettarh, 2011) thereby affecting performance of health facilities. Human resources for health challenge are evident in Nigeria such that health facilities do not have enough staff to work and provide health services to patients. For those presently working in these facilities, they suffer from stress and exhaustion due to work overload. Lawal (2014) reported that health workers tend to work overtime by assisting their colleagues on duty. According to some public health officer interviewed in his study, working overtime is a regular occurrence as other colleagues too may be expected to do the same even when they are not on duty. All these are major HRH challenge facing the Nigerian health system.

2.1.4 Human Resources for Health Challenge in South Africa

Human resources for health are vital to deliver effective health care services in South Africa which has a high rate of HIV/AIDS (Rawat, 2012). But the continued strain as a result of the shortage of healthcare professionals affects the quality of delivery patients receive; and this affects performance of the health facilities and health system in South Africa. This shortage is attributed to several factors which include lack of qualified health personnel suitable for employment or poor structuring that exists within health systems such that health facilities in urban areas have more health workers compared to facilities in informal settlements and rural areas in South Africa. The influx of health workers from rural areas to urban areas is a common phenomenon in developing countries such that health facilities in informal settlements are left with few workers to attend to large population of people within the communities (Awofeso, 2010; Couper and Hugo, 2014). In addition, shortage of health workers within SSA affects performance of health facilities because they are unable to run 24 hours services to the communities they serve. Instead, health workers are only available to attend to people during the day.

2.1.5 Human Resources for Health as a Challenge in Emerging Markets of Africa

Across the continent of Africa in the past decade, various forms of venture capitalist, small and medium scale enterprises and entrepreneurs have emerged (Akuri, Bagah, and Wulifan, 2015). This has tremendously contributed to the growth of the private sector and has attracted foreign direct investments. According to McKinsey & Company, Africa has a lot of potential for growth which is different across countries. These potentials are enormous. However, emerging markets in Africa are being projected to contribute significantly to the world economy in the coming years. The IMF projects global growth especially in developing economies and emerging markets which include those of Africa. But the contribution from the health sector of many African countries has had little positive effect on the economic indices that are being projected. Because many challenges affect the health sector of African economies, there is continued reduction in its human resources for health which is vital for the growth and development of health in African.

In Africa, the human resources of health challenge is real and its impact is felt on every other sector of the economy. Without a health workforce, the capacity for economic growth is inhibited to a great extent. This challenge is one of the many that are evident in the health sector, but the

human resource challenge is peculiar because of its immediate and direct impact on market structure of emerging economies. The human resources for health challenge is not peculiar to the African continent as countries in South East Asia also experience some challenges similar to that of Africa. But the African challenge is mainly attributed to its low budgetary allocation for health spending which still falls below the WHO recommendation and the high reliance on government to fund the health sector. This, in turn, leads to inability of many governments to properly finance the health sector. More so, because a large amount of human resources for health in Africa is under government employment, the challenge continues to persist. This negative effect it portrays on the economy and markets of many Africa countries is enormous.

Table 2: Budgetary allocation for health in selected African countries

S/N	Country	Health Budget
1	Nigeria	4.16% (2017); 4.23% (2016) of total budget
2	Sierra Leone	5.1% (2015);
3	Uganda	6.9% (2015/2016); 9.0% (2016/2017). But note that over 70% of health spending is external (donors and grants)

Furthermore, human resources for health challenge in Africa is caused by poor leadership/governance for health amongst other factors which leads to weak performance of health systems (Uneke, Ezeoha, Ndukwe, Oyibo and Onwe, 2012). But the implication of the human resource challenge is present in other sectors of the economy. In many SSA countries, the presence of human resources for health challenge will lead to poor outcomes in preventive, curative and rehabilitative health services. This will in turn affect the manufacturing and service industries in the economy. In African emerging markets, the challenge of human resources for health can be addressed. This paper suggests some solutions such as use of resilient health systems framework approach. But an understanding of the social and structural determinants of human resources for health is essential.

