Accelerating Empowerment for Sustainable Development: The Need for Health Systems Strengthening in Sub-Saharan Africa

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Abstract Sub-Saharan Africa is lagging behind in achieving the United Nations Millennium development goals particularly those which are directly health related. Although there have been some level of commitments with improvements on many fronts; however, the divide still remains in the region where the issues of high child and maternal mortality, under nutrition, human rights violation and overall weak health systems still continue to pervade. This bothers on the poor state of health of many of its citizens which is further exacerbated by the harrowing conditions of health care delivery and the health systems in general. While the region lags behind, this doesn't give the overall global reflections as there have been tremendous achievements in health and health care. Significant strides in epidemiology, population health and health systems have addressed most of the challenges of communicable diseases and these matched with technological inputs have met the basic health needs of humans and accelerated health care delivery. More so, scientific breakthrough in agriculture has also helped to tackle the challenges of hunger and under nutrition globally. These trends in a nut shell have improved on the health and overall developmental indices of humans globally. However, sub-Saharan Africa needs to be at par with the rest of the World if the MDGs are anything to go by. It is these that necessitate the need for an accelerated empowerment to strengthen the existing weak health systems in the region.

Keywords: *accelerating, Sub-Saharan Africa, health systems, strengthening*

Cite This Article: Gold, Oyibo Patrick, and Ejughemre Ufuoma John, "Accelerating Empowerment for Sustainable Development: The Need for Health Systems Strengthening in Sub-Saharan Africa." *American Journal of Public Health Research*1, no. 7 (2013): 152-158. doi: 10.12691/ajphr-1-7-2.

1. Introduction

Sub-Saharan Africa (SSA) is at the crux of reaching the year 2015 deadline set for the achievements of the targets of the United Nations Millennium Development Goals. These goals include: eradicating extreme poverty and hunger, achieving universal primary education, promoting gender equality and empowering women, reducing child mortality rates, improving maternal health, combating HIV/AIDS and other diseases, ensuring environmental sustainability and developing a global partnership for development [1]. As it were, these are a set of eight international developmental goals intended to catalyse development, reduce global poverty and improve on the living standards of humans the world over. Of critical concern with direct bearing on health, health systems and health care delivery are goals 4, 5 and 6 (reducing child mortality rates, improving maternal health, combating HIV/AIDS and other diseases respectively).

Following the unilateral agreement by member states of the United Nations in September 2000, there has being the increased global attention to expedite action in achieving goals 4,5and 6 particularly, as well as making concerted efforts to ameliorate the harrowing state of healthcare delivery in the sub-Saharan African region. There have been significant funding to combat major health problems in sub-Saharan Africa till date [2]. However, the health and developmental indices of the region has persistently remained low as there are reports of high child and maternal mortality rates, high disease burden and poor quality of life [3]. On the average, the overall life expectancy at birth has increased globally since the Alma Ata Declaration on Primary Health Care in 1978. However, the absolute increase of life expectancy in high-income countries has been 800% of that experienced in sub-Saharan Africa, where on the average its newborns will look forward to a lifespan that is only slightly more than half of that enjoyed by newborns in developed countries [4]. Statistical evidence shows that on the average that life expectancy in SSA slide by approximately 2 years to 47.1 between 1990 to 2005 [3]. Current life expectancy range level is about 35 years, from a high of 72 in Mauritius to a low of 37 in Zimbabwe with trends clearly negative in many countries [6]. In fact, increasing adult mortality from HIV/AIDS has led to a

decline in overall life expectancy in the region. Furthermore, are the issues of high maternal and child mortality rates which still continue to pervade the region. Currently, estimates show that rates as high as 500 deaths per 100,000 live births are still reported in the region [6]. Additionally, infant mortality rates ranging from 50 to 150 per 1000 live births have been reported in the region [7]. The situation is further compounded by poor maternal delivery services as reports have it that in many settings approximately 60% of the births in the region are not attended to by a skilled health professional [8,9]. Furthermore, a child born in sub-Saharan Africa, is about four times more likely not to achieve full immunization when compared to children in developed countries of the World [4].

