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# Doctors' and Nurses' Flight, Patients' Plight: The Catch-22 of Health Care in Developing Countries

## **Abstract**

I first became interested in this topic after attending an AIDS awareness workshop focusing on South Asia and a lecture given by a nursing professor who had just returned from Botswana. Although these two events dealt with different geographic areas, the problem of brain drain underlay both of them. Inspired by Paul Farmer's belief that health care is a human right, and driven by my own curiosity and interest in international development and global health, I began to dig more deeply into the problem. After further research, I realized how extensive and multi-faceted the brain drain phenomenon is, and I decided to conduct an independent research project that I hoped would complement the existing studies by identifying and exploring some of the issues associated with it that have not yet been thoroughly examined. Upon the suggestion and encouragement of Dr. Renee Fox (my wonderful faculty adviser), I drafted a proposal to undertake a qualitative inquiry that would examine the brain drain process through face-to-face interviews with a small, but intensive sample of physicians and nurses who had migrated to the United States from so-called developing countries.

## **Comments**

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Doctors' and Nurses' Flight, Patients' Plight  
The Catch-22 of Health Care in Developing Countries

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2006-2007 Penn Humanities Forum on Travel  
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Final Project Paper  
April 2007

## **Introduction**

I first became interested in this topic after attending an AIDS awareness workshop focusing on South Asia and a lecture given by a nursing professor who had just returned from Botswana. Although these two events dealt with different geographic areas, the problem of brain drain underlay both of them. Inspired by Paul Farmer's belief that health care is a human right, and driven by my own curiosity and interest in international development and global health, I began to dig more deeply into the problem. After further research, I realized how extensive and multi-faceted the brain drain phenomenon is, and I decided to conduct an independent research project that I hoped would complement the existing studies by identifying and exploring some of the issues associated with it that have not yet been thoroughly examined. Upon the suggestion and encouragement of Dr. Renée Fox (my wonderful faculty adviser), I drafted a proposal to undertake a qualitative inquiry that would examine the brain drain process through face-to-face interviews with a small, but intensive sample of physicians and nurses who had migrated to the United States from so-called developing countries.

## **Project Methodology**

For this project, I conducted interviews with eight nurses and nine physicians who had received their basic nursing or medical education in their countries before coming to the U.S. to work or to obtain further education (Fig.1).

The purpose of the interviews was to document the migration experiences of these health workers, the effect of their medical or nursing education on their choices to migrate, the factors that influenced their decisions to emigrate, and their views on the

health workforce crisis. The web of phenomena involved in this type of brain drain involves social, economic, and political, as well as medical factors. Virtually all of the studies about it that have been done are based on quantitative demographic and survey methods of research. I chose to use interviewing as my primary method because I hoped that it would enable me to penetrate and portray the lived, migration experiences of these physicians and nurses and better understand, describe, and analyze their intricacy.

## **Background**

*What is brain drain?*

Brain drain is the loss of human capital through the emigration of trained or talented individuals to another country or geographic area.

*Which countries experience brain drain?*

All countries experience some form of brain drain. Even in the U.S., talented individuals are leaving the country every day. Brain drain can occur within a country as well. An example is the brain drain of health care workers from rural to urban areas, which is a problem that occurs in almost all the countries.

Although brain drain occurs everywhere in the world, the magnitude of the brain drain differs drastically between countries. The web of brain drain is very complex, due to the flow of health workers from countries and within countries. Often, the brain drain is caused by a cascade of physician and nurse migration. For instance, the emigration of physicians from the UK to Canada and Australia results in a shortage of physicians in the UK, which in turn attracts physicians from low-income countries such as India or South Africa and causes shortages there.<sup>1</sup> Over the past half-century, the U.S., the United

Kingdom, Canada, and Australia have been the largest recipient countries of health workers.<sup>1</sup> In the U.S., approximately 10% of the nurses and 25% of physicians are foreign born and educated.<sup>2-3</sup> It is estimated that of those 25% of physicians, 60.2% of them emigrated from low-income countries.<sup>1</sup> The top donor countries that supply the U.S. with physicians are India (~4.9%), the Philippines (~2.1%), and Pakistan (~1.2%).<sup>1</sup> It is estimated that nine of the 20 countries with the highest level of emigration are in sub-Saharan Africa or the Caribbean.<sup>1</sup> Similarly, about 80% of foreign-nurses in the U.S. are from low-income countries.<sup>2</sup>