2.2 Social and Structural Determinants of Human Resources for Health

2.2.1 Social Determinants

Both social and structural determinants of health define the health outcomes of people globally. Irrespective of the country, social determinants of health may include economic, cultural, religious, political, agricultural, environmental, etc. According to the WHO (2008: 1) social determinants of health (SDH) are thus:

> *"The poor health of the poor, the social gradient in health within countries, and the marked health inequities between countries are caused by the unequal distribution of power, income, goods, and services, globally and nationally, the consequent unfairness in the immediate, visible circumstances of people's lives; their access to health care, schools, and education, their conditions of work*

> *and leisure, their homes, communities, towns, or cities, and their chances of leading a flourishing life".*

To a large extent, these SDH play a major role in shaping the health status of people. Combined both are parameters that can explain whether or not people will stay healthy at all times because it affects their ability to access and utilise health services even where available. More so, both determinants of health have to do with the components of the social structure of any given country and how these in turn shape the health realities of the people. Although the social and structural determinants of health may appear similar in some ways, they differ because the SDH are centred around the individual, community, and political economy of health, while the structural determinants of health have to do with the available health resources for the people based on the structural component of the health system. That is, the system of health care delivery being determined as centralised or decentralised and the number of healthcare providers either public or private and the roles they play.

*2.2.**2** Structural Determinants*

Social and structural determinants of health affect human resources for health in Africa because both are macro determinants which define the composition of health workers available to partake in a given health system. Human resources for health are borne from diverse cultural background in any given country; they have different religious and political views, and are beneficiaries of the agricultural and legal policies of their environment and are simply built on economics and availability of financial resources in a country. Hence, both social and structural determinants influence the structure of health workforce in Africa. But some of the main tenets of structural determinants of health include: health policy; health structure (public providers, private providers, mixed providers, faith-based providers or traditional providers); health ministries (federal, state and local/district level); health leadership and governance, health information system; and health financing mechanism. All these form the major structural determinants of health based on the health system of a given country. In Nigeria, for example, the structural determinants of health begin from her National Health Policy which was first implemented in 1984, revised in 2004. Now in 2016, the country presented yet another health policy. In addition, the National Strategic Health Development Plan which was implemented in 2009 is another remarkable policy documented by the Nigerian government. The National Health Act is a bill which was passed into law in 2014 but yet to be fully implemented as a key national document to direct health care in Nigeria. In terms of the country's structure for health, these documents direct and guide how health care will be distributed and implemented across all regions. The Federal, state and local ministries of health are another important part of the structures of health in Nigeria and these governments aim to implement the national policy by carrying out various public health related activities to promote good health for Nigerians. The Ministries of health have their presence in all the 774 local government areas in Nigeria. Providers of health care services are also a key part of the structures of health. Both public and private operators function in Nigeria to provide health care delivery services to the people across various communities (Welcome, 2011; Innocent, Uche, Uche, 2014). According to Lawal (2014), the public and private health providers are widely available in emerging communities and urban slums of south west Nigeria as well as across urban and rural areas of the country. Besides the providers of health care delivery being an institutional structure (structural determinant), the health financing model and

leadership/governance structure for health are also core aspects of the structural determinants of health in Nigeria.

3. A Resilient Health System Framework Approach to Address Human Resources for Health Crisis in Africa

As proposed by Kruk, Myers, Varpilah and Dahn (2015:1910), "health system resilience can be defined as the capacity of health actors, institutions, and populations to prepare for and effectively respond to crises; maintain core functions when a crisis hits; and, informed by lessons learned during the crisis, reorganise if conditions require it". That is, such a health system can be designed to offer both preventive and curative health services to the people. Drawing from this framework, its key elements (*Aware, Diverse, Self-regulating, Integrated and Adaptive*) can be used to train, re-train and retain health workers in Africa. These elements are currently being applied to strengthen the Liberia health system to improve its performance and health service delivery to the people.