While these trends continue to pervade the region, the global picture is quite 'aloof' from what is obtainable in this region. As it were, global trends have shown that we are currently faced with an increasingly globalized environment that is characterized by ever increasing reflections of man's technological capacities and the abilities of health systems' to meet the basic health needs of man [4]. This last century showed that scientific breakthrough is at the cusp of mapping the human genome, with its implications for generating great technologies for human health and disease control and prevention- such as diabetes, leukemia, cardiovascular diseases etc [4,8]. Additionally, through scientific research, hunger and under nutrition are now history in many parts of the world as drought and pest-resistant varieties of grains are being produced [10]. On the contrary, what is being observed particularly in the developed world are of conflicting reflections to the situation in sub-Saharan Africa where the afore mentioned issues of poor health indicators are further compounded by the perennial challenges of its health systems of which include: inadequate resources for health care delivery, the lack of expertise to address the burden of communicable and non-communicable diseases, poor health system financing, poorly developed or implemented health legislations worsened by bureaucratic impasse and corruption in health policy implementation and governance [11,12]. To this end, these issues now come to bear and necessitates for a critical reflection on the health systems with the implications for rapid and accelerated empowerment for sustainable development through health systems strengthening in sub-Saharan Africa. This review therefore identifies key areas of health systems in the region that need accelerated empowerment viz bureaucracy and corruption in health systems, health care financing, service delivery, health workforce, information systems and health legislations [9].

2. Why an Accelerated Empowerment for Sustainable Development for Health Systems Strengthening

Basically, health as a right and the duty of governments' has been extensively elaborated globally and this needs to be highlighted in the hearts of all humans [4]. On the contrary, the abysmal state of the health systems in SSA particularly primary health care leaves the health of millions of the African people in jeopardy and questions the definition of health as well as querying the responsibilities of the governments and other players in the health sector in the region.

Although it could be argued that there has been tremendous efforts in strengthening the health system through increased funding with attendant effects in curbing the incidence of mortalities from communicable diseases like malaria, HIV/AIDS, tuberculosis, as well as decreased incidence of maternal and child deaths, the healthcare delivery for the vast majority of the people in the region remains in an abysmal state [3,13,14,15]. Furthermore, with the region having 24% of global disease burden, 3% of the global health workforce and 1% of the global health expenditure [16], this then necessitates for an accelerated empowerment for sustainable development through strengthening of its health systems.

3. Critical Considerations

In critically reviewing the issues for health system strengthening particularly in SSA, it is important to reflect on the issues bothering on the health systems in the region viz bureaucracy and corruption, service delivery, health care financing, health workforce, information systems and health legislations.

3.1. Bureaucracy and Corruption

It is a sad fact that most public officials in SSA countries are often a by word for corruption, bureaucratic impasse and disorganization. The rhetoric of democracy, accountability and good governance all too often does not match the economic and social realities and same is true of the health systems in the region. Binyavavanga Wainaina a Kenyan writer describe these problems by saying ''We are often guilty of using words like leadership, government, parliament and institutions as if they represent solid realities….But in truth, all these structures are about as solid as free floating gases…we watch our Government float above us like helium balloon tethered by the flimsiest of strings [17]. The problem with corruption and the lack of concern for basic governance principles in health care delivery is that well-intentioned spending may have no impact even in health systems [18]. It is well said that ''priorities cannot be met if institutions don't function and scarce resources are wasted''. For instance, bribes, corrupt officials, bureaucratic impasse and mis-procurement undermine health care delivery even in well planned health systems [19].

The issue of corruption and bureaucratic impasse in health systems in the region is very well exemplified in drug management and leakage. Evidence from qualitative studies have revealed that the lack of drugs in public health facilities discourage utilization of these facilities [19,20]. A common practice in health centers in the region is that drugs tend to be a commonly "leaked" product given that it can fetch a higher price in the private market [21]. A survey in Uganda estimated that the average leakage rate for high demand drugs like antimalarials was estimated at 73% across 10 public health facilities. These drugs were expropriated by health workers and the Health Unit Management Committee members, who were meant to provide local oversight [19,21]. The leakage of public funds by corrupt health systems administrators is also an issue in the health systems in the region. Many health

systems in the region are characterized by bureaucratic problems, corruption and mismanagement leading to inadequate public funds at the point of service. Furthermore, is the issue of informal charging of patients by health workers to compensate for inadequate salaries and gaps in discretionary budgets. More so, informal charging may have serious equity implications undermining the objectives of subsidies and these and more bother on health systems and health care delivery in the region. Others salient corrupt practices in health systems include (i) cronyism and nepotism which may hamper the employment of the best hands to provide health services in the region [19] (ii) absenteeism which poses a chronic but often unmeasured problem in publicly financed health care, and can severely limit patient access to services [21], reduce quality [21] and these have been shown to correlate positively with poor governance in the health systems across countries in the region and beyond [18].

