

# The “Brain Drain”: Migration of Healthcare Workers out of sub-Saharan Africa

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## What is the “brain drain”?

“Brain drain” refers to the departure of educated or professional people from one country, economic sector, or field to another, usually for better pay or living conditions (1). The term can be applied specifically to healthcare workers, a group encompassing not only doctors and nurses, but also midwives, pharmacists, lab technicians, hospital managers, and so on (2). Worldwide, WHO estimates there are around 60 million healthcare workers, and like any other group of professionals, they tend to migrate to areas where working conditions are best (2). This means that healthcare workers generally migrate from developing countries to more developed countries, leaving a scarcity of health workers where the need is greatest. On average, in developed countries, 20% of doctors come from abroad (2). Despite recent trends in some countries showing stabilization or declines in health worker immigration, globally, developed countries continue to see a rise in health worker immigration and developing countries continue to face critical shortages (3).

## What motivates health worker migration?

### Push Factors

- Financial reasons
- Limited career opportunities
- Poor working conditions and management (corruption, limited resources, equip. etc.)
- Political instability, war, violence

### Pull Factors

- Financial reasons
- Greater career opportunities
- Better opportunities for family (schooling, living conditions, etc.)
- Recruitment by destination countries

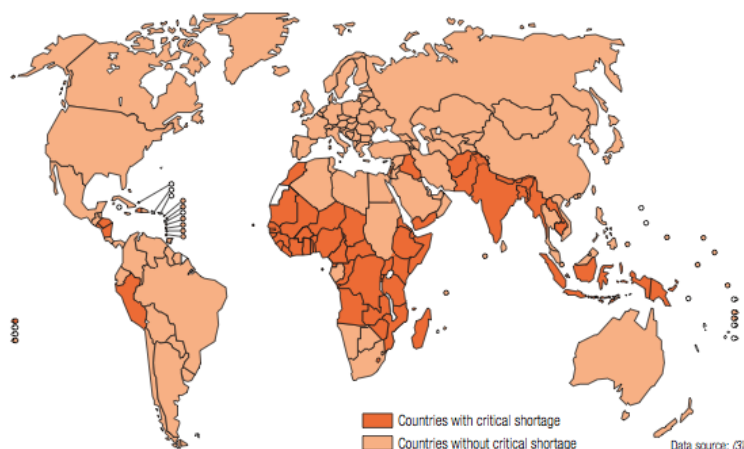
## What are the consequences of health worker migration?

The movement of healthcare workers has both positive and negative consequences. On a positive

note, the potential for emigration increases incentives for higher education (4). That is, people will study hard to become doctors, and while some will emigrate, some will stay in the home country and contribute to the home workforce. Another positive effect of healthcare migration is the generation of remittances (2). The World Bank estimated the total remittance flow to developing countries to be \$351 billion in 2011, a sum that totals three times the size of official development assistance supplied to developing countries (5). In this way, international migration of healthcare workers boosts world income on an aggregate level and supplies resources to those living in poverty (5). Despite these benefits, there are a number of negative consequences of health worker migration. When doctors and nurses leave their home countries to work elsewhere, the home country loses the return on the investment in their education (2). Furthermore, when large numbers of health workers emigrate, they leave a shortage in the health workforce, which means an understaffed and overburdened healthcare system (1). In 2006, WHO estimated that there was a shortage of more than 4.3 million health personnel across the world, with developing countries particularly hard-hit (3).

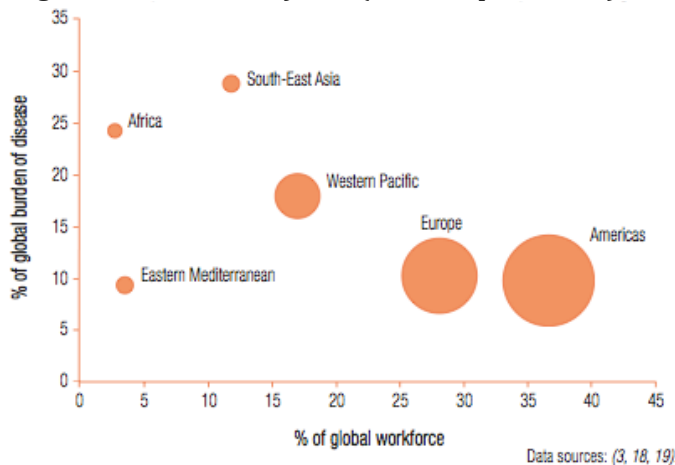
## Where do we see health worker shortages?