*Why should we be concerned about brain drain?*

The brain drain of physicians and nurses in low-income countries is an alarming phenomenon because it augments the already existing shortage of health care workers who are crucial to the adequate delivery of basic health services in their countries of origin. Studies have shown that an increased health care worker to population ratio is associated with an increased survival rate of women during childbirth and children in early infancy<sup>4</sup>. The World Health Organization has estimated that fifty-seven countries, mostly in Africa and Asia, suffer from severe health workforce crises. Furthermore, the distribution of health care workers in the world is severely disproportional to the need for health care workers. For example, sub-Saharan Africa carries 24% of world's greatest disease burden, 11% of the world's population, but only 3% of the world's health workers.<sup>4</sup> The shortage of health care workers is also one of the biggest impediments

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References

<sup>1</sup> Mullan F. "The Metrics of the Physician Brain Drain". *The New England Journal of Medicine*. 353:1810-8, 2005.

<sup>2</sup> Cooper RA, Aiken LH. "Health Service Delivery: Reframing Policies for Global Migration of Nurses and Physicians-A U.S. Perspective". *Policy, Politics, & Nursing Practice*. 7(3):66S-70S, 2006.

<sup>3</sup> Cohen, J. "The Role and Contributions of IMGs: A U.S. Perspective". *Academic Medicine*. 81(12),2006.

<sup>4</sup> World Health Organization. "The Global Shortage of Health Workers and its Impact."  
<<http://www.who.int/mediacentre/factsheets/fs302/en/>>

towards achieving the Millennium Development Goals aimed to improve the health status of people living in low-income countries. Additionally, the loss of health care workers is not just a matter of numbers. It also entails the loss of talent and intellectual capacity.

Through my interviews, it became apparent that the countries from which health professionals are migrating are losing some of their best and brightest physicians and nurses. The physicians and nurses whom I interviewed are intelligent, well-trained, and highly qualified in their fields. Many interviewees remarked that it was very difficult for them to come here and that only very qualified individuals are able to do so. When asked if the U.S. actively recruits nurses and physicians from other countries, one doctor responded:

“There is no active recruitment from the U.S. It is very difficult because the U.S. is producing medical graduates at the same time. So in order to be qualified for a position here, you have to be 150% qualified to match the 100% qualified U.S. graduates”.

### **Project Findings**

Several interesting findings and underlying patterns emerged from my interviews, which I will try to highlight by addressing the following questions:

1. Why does brain drain occur? Specifically, what are the push and pull factors that influence physicians and nurses' decisions to migrate?
2. What were some of the similarities between the education and migration experiences of these physicians and nurses? Were there consistent patterns that underlay their migration experiences?

3. How did their medical or nursing education affect the decisions of the physicians or nurses to emigrate?
4. What are the views of the physicians or nurses on this issue of brain drain?
5. What are the policy implications of these findings?

### **Push and Pull Factors**

#### *Lack of Research Opportunities*

This was one of the most cited reasons for emigration and it was independent of the geographic origin of the participant. This is not a surprising finding because most low-income countries such as Pakistan, India, or China do not invest a significant amount of money in research and development. Therefore, many participants were encouraged by their mentors or influenced by their peers to come to the U.S. to conduct research after their basic medical or nursing education. One interviewee explained that although publishing is very important, people in Pakistan lack both the resources and the confidence to publish papers. Similarly, both of the interviewees from China commented on the lack of good research opportunities there.

#### *Lack of Higher Education Opportunities*

Many of the participants also emphasized the lack of higher education opportunities in their countries as one of the reasons for coming to the U.S. Although almost all of the physicians and nurses were very satisfied with the basic education that they had received in their countries, they commented on the dearth of higher education opportunities. Two of the nurses from India came to the U.S. initially in order to obtain higher degrees. A nurse from Pakistan explained that up until 1999, the highest degree

one could obtain in nursing was a BSN, so many initially came to the U.S. only temporarily in order to receive training in their particular field. Interestingly, the nurse from South Korea stressed that Korean universities actually prefer to hire people who have earned degrees from other countries and many nursing schools now not only require their teachers to have received their Ph.D. and post-doctoral training in the U.S., but also to have worked as a faculty member in an American university or college.

