

**Brain Drain in the Health Sector in Africa: Examples from the
University College Hospital (UCH), Ibadan, Nigeria**

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BRAIN DRAIN IN THE HEALTH SECTOR IN AFRICA: EXAMPLES FROM THE UNIVERSITY COLLEGE HOSPITAL (UCH), IBADAN, NIGERIA

Abstract

Brain drain occurs in the health sector in Africa with the flight of highly skilled professionals to the west and to oil rich nations of the Middle East. They are leaving at a time Africa is battling with HIV/AIDS epidemics and the resurgence of communicable diseases. The reduction in stock of such scarce personnel is bound to put severe strain on their colleagues and institutions. This paper examines the dimensions of the brain drain and measures to stem the phenomenon, as well as strategies that governments and universities can adopt to turn the brain drain into brain gain.

The flight of medical personnel from Africa is not unconnected with the prevailing severe economic recession and hyper-inflation which tend to reduce the purchasing power. At the professional level, the adoption of the World Bank and International Money Fund (IMF) conditionalities resulted in cuts in education and health budgets leading to their under-funding. Consequently, provision and maintenance of facilities became a daunting challenge. There are also political and social factors to emigration.

Various measures have been adopted or proposed to either stem or reverse the negative effects of the brain drain through such delay tactics as extending medical education. Others include extracting pledges from developed countries not to recruit, employing various tax initiatives, and designing strategies to tap benefits from the Diaspora. Governments and universities have roles to play to tap successfully the resource potentials of the Diaspora in the short and medium terms and ensure their return in the long term.

The governments, for instance, need to address the issue of under-funding of the health sector and science and technology education by giving special salary scale and allowances to professionals within the sector and providing and maintaining equipments and infrastructure. Furthermore, Africa has remained a theatre of war, creating unmitigated health emergencies resulting in human capital flight. While the perception of the Diaspora as potential economic resource through remittances and various tax initiatives could be beneficial to countries of origin, however, what the governments should aim at, is how to get the Diaspora back to assist in the development of the continent.

The universities, on the other hand, should embark on fundamental curricula reform that would result in community-based curricula and teaching styles, and preventive as against curative medical education, to make products less attractive to the sourcing nations. Brain sharing between universities in the continent through linkage programmes, technical cooperation, and knowledge networks would yield immense gains to nations, universities and individuals. The universities have a role to provide friendly work environment to their staff. Whilst scholars from the west may not view salary as a key factor in international migration, to the professionals from poor countries, salary could be the main factor. Therefore, universities should urge governments to review upwards the salaries of health professionals.

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I. INTRODUCTION

Brain drain in the health sector in Africa is the emigration of health professionals from Africa to developed countries of the west and the oil rich nations of the Middle East. This could occur when health professionals trained abroad fail to return to Africa after successful completion of their studies. It could also occur when professionals working in the continent vote with their feet for greener pastures elsewhere. The emigration of the latter group appears to drain more resources and is far more problematic than the former.

Africa is home to nearly 800 million people (Bridgewater, 2003) and 300 million of the globe's poorest people (Broadman, 2005). Consequently, the health status of the continent has been low compared to other continents of the world. For instance, going by the recommendation of the World Health Organization (WHO) of one doctor per a population of 5,000 people, about 10 Africa countries have one doctor to 30,000 or more people (Schrecker and Labonte, 2004). Nigeria had a doctor-population ratio of 1:24,607 in 1979 (Mbanefoh, 1992). With population growth rate of 2.3 percent per annum for Sub-Saharan Africa (Broadman, 2005) and the unabated migratory flow of health professionals, the doctor-population ratio would, undoubtedly, be worse today than it was some three decades ago. Medical professionals, particularly the doctors, have remained a scarce commodity in the health systems in Africa. Filling vacancies created by the emigration of experienced doctors tend to be difficult due to their increased demand by the developed nations and rich Arab countries. The recent globalization appears to have facilitated this process and aggravated the situation.

As at 2005, Nigeria had a total of 20 teaching hospitals (NMA, 2005). The University College Hospital (UCH), Ibadan, is the premier teaching hospital in Nigeria, having been established in 1957. The various teaching hospitals collaborate with their universities in all matters affecting teaching, research and clinical services. Some of the teaching hospitals are centres of excellence, having distinguished themselves in medical practice in designated areas. What qualifies them as centres of excellence is the caliber of their medical personnel and their medical practice. The migration of such high caliber medical personnel is a great loss to the system.