*Figure 1: Countries with critical health worker shortages (WHO Report 2006)*



As evidenced by the map above (4), virtually all healthcare shortages exist in the developing world, with the most notable deficit in sub-Saharan Africa. The graph below (4) plots percent of global workforce with percent of global burden of disease, demonstrates how countries with the lowest relative need have the largest healthcare workforce, while those with the greatest burden of disease have a much smaller healthcare workforce.

**Figure 2: % of the global burden of disease vs. % of the global health workforce (WHO Report 2006)**

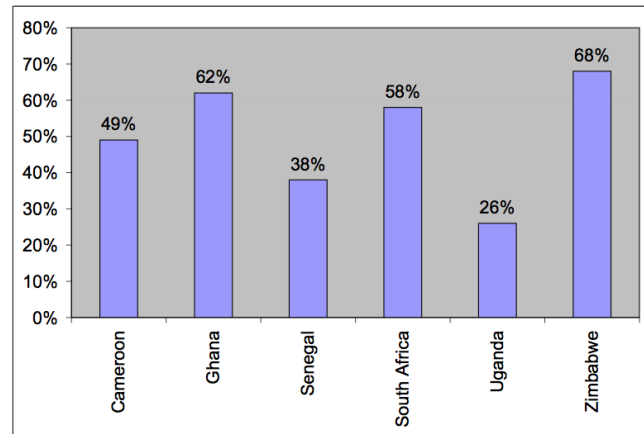


### Focus on Sub-Saharan Africa

It is clear that the most critical shortages are concentrated in sub-Saharan Africa. Of the 57 countries recognized by WHO to have critical shortages, 36 are in sub-Saharan Africa (3). While African countries face 24% of the global burden of disease, they have access to just 3% of the world’s healthcare workers and less than 1% of the world’s financial resources (4). It is estimated that 80% of sub-Saharan African countries do not meet WHO’s minimum recommendations for the numbers of doctors and nurses (6). In 2000, nearly half of Ghana’s doctors’ posts and more than half of its nursing positions were unfilled (7). In Malawi in 2006, 65% of nursing positions were unfilled and one hospital had only 10 midwives left with the responsibility of delivering 10,000 babies per year, resulting in many unattended births (7). In Zimbabwe, of the 1,200 doctors trained domestically in the 1990s, only 360 members of that cohort remained in the country in 2004 (8). Large percentages of doctors and nurses will leave their home country to seek work elsewhere, with

many individuals in these countries choosing to become health workers not because they value the profession, but because of the possibility of migration (7). As evidenced by the following graph, in many African countries, over 50% of healthcare workers report that they intend to migrate from their home country once trained (8).

**Figure 3: % of health workers intending to migrate (Vujicic et al. 2004)**



### What policies are currently in place to control healthcare worker migration?

Instituted in May 2010, the WHO Global Code of Practice on the International Recruitment of Health Personnel is a voluntary protocol that sets principles and recommendations for health workers and associated stakeholders concerning migration (2). The key components of the code are as follows (2):

- Commitment to assisting countries facing critical health workforce shortages
- Investment in information systems to monitor international migration of health workers
- Emphasis on education and efforts to retain health workforces in member states
- Protection of migrant worker’s rights
- Responsible recruitment policies by destination/receiving countries and fair treatment of migrant health workers

### How do we reduce the shortage of healthcare workers in sub-Saharan Africa?

In order to address the critical shortages that sub-Saharan Africa faces, a number of changes must be

made. Policy recommendations should consider and directly address some of the push and pull factors that drive health workers to migrate, thus addressing both source and destination countries.

**Push Factors:** On the side of source countries, policy should first work to increase healthcare worker salaries in source countries in sub-Saharan Africa. The current differences in salaries in African countries and destination countries are striking (7).