Although the challenge of human resources for health is not peculiar to only one emerging market in Africa, but too many of them, the elements of the framework can be incorporated into the health systems of many countries to improve on the lapses of its human resources for health. ***Aware***: while health workers undergo training, they must become aware of the role they play as key actors in solving the health crisis in Africa. Health workers across all cadres must become aware of both challenges already in existence, future damage their inefficiency will cause to health system and why their role in providing effective and efficient health care delivery is vital. Awareness is crucial for human resources for health to become more self-conscious of the public health realities which affect Africa. In addition, heightened awareness is required by government on why a non-functional and ill-funded health system is detrimental to the development of many emerging markets in Africa. More so, governments at all levels in African countries must become aware that health is a fundamental human right and an essential component to building sustainable economies of the 21st century.

Diverse: Diversity has always been a trend in health care delivery in Africa because the continent's health workforce cuts across a wide spectrum of ethnic nationalities. Despite this diversity in population and ethnic background, there is a huge lack of diversity in human resource skills required to improve health services in Africa. In complex situations many Africans require skill to treat chronic conditions and some non-communicable diseases, which are not available because both human and adequate material resources for treatment are unavailable. In terms of diversity, there is need for structural diversity such that specialised health care services are made available in every region of any given African country. That is, such services are not limited to one region or mainly available in urban centres. But diversity in terms of availability of specialised care such as treatment for heart infections or complications. More so, there is need for more diversity in mode of training for health care workers. Such diversity must be reflected in the composition of teaching hospitals, faculties of medicine, public health, pharmacy, social medicine, etc. Having a diverse and cosmopolitan faculty for training of Africa's essential human resources for health is crucial to address the ongoing challenges. Furthermore, cross fertilisation and training of health care workers in better equipped countries of Africa must be widely

encouraged. This will enable countries learn from one another and benefit from the progress being made in other countries.

Self-regulating: ability of a health system to self-regulate itself to a state of optimal performance after a crisis is important. But at a micro level where human resources for health are involved, health workers must become self-regulated in the way they carry out their duties. Self-regulated health workers are (a) able to anticipate a crisis even before it occurs, (b) can proffer innovative solutions to tackle such health crisis, (c) are able to mobilise the needed resources to tackle health challenges (d) can function in different environments other than their familiar social space and (e) are more committed to the improvement of the national state of health care delivery.

Integrated: human resources for health challenge in Africa can be tackled from health workers' integration. There exist too many national bodies and associations with everyone concerned on addressing specific issues with little or no synergy. As such members of such associations are mainly committed to their associations than the entire health system. Therefore, there is need for a system wide integration whereby members of different health associations make up members of the national working committee of the Federal Ministry of Health. Such an integrating programme for Africa's health workforce will further promote a collective consciousness towards the existing health policies and declarations aimed at improving health conditions of Africans.

Adaptive: Ability to adapt to change in a society is important for health workers. People must be properly trained and re-trained to be able to adapt to system-wide macro changes in the society. That is, changes that goes beyond the health sector. Adaptability of human organisms is vital for their survival and continued existence. Therefore, such adaptability is required for health workers such that when posted to work in different parts of their country, they are able to function and perform their duties. On the other hand, African countries can focus their human resources for health to become decentralised such that in the local communities where people live, they can also work as health personnel. Such has been documented in other parts of the world where community health workers on certain projects are simply members of those communities (Okonkwo, Osibogun and Onwuasiogwe, 2002; Islam, Wakai, Ishikawa, Chowdury, Vaughan, 2002; Olivier, Geniets, Winters, Rega and Mbae, 2015). Such a strategy has been shown to have improved health outcomes of people within a community. The national adaptive capacity of human resources for health is essential to improve health services in emerging markets of Africa.

4. Public-private partnership and human resources for health in Africa

Public-private partnership for health has shown positive contribution to health systems development globally. According to Roehrich, Lewis and George (2014) "governments around the world, especially in Europe, have increasingly used private sector involvement in developing, financing and providing public health infrastructure and service delivery through public–private partnerships (PPPs)". More recently, public-private partnership collaboration was initiated to tackle the scourge of Ebola in West Africa. The public-private partnership model for health care has been used to address different types of challenges in society beyond healthcare. The public-private partnership model for health has been in operation over the years "for health across many countries and all national income levels". This led to drastic reduction in the spread and improvement in health care delivery. This model for health care delivery has proved to be more effective than a single model of healthcare and it's not a new occurrence in global health care

delivery. The benefit of this model has been shown to be phenomenal in tackling diseases. It is therefore necessary to harness the advantages of this model to tackle HRH challenge in Africa.