1.1 Statement of the Problem

Factors precedent on the exodus of doctors from Nigeria's teaching hospitals include the frequent face-offs between the doctors and the federal government over poor salary and allowances, proscription of private practice in 1978 and again in 1984; the banning of the Nigerian Medical Association (NMA) for embarking on strike action; and the forced ejection of doctors living in government quarters. With prevailing economic crisis, the World Bank and the International Monetary Fund (IMF) compelled the federal government to remove all forms of subsidies from the social sector including education and health. The resultant under-funding meant that facilities for teaching, research and

service delivery were inadequately provided and maintained, researches were under funded and personnel were poorly remunerated. The professionals became restive.

The developed nations of the west and the oil rich Middle East countries cashed in on the prevailing severe work and socio-economic environments to lure away Nigerian health professionals with good salary and allowances, excellent professional opportunities, state of the-art-facilities, and excellent social amenities. When the emigration started early in the 1980s, it was slow, almost unnoticeable and therefore appeared not to be a cause for concern. By the mid 1980s, it had become a massive outflow of all manners of medical personnel - doctors, nurses, technologists - with early migrants recruiting for their host organizations. Within the onset of the brain drain in the early 1980s and 1987, the UCH had lost almost 40 percent of its senior doctors (Mbanefoh, 1992). "Many departments became shadows of their past and utterly unable to carry out their statutory functions" (NMA, 1989). More fundamental is the ripple effect of their leaving. In UCH, for instance, the Department of Surgery which had 23 lecturer/consultants in 1984 was left with only five by April, 1989 and student intake fell from 279 in 1984 to 124 in 1989. Meanwhile the number of the Department's hospital beds had increased considerably by 1989. The same scenario was replicable in most other departments of the UCH and in majority of the other teaching hospitals in Nigeria.

A major constraint in the health sector in Nigeria has always been the shortage of medical personnel. The federal government admits that "manpower remains the most important resource requirement for the health sector as well as its greatest constraint (Nigeria, 1981). Therefore, the loss of medical personnel from the nation's tertiary health system contributed to the erosion of past gains in the nation's health status. The increase in maternal and infant mortalities from 700 to 800 deaths in 100,000 live births and 90 to 100 deaths in 1000 births from 1999 to 2004 respectively (Obiyan, 2007), tends to support this assertion. Their loss also came on the heels of "a major health crisis of 'new' epidemics in HIV/AIDS and resurgence of 'old' communicable diseases such as tuberculosis, malaria, cholera, and increasing levels of disorders linked to changing lifestyles and degenerative diseases" (Sanders et al, 2003). With such health catastrophe and the uncontrolled emigration of medical personnel, the achievement of the millennium development goals (MDGs) on health by the year 2015 appears very daunting.

1.2 Objectives of the Study

The paper is an investigation of the impact of the brain drain of health practitioners on the health systems in Africa with examples from the premier teaching hospital in Nigeria. Specifically, the paper examines:

1. the dimensions of the brain drain;
2. the measures to stem, restrict or prevent the brain drain;
3. the measures to reverse and turn the brain drain into brain gain;
4. the roles of universities and governments; and
5. makes recommendations on the way forward.

II. DIMENSIONS OF THE BRAIN DRAIN

The dimensions of the brain drain include types, magnitude, causes and consequences.

2.1 Types of the Brain Drain

The brain drain of medical professionals could be internal or external. Internal brain drain occurs when health professionals move from public to private health system and vice versa or to non-health sectors, within the same economy. While movement within the health sector is not considered a loss, movement outside the health sector constitutes a definite loss to the system. The other dimension of internal brain drain will be movement from one African health sector to another. While this may create problems for the country of origin, it is, nevertheless, not a loss to the continent. In the context of Africa, external brain drain occurs when human capital emigrate to countries outside the continent of Africa. Apparently, salary differentials appear to be a key factor in internal brain drain. "What leads to a threshold decision to migrate internationally is a complex combination of push and pull factors" (Meeus, 2003). International migration may be temporary or permanent. It is temporary emigration when migrants return to countries of origin after some years of absence. Such characterizes the UCH, Ibadan migrants to the Middle East countries who returned home after their sojourn abroad. This phenomenon could be due to cultural and religious differences, as the study by Mbanefoh (1992) shows that over 90 percent of the medical migrants from the UCH were Christians. However, some relocated to Europe or the US at the expiration of their contracts.