3.2 Health System Financing

The poor state of the health systems in sub-Saharan African countries have been traced to several factors especially due to gross under funding [22,23]. Countries in the region rely on a disaggregated mixture of health financing options; including government budgetary allocation, health insurance (social and private), external funding and private out-of-pocket spending particularly to finance health care. Currently about 52% of the resources for financing health care services come from out of pocket sources or user fees in the region [22,23]. Against this backdrop, the African Union's Heads of State and Government met in Abuja, Nigeria in 2001 and recommended the allocation by member states of 15% of national budgets to health; and again in 2006 there was a Call for Universal Access to health services [24].

However, as at 2010 evidence has shown that the situation had barely improved and that governmental expenditure for health care on the average in the region is still grossly behind the set target by the WHO [24,25]. Only six countries in the region spend at least 15% of their national budget on health: Rwanda, 18.8%, Botswana, 17.8%, Niger, 17.8%, Malawi, 17.1%, Zambia, 16.4% and Burkina Faso, 15.8%. Furthermore, 32 out of 53 African Union member states spend less than the US$40 recommended per person by the WHO with only 11 of these investing about US$5 or less per capita [24]. More so, out of pocket payments for health services continues to soar high in many settings in the region. As it were, the situation of out of pocket payments has been 'catastrophic' in the sense that it aggravates poverty by crowding-out other essential consumption items such as food, clothing and housing, leaving its negative toll on the economy [26,27,28]. These issues may be the reason for the increase in donor support for health care financing in the region. Evidence has it that international developmental assistance now accounts for approximately 20% of the total health expenditure in about 48% of the countries in the World Health Organization (WHO) African region [29,30]. Findings form technical reports have it that, aids to the region has quadrupled from around US$11 billion to US$44 billion with a net increase of almost US$10 billion during the years 2005-2008, with huge allocations to health care delivery, which is the direct result of commitments made by the world's major aid donors and United Nations summits to the region [31].

Table 1 below gives further insight into the current issues of health care funding in the region, as it shows who pays and reveals that in Africa, the total expenditure on health as a percentage of gross domestic product (GDP) is less than 6% which on the average is 9% less than the required 15% recommended benchmark by the WHO in order to scale up health services and strengthen already weak health systems [16].

Table 1. Estimates of Expenditure on Health Care Delivery per Region

WHO Region	Total expenditure on health as a % of Gross Domestic Product	General government expenditure on health as a % of total expenditure on health	Private expenditure on health as a % of total health expenditure	External resources for health as a % of total expenditure on health
Africa	5.5	47.1	52.9	10.7
Americas	12.8	47.7	52.3	0.1
South Asia	3.4	33.6	66.4	1.9
Europe	8.4	75.6	24.4	0.1
Eastern Mediterranean	4.5	50.9	49.1	2.0
Western Pacific	6.1	61.0	39.0	0.2

Source. Nigel Crisp (2010): Health and Poverty- the Second Headline.

3.3. Health Workforce

Evidence as well as anecdotes has shown that shortages of health care staff are endemic in sub-Saharan Africa. There is virtually shortage of all professionals- doctors, pharmacists and nurses- in the health system. Current reports shows that on the average there is about one physician for every 8000 people in the region [32]. Countries worst hit such as Malawi have a physician-to-population ratio of just 0·02 for every 1000 [32]. More so, there are also huge disparities between rural and urban areas: even in Africa's biggest economy- South Africa- its' rural parts have 14 times fewer doctors than the national average [33]. These trends are very different to those in developed countries: the UK, for example, has over 100 times more physicians per population than

Malawi [32]. More so, the number of pharmacists working in the region is very low in comparison with those of other regions of the world. For instance, Liberia as it were has a pharmacist-to-population ratio of about 1-to-85,000 [34]. The situation has been catastrophic in that many health service outlets have closed because of scarcity of trained pharmacists and pharmacy technicians [35].

Besides the paucity of health workers, the situation is further compounded by the perennial migration of health workers from the region to richer regions of the world and this exacerbates the current trends of poor health work force in the region. For instance, estimates are that 135,000 doctors and nurses who were first trained in sub-Saharan Africa are now living in richer countries and many of those graduating in this profession will continue to migrate [9,16]. Research findings show that a third of