Public-private partnership for health can be executed in Africa through the following ways:

Recruitment of health workforce: The combined effort of public and private sectors can be used to recruit health care workers. For example, where private organisations are located within urban and rural areas of Africa, these organisations can also direct their corporate social responsibilities to improve health care delivery. Private organisations can work with local government districts department in-charge of public health to support and provide the required capacity to recruit competent health care workers within and outside those communities in which they work.

Training of health workforce: The continuing education and training of health workforce in Africa is essential to strengthen their capacity to deliver. Through public and private partnerships for health, government and the organised private sector can engage in training of health care workers based on a national guideline for health workforce development in Africa.

Remuneration of health workforce: Payment of salaries and benefits of health workers remains a daunting challenge for many African governments. But with private sector engagement in health funding as a way of corporate social responsibility will support the prompt payment of workers' salaries. This is simply based on government giving private organisation certain tax cuts and rebates to enable them support with the payment of health workers in Africa.

Provision of a favourable work environment: To better perform in their duties, health workers who work in a convenient environment tend to perform better in carrying out their duties compared to those who do not. Therefore, there is need for both public and private sector to collaborate within communities where hospitals are located to make the work environment for healthcare workers more favourable.

Establishment of hospitals/health facilities: Availability of hospitals (public owned or privately-owned) is fundamental for effective health care delivery. Across Africa, having a functional hospital to meet health needs of the people will significantly reduce the burden of diseases.

Monitoring and evaluating performance of health facilities: Collaboration between the public-private sectors can aid the Ministries of Health to properly monitor activities of health facilities within different countries in Africa. Through "monitoring and regular process evaluation (which can be done) on a quarterly or bi-annual basis" (Lawal, 2014) is essential for effective delivery to people. That is, "when health facilities are well monitored, (African) governments will know what type of facilities are in operation" (Lawal, 2014) within different states, local government, districts and communities, what their needs are and how they can be met.

Health advocacy through mass and social media: Private radio stations and other forms of private media outlet can be used as partners for health education, literacy and advocacy. The mass media have been shown to be an effective tool for health communication whether in rural or urban areas. Therefore, across SSA both the public and private mass and social media outlets must partner to improve the flow of health information from the Ministries of Health to the people.

Provision of equipment to hospitals: Having adequate equipment is central to improving the way health workforce in Africa will deliver. Collective efforts of government and its private sector within each country can work together in equipping the various hospitals across the continent.

Health literacy, education and promotion: Health literacy programmes that are private sector led initiatives with support of government can work together to better educate, enlighten, inform, and promote better health initiatives for sub-Saharan Africans.

Subsidizing health care services: Because health care is capital intensive and expensive to manage, combined responses of the government and its private sector are needed to subsidise health care services for the people. There is need for a combined pool from both the public-private aimed at reducing cost of access to and utilisation of healthcare services *whenever* and *wherever* the need arises for people of sub-Saharan Africa. A *public-private health financing framework for poor economies* is a useful strategy that can proffer solutions and subsidise cost of health care to address the existing challenges associated with access to and utilisation of health services in Africa.

Provision of health insurance: Adequate provision of health insurance for Africans and its health workforce is pertinent to development of the health sector in Africa. Without insurance available to all Africans, people will be discouraged from utilising healthcare services even when its available to them for use.

Renewed corporate social responsibility to improve the health of communities in SSA: Because the private sector is profit oriented, companies can be encouraged to rethink their CSR policies and services. Many companies and private sector players can be encouraged to channel a huge part of their budget towards health care delivery. Because the health of a nation relies heavily on the capacity and capabilities of its health workforce, there is need for private sector players to focus and make health matters a top priority to improve the livelihood of Africans across the continent.