2.2 Magnitude of the Brain Drain

The magnitude of medical brain drain in Africa is staggering and so unprecedented that Dr. Lalla Ben Barka of the United Nations Economic Commission for Africa, was quoted as saying that "in 25 years, Africa will be empty of brains" (Mutume, 2003). The following statistics appears to justify her fears:

- More than 25 percent of doctors trained in Africa work abroad (WHO, 2006).
- There are more Sierra Leonean medical doctors in Chicago than in Sierra Leone (Emeagwali, 1999).
- At least 60 percent of the doctors trained in Ghana during the 1980s have left the country (Mutume, 2003).
- Of the over 600 medical graduates trained between 1977 and 2000 in Zambia, only 50 were still working in the Zambian public sector health service in 2000 (Bundred and Levitt, 2000).
- Only 10 percent of the 6,000 physicians trained in public hospitals every year remain in Kenya (Emeagwali, 2003).
- 120,000 of the over 640,000 African professionals in the United States alone, are medical doctors (from Nigeria, Ghana, Sudan and Uganda) (Dembele, 2007).
- Between the on-set of the medical brain drain and 1987, the UCH, Ibadan, just one out of the many teaching hospitals in Nigeria, had lost about 40 of its specialist doctors to international migration (Mbanefoh, 1992).
- At the rate medical doctors are leaving Nigeria, there may eventually be more Nigerian doctors working outside Nigeria than within (Emeagwali, 1999).

2.3 Causes of the Brain Drain

Bridgewater (2003) blames Africa's brain drain on unfulfilled dreams at home caused by strife, corruption and misrule which mark Africa's post-colonial history. Scholars explain the causes in terms of push and pull factors. Dolvo (2003) explains them using six gradients of salary, job satisfaction, organizational environment/career opportunity, governance, protection/risk, and social security and benefit. Indeed, the dualistic nature of the world economy is a major cause of the brain drain, as intellectuals from Africa try to escape endemic poverty by relocating to wealthy, developed and technologically advanced nations of the world. The causes of the brain drain of the Nigeria's medical professionals, particularly the medical doctors, have historical antecedent as follows:

1. In 1974, the federal government streamlined salaries of all civil servants into grade levels, a move doctors resisted as unfair and comparatively too low vis-a-vis their training and professional responsibilities.
2. In 1978, the federal government enacted Decree No. 5 which banned private practice for doctors in the public service. The Decree was subsequently included as Section 158 of the Code of Conduct for public officers in the 1979 Constitution.
3. In 1982, the federal government terminated the superannuity of medical clinical supplementation of N3,000 per annum for honorary consultants, who were also academic staff of universities, without due consultation with the affected staff.
4. In 1984, the federal government re-enacted the ban on private practice by Decree No. 34; in both cases, medical doctors went on strike to protest government actions and policies which they considered humiliating both emotionally and professionally (NMA, 1989).
5. These industrial action led to the proscription of both the Nigerian Medical Association (NMA) and Nigerian Association of Resident Doctors (NARD) in 1985 and forced ejection of doctors occupying government quarters;
6. The refusal of the federal government to review upwards doctors' call-duty allowance of N4,800 approved over two decades earlier, for work in excess of 40 hours per week.
7. Poor funding of health sector resulting in inadequate provision and non-maintenance of facilities, poor salary and allowances, un-conducive work environment, insecurity of lives and properties, undue government interference in medical profession, and the penchant of public servants and wealthy Nigerians to seek medical treatment abroad;
8. Massive devaluation of the naira and the consequent hype-inflation, resulting in reduced purchasing power of the naira and high interest rates on mortgage and other loans.

2.4 Consequences of the Brain Drain

The emigration of medical professionals would, naturally, result in shortfalls within the health sector, putting a huge strain on those on ground. The highly selective nature of migration policies meant that those who emigrate rank among the brightest and the best

of teachers, researchers and healthcare providers in terms of experience, country trained, critical skills, brain power, and specialization. In the UCH, for example, about 74 percent of the doctors who emigrated qualified before 1970; 97.5 percent trained abroad, and all, without exception, specialized in curative medicine (Mbanefoh, 1992). Their loss, therefore, was capable of sabotaging the hospital's capacity to provide quality training for new generation of medical personnel and quality health care. Apart from the strain they absence would put on their institutions and their colleagues on ground, it also has a huge direct financial cost implications on the country. Madamombe (2006) puts the direct cost to Africa of training a medical doctor at US \$40,000. Thus, Zimbabwe and Nigeria losses would exceed tens of millions of dollars per year from training doctors who rapidly emigrate (Schrecker and Labonte, 2004). There are also the indirect costs which include the lost opportunity of migrants' contribution to the gross domestic product (GDP) and taxes, costs of illness/morbidity caused or aggravated by staff shortages, costs arising from substituting less qualified staff, and the huge cost involved in recruiting expatriates replacements (Dolvo, 2003).