medical graduates from Nigerian medical schools migrate within ten years of graduation to Canada, the UK, and the USA [36,37]. These high income countries have sustained their relatively high physician-to-population ratio by recruiting medical graduates from developing regions, including countries in sub-Saharan Africa [37]. On the contrary, over 50% of the countries in SSA do not meet the minimum acceptable physician to population ratio of one per 5000—WHO's Health for All standards [34]. Nurses, pharmacists, and other health workers are systematically recruited from this region that is still struggling with the greatest burden of infectious and chronic illness [38,39,40]. By 2001 statistical evidence had it that more pharmacists exited South Africa (600) and Zimbabwe (60) respectively. More reports from South Africa and Zimbabwe showed that the emigrating number of pharmacists was more than that graduating (put at 500 and 40 per annum respectively) [41]. Reasons for all these low health workforce to patient ratio in the region as well as the net migration are due to key push factors: inadequate resources, long hours and heavy workloads, threat of infections and violence, and lack of career development for health professionals in SSA, in contrary to key pull factors: high pay, greater opportunities, better working environment and professional fulfillment of health workers in the richer regions.
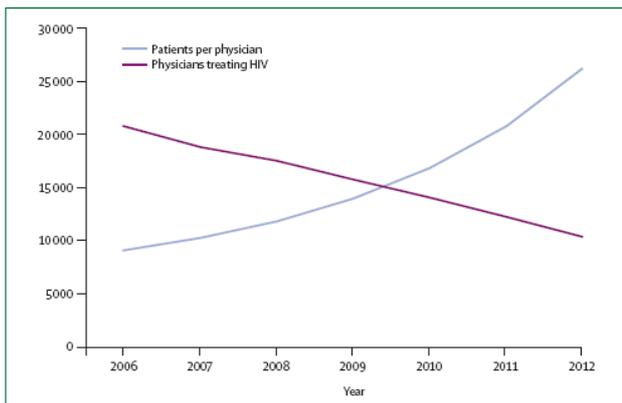
Source: Derived from Mills et al., 2010 on Recruitment of Health workers

Figure 1. Inverse relationship between health-care worker density and rising patients' density

Clearly illustrated in the figure above, is the inverse relationship that exists between health-care worker density and rising patients' density. It shows the negative relationships between rising patients numbers (i.e cases of communicable diseases including HIV/AIDS and non-communicable diseases reporting to health centres) in the region and the relative decreasing number of trained health workers recruited into health systems for service delivery between 2006 to 2010. The situation will remain over the years as depicted by the graphical analysis unless something drastic is done to curtail the prevailing circumstances.

3.4. Service Delivery

This may be described as the crux of health systems as it functions to meet the 'health-needs' of the people. While there has been increased investment in health systems it appears that most of the funding do not scale up service delivery at the primary level particularly. For instance, in countries like Nigeria, Malawi and a number of Eastern and Western African countries, the primary and secondary health care facilities are often all that rural and semi-urban communities have in form of a formal health system. The utilization of these health service facilities has remained low with slight improvement in recent years [42,43]. Evidence shows that poor quality and inadequacy of available services are the major reasons responsible for low use of health services particularly the primary health centres [43,44]. Of note is the fact that, one of the main objectives of primary health care is to tackle health problems causing the highest mortality and morbidity at a cost that the community can afford using the principles of equity among others [45]. But, presently, there appears to be an existing chasm between quality and accessibility of health care in many of the health systems in the region. The health care quality chasm is better described as a gulf between the 'Haves' and the 'Have-nots' in the population.

3.5 Information Systems

The importance of reliable and timely information in order to allocate health-care resources (such as doctors, nurses, hospital beds, and drugs) in health systems is critical for the planning and monitoring of service provision [46]. While health information systems do exist to address these needs at local to national scales across the region, what is obtainable is that these systems are failing to deliver adequate data because of widespread underreporting by health facilities in most part of the region. This creates an information gap for efficient health care delivery and this continues to pervade health systems across sub-Saharan Africa [47]. Furthermore, the implementation and development of routine health information systems continue to provide a number of challenges for managers—the more so in this region where resources are scarce and human resource and technical skills are limited [47]. Additionally, it could be that most health systems managers and administrators are yet to have a **'perfect'** understanding of the fundamental role information systems play in health care delivery. This may then explain why it may not always top the priority in planning for health services at all levels of healthcare delivery even though there are competing health care needs with scarce resources to meet them. The import of this is that in many of the health facilities in the region, health workers operate under difficult circumstances where there may be lack of record keeping materials, so much that keeping detailed records and reporting them regularly is not always at the top of the priority list as well [48]. This often results in incomplete or insufficient data from many of the facilities for any given required period and the overall national picture is inevitably incomplete [49].

3.6. Health Legislations

In sub-Saharan Africa, inequalities in health and economic development continue to pervade its developmental trajectory and exclusion from social systems remains the most fundamental obstacle to realizing human potential [4]. The integration of human rights approaches into health and social policies in the region will offer an opportunity for addressing key

challenges bothering on health care delivery. Of concern to health systems and health services in the region is that sustainable and equitable approach to laws and regulations guiding the practice of healthcare delivery in the region if taken into strong considerations will not only protect the rights of its teeming populace but it will culminate in strengthening health systems alike.