#### *Low Job Reward*

Because both physicians and nurses undergo rigorous education and training in which they invest a great deal of energy and time, they expect high job rewards that are often unmet in their countries. More than half of the physicians and nurses cited low financial and non-financial job rewards as among their reasons for coming to the U.S. Although economic motivation was never the sole reason for emigration, it was one of the factors that contributed to the emigration decisions of many of the physicians and nurses. In this connection, many of the interviewees were reluctant, even embarrassed to admit that lack of financial compensation was one of the factors that influenced their decision to emigrate. Only one nurse stressed the importance of money and stated that higher income was her main reason for coming to the U.S. However, it was clear from the interviews that the salary differential between the interviewees' countries and the U.S. was immense. One participant commented that sometimes nurses in Nigeria do not get paid for six months and that the salaries are so low that people could not even afford to send their kids to schools. Another interviewee explained that most people who graduated from medical schools in Pakistan were offered dead-end jobs or non-medical related government jobs that did not even pay enough to allow them to support their

families. Although salary is a large part of the job reward, other aspects of the job such as research, teaching, conferences, and publication opportunities are also a part of it. As one of the doctors said,

“I think the job happiness and the situation, if you look at it, has several components. First, the job should be able to support your living. Not to make you filthy rich. At Penn, I make about 70% less than somebody could in the private practice. But my job satisfaction is not only monetary. It has to be the feedback; it has to be what I give in and what I get for it.”

#### *Lack of Political Stability and Safety*

Several participants, specifically those from Nigeria, Pakistan, and South Africa expressed their concerns about safety and political stability as one of their reasons for emigration. All of the South African doctors interviewed stated this as one of the push factors. They all mentioned the instability of the government during the transition from apartheid to democracy and the post-apartheid escalation in violence that made the living situation there very unsafe. The interviewees also felt politically oppressed, even after the ending of the apartheid. One doctor commented that “It wasn’t a drain; it was a flight, for many people.”

The general attitude among the medical students at that time was expressed by one South African doctor as such:

“The last 1 or 2 medical years, we used to sit and debate for hours and hours and hours, ‘are you taking the gap’, that was the term, ‘are you going to take off or are you going to be one of those altruistic, you know, selfless people who’s going to give up your life to the future of South Africa. And I have friends who stayed on in South Africa and

now have really big positions in the health care system, but I'm not sure they're happy doing what they're doing right now with what has happened. But it was 'am I going to give up myself for my country, you know, or am I going to be a little bit more selfish about my own personal wellbeing, security, future, and am I going to take the gap' and I would say 50% plus of the country took the gap."

The main concern with the political climate in Pakistan is its lack of stability due to the amount of corruption that exists. When asked if the government of Pakistan is doing anything to retain its health care workers, one interviewee said,

"I think the government is really not interested at this time because the Pakistan government has bigger problems. They have religious problems, Taliban and stuff like that. Pakistan is a very small country, but they have 15 to 17 political parties. There is always political turmoil... always... some small, undetected civil war situation in the government. So I think to keep the country running in law and order is more important than worrying about the brain drain. That's what it comes down to."

Similarly, political corruption and safety are two concerns in Nigeria. One interviewee, for example, commented that the rate of crime is very high in Nigeria due to the high rate of unemployment.

#### *Poor Working Condition*

A few participants expressed dissatisfaction with the working conditions in their countries. One nurse described the deplorable conditions in the hospitals when she went back to Nigeria a few years ago in the following way:

"The nurses there were washing their gloves because they don't have gloves. There's no bed and you have to bring your linen. There's no infrastructure. So if you are

going to be a nurse, you can't even practice in a safe environment." She then remarked that the nurses there even tried to steal the gloves she had brought from the U.S.