All these are some ways in which public-private partnerships for health can work to improve human resources for health challenge in SSA. With a focus on the first three points mentioned above, governments and private sector can work together to improve the welfare of Africans through provision of better health services hinged on an effective workforce. As a form of renewed corporate social responsibility, many private organisations can partner with government to improve the health system.

5. Revitalising Health Systems in Sub-Saharan Africa

Most SSA countries are multicultural in nature and are comprised of people from diverse ethnic groups. For example in Nigeria, there are several ethnic groups in a country of over 180 million people (Edewor, Aluko and Folarin, 2014; PRB, 2017). Such a high population needs a health system that is effective, efficient, and responsive, and can meet their health needs whenever and wherever they live or work. But in reality this is not so as the health indicators in Nigeria show that maternal mortality is 820 (per 100,000 live births), and child mortality is 113 (under 5 per 1,000), life expectancy is 52 and the country has a high burden of disease (communicable and non-communicable). Hence, there is need for health system strengthening in Nigeria and other African countries with similar health indicators.

The need to revitalise health systems in Africa is urgent as focus should be placed on both its existing structures of health and agency of health. The *structure of health* in many African countries is not well developed as health facilities are lacking and even where available its human resources for health are inadequate. This is attributed to the shortage of health workers the continent suffers and poor implementation of health policies and agreements by governments.

Most structures of health in Africa operate health policies that do not meet the realities of their various countries. Even in Nigeria, the health system is still plagued by low political will to make healthcare a top priority by past governments. Therefore, the structures of health need to be revisited to become people-centre. Such should be instituted from the primary level of care to the tertiary level of care whether the individual visits a public or private health facility.

Second, the agency of health is where human resources for health (health workforce) are placed in the social system of health care delivery. The agency of health begins from the Minister of Health in each African country through other actors in the ministry to the state ministries of health down to the local and district level. Among agents are health workforce (doctors, nurses, midwives, laboratory scientist, pharmacist, allied professionals, etc.), that make up the core of the agency of health in any country. In addition, there are technocrats and policy makers engaged in issues of health care, while consumers of health care services remain crucial to the dynamism in the composition of a country's agency of health. To revitalise agency of health, there is need for proper and effective checks and balances on activities of all actors except the final consumer. Proper supervision must be carried out at all times and to ensure that health workers remain committed to the ethics of the profession especially in a market structure where healthcare is given top priority as it is obtainable in developed countries. The revitalization of SSA health systems must be approached from an holistic perspectives such that the structure of health and the agency of health can guarantee better health outcomes and health systems performance.

6. Conclusion

The human resources for health challenge in SSA at present appear herculean. But inherent in SSA lies innovative solutions to address the health systems' challenges that have become "*public issues*" that cause "*private troubles*" for many families in SSA. As suggested in this paper, there is need for new thinking to solve human resources for health crisis to achieve better health outcomes for Africans. Despite the obvious realities and challenges facing SSA, which include that of its human resources for health, a resilient health system framework approach can offer some useful insights, and a renovated public-private partnership for health model can be beneficial as a strategy to tackle this challenge. More over this study suggests the need to revitalise the current health system in many sub-Saharan African countries.

7. Acknowledgements

Research reported in this publication was supported by the Fogarty International Center and National Institute of Mental Health, of the National Institutes of Health under Award Number D43 TW010543. The content is solely the responsibility of the author and does not necessarily represent the official views of the National Institutes of Health.

References

Akugri, M.S., Bagah, D.A, and Wulifan, J.K. (2015). The contributions of small and medium scale enterprises to economic growth: A cross-sectional study of Zebilla in the Bawku West district of Northern Ghana. *European Journal of Business and Management*, 7(9), 262-274.

Anyangwe, S.C.E., and Mtonga, C. (2007). Inequities in the global health workforce: The greatest impediment to health in sub-Saharan Africa. *International Journal of Environmental Research and Public Health*, 4(2), 93-100.

Awofeso, N. (2010). Improving health workforce recruitment and retention in rural and remote regions of Nigeria. *Rural Remote Health*, 19(1), 1319.

Baine, S.O., & Kasangaki, A. (2014). A scoping study on task shifting: the case of Uganda. *BMC Health Services Research*, 14:184.