III. MEASURES TO STEM/REVERSE THE BRAIN DRAIN

A variety of measures have either been put in place or proposed to stem or reverse the brain drain in the health sector in Africa. The measures aim at delaying, stemming, or mitigating/reversing the negative outcomes of emigration of medical professionals.

3.1 Delaying Strategy

Delaying strategies include the extension of number of years of training and the use of bonding or compulsory service schemes (Dolvo, 2003).

3.2 Stemming Strategy

A most used strategy aimed at stemming emigration is salary and pension enhancement. Others include such restrictive and preventive measures such as the adoption of locally-relevant curricula and community-based training styles pioneered by two medical schools in Ethiopia and the UDS medical school in Northern Ghana. A major drawback on the adoption of the community-based approach hinges on the difficulty in re-orienting medical educators whose trainings were internationally based to implement such programmes. Yet another is an agreement between industrial and developing nations, under which the former pledges not to recruit health professionals from latter. This measure borders more on ethics and morals and, therefore, difficult to enforce.

3.3 Reverse Strategy

The reverse strategies are those measures adopted or proposed to turn the brain drain into brain gain or cause the return of the Diaspora. An example of the former is the use of various tax measures ranging from one-time exit to bilateral taxes. In these cases, the receiving countries will be required to tax citizens of another and remit proceeds to countries of origin. Others have suggested a market-driven approach to the problems of the brain drain. This approach which views migrants as potential economic resource to the countries of origin would require expansion of training capacity. However, "given the rustic infrastructure and loss of medical teachers, training larger number may result in

poor quality products" (Dolvo, 2003). The return option is yet another of the reverse strategies. This programme was coordinated by the International Organization on Migration (IOM) with the aimed of relocating the Diaspora to countries of origin. Its implementation was difficult, with limited success. Consequently, the programme was discontinued after over a decade of operation. Scholars blamed its fail

4.1.3 Conflicts Free Continent

Most countries in Africa are at war which could create unmitigated health emergencies and cause the flight of health professionals. Governments should endeavour to minimize both internal and cross border conflicts.

4.1.4 Diaspora as Potential Economic Resource

Remittances from the Diaspora as potential economic resource for poor African countries could be beneficial, however, money has no intrinsic value on its own and cannot cure diseases but doctors can (Emeagwali, 2003). While exporting doctors and other medical professionals for cash would make sense in a situation of overproduction, exporting scarce skills would compromise the training of future doctors, lead to collapse of the health systems, undermine the health of the continent, and the continent's inability to meet the millennium developed goals. In the final analysis, therefore, the governments should make concerted efforts to facilitate the return of the Diaspora through the remediation of the conditions that led to their flight.

4.2 Role of Universities

4.2.1 Curricula Review

African universities undeniably have a role to play in the current brain drain of medical professionals from the continent's tertiary health institutions. Some African universities have continued to run the syllabi of colonial masters by placing greater emphasis on the diseases of the developed nations to the detriment of diseases plaguing Africa which facilitates the migration of medical personnel. This has led to the assertion that poor African nations supplement the medical education of the developed nations. Training in curative medicine requires very expensive technologies which the continent can ill-afford compared to training in disease patterns of Africa. Therefore, African university should embark on medical curricula review with emphasis on preventive and community-based approach.

4.2.2 Brain Sharing

The universities should buy into the idea of brain sharing through technical cooperation, linkage and exchange programmes, workshops/conferences/seminars, and networking for purposes of training, research, teaching, and service delivery in treatment of patients and for external examinations. Also important is the establishment of networks between the universities and their former staff who are in the Diaspora. Apart from tapping their brainpower, the institutions should be able to gain materially and financially from them.