### *Brain Waste*

One important push factor, which is sometimes overlooked in studies on brain drain but was emphasized by the physicians and doctors who participated in this study, is the misutilization of health care workers or 'brain waste'. Several interviewees pointed out that many newly graduated doctors and nurses in their countries cannot find medically or nursing related jobs so they are employed in other sectors that do not fully utilize the medical skills and knowledge that they have acquired. This misuse of their skills motivated some of them to emigrate to the U.S. where they can engage in medical and nursing activities that do require their expertise. One nurse shared her frustration at the 'brain waste' she saw in Nigeria:

"I tried to go back, I wasn't planning on staying [in the U.S.] for this long, but every time I tried to go back, the situation gets worse over there...I have 30 of my classmates that were given early retirement because when you stay in this position, you get to climax and you retire early and they get a new nurse with barely [enough] salary because the government has a certain amount of Naira for nurses' salaries. So you have a large number of nurses, yet no jobs. Some of them are selling clothes, some of them are going to be tailors, some of them are selling groceries. I get emails about them trying to take the state board to come to America. And when you're calling it 'brain drain', I'm looking at it as a 'brain circulation'. I don't understand how they came up with this 'brain drain' phenomenon. Because there in Africa, in Nigeria, they don't have jobs."

Another participant observed similar situations in Pakistan. Many of his friends who graduated from medical school took the civic service entrance exam and got nonmedically-related administrative or political jobs, so they could not even practice the medical skills they had learned.

### *Personal Growth*

A few interviewees commented that they emigrated simply because they saw it as an opportunity for personal growth. They wanted to go abroad to expand their horizons and challenge themselves by working and living in a different environment.

### *Family Influence*

Another surprising and interesting pattern that emerged from these interviews was the reaction of family members to the interviewees' decisions to emigrate. Contrary to my assumption that the families of these physicians and nurses would be reluctant to see their sons or daughters go abroad, the participants' families were very supportive of their decision to emigrate. Most explained that despite the distance, their families were happy for them because of their new opportunities to grow and prosper in the States. In fact, some of the participants were encouraged by their families to come to the States either because they viewed it as a prestige for their sons or daughters to come to the U.S. to study or work, or because they recognized the necessity to leave their countries. One doctor from South Africa commented that "his family fostered his decision to come here and expected it." Similarly, a doctor from Pakistan explained that "her [mother's] goal was, and she always told us that the main thing was to get us out of Pakistan".

Although numerous of the doctors and nurses who I interviewed mentioned in passing that they provide extra income for their families through the funds that they send

home to them, this did not seem to be one of the major reasons why their families had encouraged them to go to the United States, and to pursue their careers here. (However, it is possible that they were not as willing to be as forthcoming with me about these family-oriented aspects of their working abroad as about other benefits that they derived from it.)

### **Education and Migration Experiences**

#### *Basic Education*

Almost all of the participants were highly satisfied with the basic medical or nursing education that they received before they came to the States. The majority of nurses stated that the education they received in their countries were much more practical and useful than the nursing education here, perhaps due to the different emphasis placed on clinical skills versus theoretical knowledge.

Similarly, all of the physicians were very happy with the medical education they received in their countries. Many emphasized that the medical education they had received placed more focus on clinical judgment to make diagnoses as opposed to the utilization of technology to make diagnoses. One physician explained this difference in this way:

“My sense is there is a lot more attention in South African medical education to examining the patient and taking histories. You spend a lot more time with the patient and perhaps less time with esoteric investigations. Whereas here, in my sense, there is more attention paid to using technology to make a diagnosis, maybe appropriately so, rather than listening to the patient and examining the patient. So for example, you know, if the question was does the patient have an enlarged spleen, well you make that

determination by examining the patient appropriately to see if there's an enlarged spleen. Whereas here, you sort of hear 'well lets get a CT scan' to see if the spleen is enlarged and things like that. So we grew up with more bedside practice of medicine."

### **Effect of Medical/Nursing Education on Emigration Decision**

There are a number of significant relationships between their medical and nursing education and their decisions to emigrate about which the interviewees spoke. All of the nurses who were enrolled in the Ph.D. program cited the importance of their mentors in their decision to emigrate. Many of those nurses were trained by expatriates who encouraged them to come to the U.S. The majority of participants felt that their nursing or medical education made them more "marketable" and facilitated their ability to emigrate and come to the U.S. In a few cases, the intention to emigrate had actually influenced the participant's decision to go into the medical or nursing field. One nurse admitted that she went into nursing because she saw it as an opportunity to come to the U.S. Another interviewee commented that despite not wanting to become a doctor, he went into medical school because it was a "politically expedient way to get out of South Africa". He noted that the profession of a physician is more transferable from one country to another than other professions – notably, for example, that of a lawyer. Therefore, the medical and nursing professions, in his opinion, serve as vehicles that facilitate emigration. .