Chen, L., Evans, T, Anand, S, Boufford, J.I, Brown, H, Chowdhury M, et al., et al. (2004). Human resources for health: overcoming the crisis. *Lancet*, 364, 1984-90

Cometto, G., Tulenko, K., Muula, A.S., & Krech, R. (2013). Health workforce brain drain: From denouncing the challenge to solving the problem. *PLoS Med* 10(9): e1001514. https://doi.org/10.1371/journal.pmed.1001514

Couper, I., & Hugo, J. (2014). Addressing the shortage of health professionals in South Africa through the development of a new cadre of health worker: the creation of Clinical Associates. *Rural and Remote Health*, 14:2874.

Edewor, P.A., Aluko, Y.A & Folarin, S.F. (2014). Manging ethnic and cultural diversity for national integration in Nigeria. *Developing Country Studies*, 4(6), 70-76.

Ezeonwu, M.B. (2013). Nursing education and workforce development: Implications for maternal health in Anambra State, Nigeria. *International Journal of Nursing and Midwifery*, 5(3), 35-45.

Grobler, L., Marais, B.J., Mabunda, S.A., Marindi, P.N., Reuter, H., & Volmink, J. (2009). Interventions for increasing the proportion of health professionals practising in rural and other underserved areas. *Cochrane Database of Systematic Reviews*, 21(1).

Hagopian, A., Thompson, M.J, Fordyce, M, Johnson, K.E, and Hart, L.G. (2004). The migration of physicians from sub-Saharan Africa to the United States of America: measures of the African brain drain. *Human Resources for Health*, 2(17). doi:10.1186/1478-4491-2-17.

Hagopian, A., Zuyderduin, A., Kyobutungi, N., & Yumkella, F. (2009). Job satisfaction and morale in the Ugandan health workforce. *Health Affairs*, 28 (5), w863–w875.

Hamilton, K., & Yau, J. (2004). The global tug-of-war for health care workers. Washington, Dc: Migration Policy Institute. Retrieved August 18th, 2013 from http://www.migrationinformation.org/Feature/print.cfm?ID=271

Hongoro, C., & Normand, C. (2006). Health workers: Building and motivating the workforce. In D.T. Jamison, J.G. Breman, A.R. Measham, G. Alleyne, M. Claeson, D.B. Evans, P. Jha, A. Mills, & P. Musgrove (Eds), *Disease control priorities in developing countries* (1309-1322). New York: World Bank & Oxford University Press.

Innocent, E.O., Uche, O.A., & Uche, I.B. (2014). Building a solid health care system in Nigeria: Challenges and prospects. *Academic Journal of Interdisciplinary Studies*, 3(6), 501-510.

Islam, M.A., Wakai, S, Ishikawa, N, Chowdury, A.M, and Vaughan, J.P (2002). Cost-effectiveness of community health workers in tuberculosis control in Bangladesh. *Bulletin of the World Health Organization*, 80(6):445-50.

Kabene, S.M., Ocrhard, C, Howard, J.M, Soriano, M.A, and Leduc, R. (2006). The importance of human resources management in health care: a global context. *Human Resources for Health*, 4 (20).

Kruk, M.E., Myers, M., Varpilah, S.T., and Dahn, B.T. (2015). What is a resilient health system? Lessons from Ebola. *The Lancet*, 385, 1910-1912.

Kumar, P. (2007). Providing the providers-remedying Africa's shortage of health care workers. *New England Journal of Medicine*, 356 (25), 2564-2567.

Lawal, S.A. (2014). *Health care delivery, access and utilisation in emerging communities and urban slums of south west Nigeria* (Unpublished doctoral dissertation). Centre for Global Health, Trinity College Dublin, Ireland.

Lucas, A.O (2005). Human resources for health in Africa. *BMJ*, 331:1037.