**Figure 4: Monthly wages for nurses and doctors in source v. destination countries (Connell et al. 2007)**

Country	Average monthly wage (US \$)	
	Nurses	Doctors
Uganda	38	67
Sierra Leone	175	228
Ghana	206	473
Chad	425	1,050
South Africa	1,486	2,836
U.K.	2,576	7,676
Canada	2,812	8,472
U.S.	3,056	10,554

If doctors in sub-Saharan Africa were paid just as much as doctors in the U.S., then African trained doctors would theoretically be less likely to emigrate. Unfortunately, increasing salaries is unrealistic for many reasons. Even doubling or tripling salaries in many countries would not make a doctor's pay in Africa comparable to that in the U.S. Additionally, health worker salary increases cannot occur without also increasing salaries of other public-sector workers like teachers (6). Finally, in an analysis by Vujicic et al., it was demonstrated that simply raising salaries does not play a large role in preventing migration (8). Thus, beyond simply increasing wages, efforts should be made to improve working conditions, ease stress loads, encourage work autonomy and potential for career advancement, and enhance access to resources and medical supplies. Other push factors that are more difficult to control include violence in the workplace, civil strife and war; however, these should be noted as definite factors pushing migration in many countries.

**Pull Factors:** Pull factors, actions on part of the destination countries may be more practical in terms of implementing policy. The call for

“responsible recruitment” in the WHO Global Code of Practice is crucial as recruitment by destination governments and agencies has greatly facilitated migration of healthcare workers out of developing countries (7). A study in Britain revealed that 41% of migrant nurses migrated primarily because they had been recruited (7). Destination countries that take in migrant healthcare workers could help ease the pressures placed on source countries by taking part in cooperative programs that strive for “managed migration” (7). The Ghana-Netherlands Healthcare Project, for instance, intends to transfer knowledge and skills, facilitate short internships for Ghanaian medical residents, and develop a center for the maintenance of medical equipment in Ghana (7). Similar programs might require emigrating healthcare workers to give a portion of their income to the health system of their home country or to serve a minimum amount of years in their home country before leaving. Finally, policy options include instituting barriers to migration for healthcare workers specifically; destination countries could implement strict regulations that make it difficult for doctors and nurses to enter the country and source countries could make it difficult for them to leave.

## Conclusions

In the end, policies addressing the “brain drain” must not only consider what might ease critical shortages in African countries, but also what is ethical and practical. Article 13 of the United Nations Universal Declaration of Human Rights attests that “Everyone has the right to leave any country, including his own, and to return to his country.” Thus, while policies may encourage healthcare workers to remain in their home countries, individual rights cannot be intruded upon. Every person has the right to emigrate to seek a better career and lifestyle. The issue is complex and multifaceted, particularly because demand remains for healthcare workers in developed countries, so why would they want to limit immigration? Ultimately, helping to ease the consequences of “brain drain” will be reliant on cooperation between destination and source countries to maintain and improve healthcare systems in countries with critical shortages.

1. Merriam-Webster Dictionary. <http://www.merriam-webster.com/>
2. World Health Organization. "Migration of Health workers." <http://www.who.int/mediacentre/factsheets/fs301/en/index.html>
3. Organisation for Economic Co-operation and Development. "Policy Brief: International Migration of Health Workers: Improving international co- operation to address the global health workforce crisis." 2010.
4. World Health Organization. "Working Together for Health: World Health Report 2006." 2006.
5. World Bank. "Migration and Development Brief: Migration and remittances Unit." 2011.
6. Pillay, Y and P Mahlati. "Health-worker salaries and incomes in sub-Saharan Africa." *Lancet* 371 (2008): 632-34.
7. Connell, J, P Zurn, B Stilwell, M Awases, and J Braichet. "Sub-Saharan Africa: beyond the health worker migration crisis?" *Social Science & Medicine* 64 (2007): 1876-91.
8. Vujcic, M, P Zurn, K Diallo, O Adams, and MR Dal Poz. "The role of wages in the migration of health care professionals from developing countries." *Human Resources for Health* 2 (2004).