A sustainable and equitable approach to regulations guiding the practice of healthcare delivery is critical to strengthening health systems in sub-Saharan Africa where clients' or communities' human rights to essential and quality health care are threatened in many instances [50]. Issues of unethical conducts of health care providers do occur in health systems in the region. However, a good development for healthcare delivery in the region is the case for HIV/AIDS management: where the practice of public health has been challenged to make a paradigm shift on how population approaches to health can respond to public health crises based on inequalities and exclusion through the development of new methods such as voluntary counselling and testing to integrate a rights approach into public health practice in the region [51]. These then necessitates a paradigm shift in health systems and health service delivery towards sustainable and equitable programmes and policies that empowers individuals in the region to exercise their 'rights to health'.

4. Reflections for Sustainable Development via Health Systems Strengthening in the Region

Achieving the dramatic and permanent declines in poor health indicators in the region as envisioned by the MDGs is doubtful unless health policy makers and governments shift their attention to the institutional factors that affect performance in the health sector. To this end, an accelerated empowerment for sustainable development via health systems strengthening in sub-Saharan Africa will only come to bear when the issues bothering on the health systems are addressed through commitment from health policy makers and other concerned players in the health sector in order to improve on health care delivery outcomes in the region.

Of critical consideration is addressing the strangulating effects of corruption in health systems through accountability. These will include strengthening: information on performance and impact, the ability to audit, the authority to reward performance, and discipline or transfer and terminate employees who engage in abuses; and answering to stakeholders on the performance of public services. As it were, there should be increased attention to regular auditing of health facilities to observe areas of poor performance either due to administration or at the point of service delivery by health care workers. For instance, findings from the Philippines showed that the frequency of audit by central government and autonomy of local government increased immunization coverage, the import being that local governments can benefit from authority and auditing will further encourage responsible public performance [52]. Besides, there is the need to for a rapt attention on discipline and punishment for defaulters as was the case in Madagascar where sanctions for misuse of funds led to systematic following of financial procedures [18]. Furthermore, rewards, incentives and better remuneration are critical to reducing corrupt practices amongst health workers in the region [53].

Additionally, policy issues on health financing should provide sustainable ways to address the existing gaps. In this regards, there should be scaling up of health insurance particularly community based insurance programmes. This will lead to the decrease in over dependence on international aids for health care as well as in the long run support governments in weaning off aid dependency while supporting an accelerated development [29]. Furthermore, it is also cardinal that tough measures are taken to address the key push factors of inadequate health workers through regular recruitment of health workers which will also address the issue of long hours and heavy workloads at work. Solving the challenges of poor investment in training and re-training of local health workforce and lack of clear career development for health workers will require increased funding for health sectors. These will then address the perennial issue of disproportionate workforce to population ratio. More so, is the issue of migrating health workers from the region. It is not out of context to state that the active recruitment of health workers from sub-Saharan Africa is a systematic and wide spread problem and a cause for social alarm. It further worsens the already existing health burden, leads to negative health outcomes [54] and undermines the right to health as asserted by the Universal Declaration of Human Rights [55]. These calls for the ratification of international covenants to protect the health of the people in the region by limiting the mass exodus of its skilled health work force [56]. However, while there is a right to health for everyone, there are also health-workers' rights to consider [55]. Health workers should have freedom of movement and choice of where they live and work, just as any worker should [55,56,57]. There is need therefore to address issue of **key push** factors of low salaries, inadequate resources, long hours and heavy workloads, threat of infections and violence, and lack of career development.

Increased performance in health care delivery cannot come to bear if service delivery is not taken in to consideration. Hence, "equity" in health care should aim to ensure that quality care is available to all and that the quality of care provided does not differ by age, race, ethnicity, or other personal characteristics unrelated to a patient's reason for seeking care. These issues of quality and equity should be fully addressed in terms of service delivery in the region [58]. Additionally, it behoves stake holders to take into cognisance that what is ideal to achieve strengthening of health systems' information systems in the region is that all facilities (primary to tertiary) should report their data promptly and comprehensively regularly.

Finally, implementing health legislations is needful for the rapid empowerment of the weak health system. Nonetheless, health systems' strengthening through the right to health imposes some obligations of immediate effect on the **State**.

Authors' Statement

This paper is a review document clearly expressing the views of the authors as there are no competing interests (financial or personal).

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