Mills, E.J., Kanters, S, Hagopian, A, Bansback, N, Nachega, J, Alberton, M, et al, (2011). The financial cost of doctors emigrating from sub-Saharan Africa: human capital analysis. *BMJ*, 343:d7031

Miseda, M.H., Were, S.O., Murianki, C.A., Mutuku, M.P., & Mutwiwa, S.N. (2017). The implication of the shortage of health workforce specialist on universal health coverage in Kenya. *Human Resources for Health*, 15:80. DOI 10.1186/s12960-017-0253-9.

Mutua, M.K., Kimani-Murage, E., & Ettarh, R.R. (2011). Childhood vaccination in informal urban settlements in Nairobi, Kenya: Who gets vaccinated? *BMC Public Health*, 11(6). doi:10.1186/1471-2458-11-6

Naicker, S., Plange-Rhule, J, Tutt, R.C, and Eastwood, J.B. (2009). Shortage of healthcare workers in developing countries-Africa. *Ethnicity and Disease*, (19), SI-60-SI-64.

Namakula, J., Witter, S., & Ssengooba, F. (2014). Health worker incentives during and after the conflict in Northern Uganda: A document review. A report by Rebuild Consortium. Retrieved 30th January, 2018, from https://rebuildconsortium.com/media/1013/health-worker-incentives-during-and-after-the-conflict-in-northern-uganda.pdf

Narasimhan V, Brown H, Pablos-Mendez A, Adams O, Dussault G, Elzinga G, et al. (2004). Responding to the global human resources crisis. *Lancet*; 363: 1469-72.

Nyoni, J., Gbary, A, Awases, M, Prosper Ndecki, P, and Chatora, R. (2006). Policies and plans for human resources for health guidelines for countries in the WHO African Region. Retrieved on 25th June, 2016, from http://www.who.int/workforcealliance/knowledge/toolkit/15.pdf

Okonkwo, P., Osibogun, A and Onwuasiogwe, C. (2002). Knowledge and practice of different cadres of community health workers (CHWs) as in Anambra State, Nigeria. *Nigerian Journal of Clinical Practice*, 5 (1), 37-40.

Olivier, M., Geniets, A, Winters, M, Rega, I, and Mbae, S. M. (2015) What do community health workers have to say about their work, and how can this inform improved programme design? A case study with CHWs within Kenya. *Global Health Action*, 8, 28168.

Population Reference Bureau (PRB). 2017 World Population Data Sheet. Washington DC: USA.

Ramadhan, H. (2015). Retention challenges of human resources for health: What are the alternative incentives for retention of skilled health workers in Ugandan health sector? *Medical Practice and Review*, 6(2), 16-23.

Rawat, A. (2012). Gaps and shortages in South Africa's health workforce. Africa Portal. Backgrounder, No 31. Retrieved on 30th January 2018, from https://www.africaportal.org/publications/gaps-and-shortages-in-south-africas-health-workforce/

Roehrich, J.S., Lewis, M.A., and George, G (2014). Are public–private partnerships a healthy option? A systematic literature review. *Social Science and Medicine*, 113, 110-119.

Ugandan Ministry of Health (MoH). Health Sector Development Plan, 2015/16–2019/20. Kampala: MoH.

Uneke, C.J., Ezeoha, A.E., Ndukwe, C.D., Oyibo, P.G., & Onwe, F.D. (2012). Enhancing leadership and governance competencies to strengthen health systems in Nigeria: Assessment of organisational human resources development. *Healthcare Policy*, 7(3), 73-84.

Welcome, M.O. (2011). The Nigerian health care system: Need for integrating adequate medical intelligence and surveillance systems. *Journal of Pharmacy and Bioallied Sciences*, 3(4), 470-8.

World Health Organization (WHO). (2006). The World Health Report 2006: Working Together for Health. Geneva, Switzerland: World Health Organization.

World Health Organization (WHO). (2008). Commission on Social Determinants of Health. 2008. Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health. Final Report of the Commission on Social Determinants of Health. Geneva, Switzerland: World Health Organization.

Ziraba, A.K., Mills, S., Madise, N., Saliku, T., & Fotso, J.C. (2009). The state of emergency obstetric care services in Nairobi informal settlements and environs: results from maternity health facility survey. *BMC Health Services Research*, 9(46). doi:10.1186/1472-6963-9-46