4.2.3 Work and Academic Friendly Environment

Professional and academic environments are often not the ideal in African universities. In the sciences, for instance, both teachers and students improvise in the absence of science equipment and reagents. In most Nigerian universities, science and technology practical has become "theory of practical", a carry over from secondary school science education. Such severe work and academic environment requires the ingenuity of the very brightest and best

among the sciences educators who are expected to provide guidance and impart knowledge from their wealth of experience. The problem, however, is that the migrants rank among the brightest and the best, and they leave because of the fear of being stifled by the system. Universities must therefore endeavour to provide friendly working environment for their staff.

4.2.4 Acceptance of Returnees back to Faculties

An informal interview with some former migrants indicate that upon return, universities did not accept them back as full staff, rather some of them were advised to join as adjunct or contract staff. The younger staff members, who assume leadership positions during the absence of their very senior and more experienced colleagues, resist the very idea of the re-absorption of returnees as full time staff of the universities. The universities, on their own part, felt that since some of the migrants had resigned their appointment or had overstayed beyond the period approved, they have ceased to be bone fide staff of the universities. Their non-acceptance on full time basis would mean that the universities may not get the best from them in terms of their participation in decisions and policies of the universities, and, that the manpower starved universities may not fully tap their wealth of experience and gain maximally from their return.

4.2.5 Review of Salaries of Health Professionals

Although western scholars do not see salary as a key push and pull factor in international migration, Africa's may perceive it the topmost factor in their decision. A study of the brain drain among health professionals from the UCH shows that economic factor is the first consideration in their decision to migrate (Mbanefoh, 1992). The study also indicates that professors who immigrated to the Middle East in the late 1980s and early 1990s earned 26 times their salary in Nigeria, while those of nurses and technologists were 16 times higher. With accumulated mortgage debts and impending retirement, their options were few. There is therefore the need for medical professionals to be adequately remunerated.

4.2.6 Building of the Database of the Diaspora

Institutions should build a database of health professionals as well as the alumni in the Diaspora to know their number and utilize them to serve as links between the home institutions and the Diaspora networks and overseas institutions.

V. CONCLUSIONS AND RECOMMENDATIONS ON THE WAY FORWARD

5.1 Conclusions

In the last almost three decades, African continent has experienced loss of health professionals to countries of the west and oil rich Middle East nations. The flight of medical personnel has been blamed on the gradients of push and pull factors, ranging from salary, job satisfaction, organizational environment/career opportunity, governance, protection/risks, to social security and benefits.

5.2 Recommendations on the way forward

5.2.1 Government

- 1). In budgetary allocations, governments should give highest priority to science and technology education and the health sector. Military spending should be reduced to a level that would curtail the continent's penchant for wars.
- 2). Governments should provide necessary infrastructure, good communication networks, efficient power supply, and state-of-the art facilities which promote and sustain knowledge networks in research, teaching, training, and service delivery.
- 3). Governments should resist the temptation to interfere with or frustrate professional associations by imposing policies that affect members without due consultation.
- 4). Government should provide special salary and allowance package for medical staff.
- 5). African governments should endeavour to minimize both internal and cross border conflicts.
- 6). Even with all the benefits that the Diaspora option portends, it should be seen as short and medium term measures. Governments should make concerted efforts to facilitate the return of the Diaspora through the remediation of the conditions that led to their flight.

5.2.2 Universities

1. Universities should always source for state of-the-art equipment that would enhance teaching, research, training, and service delivery. Virtual equipment of telemedicine nature which makes it possible for medical professionals in African institutions to consult live with colleagues in the Diaspora or foreign experts in their fields while handling difficult cases, for example, in surgeries, is a case in point.
2. The need for radical curricula review is greater now than ever. The review should emphasize preventive and diseases of the south as against the current emphasis on curative and diseases of the west.
3. Building of networks among the African health institutions and between the institutions and the Diaspora knowledge networks should be stepped up to facilitate effective and efficient tapping of the Diaspora knowledge, skills and talents.
4. Institutions should build a database of health professionals as well as the alumni in the Diaspora to know their number and utilize them to serve as links between the home institutions and the Diaspora networks and overseas institutions.
5. The various health institutions and science and technology institutions in the continent should harness and pull together their resources to create a synergy to overcome the challenges of scarcity of funds, human capital and material resources. Therefore, rather than the current duplications of centres of excellence in health institutions all over the continent, only one or two institutions with comparative advantage over others should be so designated for each specialty.