### **Participants' views on Brain Drain**

Most of the participants were very much aware of the 'brain drain' of health care workers. When asked about their views on this issue, all of the interviewees responded with great thoughtfulness and often deep regret that they were not able to contribute their skills and knowledge to their country. In the words of one South African physician:

“There is an enormous brain drain of qualified physicians. I don't know the percentages, but significant percentages of my medical class, I'm sure, are no longer there. I remember there being an article in the newspaper on the medical school class a year or two behind me in which they did a survey of the class, and more than 50% of that medical school class had left the country. Last year, scary thought, we had our 25<sup>th</sup> anniversary, makes me feel really old, of graduation. I graduated in 81 and so they had the 25<sup>th</sup> reunion, in South Africa, sort of jokingly suggested that it would make more sense to have it in the States. I'm not sure how many people went to it in South Africa; I did not go back for it.”

Many expressed that they are discontent and concerned with the phenomenon, even though they are a part of it. Several participants also expressed their strong desire to go back if the conditions in their home countries were improved. They shared anecdotes about people they knew who went back to try to change the system, but eventually failed and returned to the States. One nurse stated: “If I had a choice, I don't want to be here. I want to be where people would understand me, I want to be where people would give me respect for who I am, I want to be where I know best, I want to be where I am with my real friends. Here, I'm isolated. But with respect to everything, it's the best of the both worlds I could live in.”

Another participant felt that she can do more for her country here than she could in Pakistan because she would be trapped in the system. If she was in Pakistan, she would have limited resources. For example, applying for a grant from NIH is much easier than applying for funding in Pakistan. Therefore, she felt that she would be better able to influence the policies in Pakistan from abroad than from within.

Interestingly, several interviewees also felt that although the U.S. does contribute to the emigration of qualified physicians and nurses from other countries through pull factors such as higher salary and better research opportunities, it should not be blamed for the brain drain phenomenon. They emphasized that the push factors must be stabilized first and foremost in order to solve this problem; stemming brain drain from the U.S. will not stop people from coming here if the conditions at home are not improved.

## **Policy Implications**

### *Institutional Changes*

The findings from my study suggest that the push factors are much greater than the pull factors. Therefore, both the donor countries and the source countries need to work together to solve the problems caused by brain drain. It is impossible to stem brain drain solely by eliminating the pull factors. In order to retain health care workers, donor countries must implement institutional changes that would minimize some of the push factors such as lack of political stability and higher education opportunities. One of the nurses emphasized the need to build accountability and transparency into the Nigerian government as the first step towards stopping brain drain.

### *Community Health Workers*

Many participants also suggested that community health workers should be used to solve the shortage problem and meet the health care needs of the local population. Indeed, the role of community health workers has become increasingly more important. As one of the doctors said, “90% of the problems in society do not need an M.D. or Ph.D. What is needed are public health practitioners.” From the former bare foot doctors in China to the present day accompagnateurs in Haiti, community health workers have shown their ability to successfully improve the health of the community.

### *Current Efforts*

Recently, some countries, institutions and organizations, and individuals have begun to take the initiative to alleviate the health workforce crisis created by both inadequate health infrastructures and the brain drain of health care workers. For example, in the U.S., health activists are trying to lobby the government to pass the African Health Capacity Investment Act of 2007, a bill that will provide financial aid to African countries that experience severe health force crisis and work with them to improve their health infrastructure in order to train and retain health care workers.

### **Future Research**

Through my interviews, there were several other interesting patterns that emerged that deserve further research. One difference that the interviewees observed between the health care systems in their countries and the U.S. was the status of physicians and the patient-doctor relationship. Especially in India, the physician-patient relationship was described as very paternalistic and hierarchical. It would be interesting to explore this

component of India's health care system and how this relationship affects the physician's interaction with patients after she or he has emigrated here. Another interesting topic for future research is to examine the cultural differences that the health worker experiences after coming to the States and how that affects their medical or nursing practices.

## **Conclusion**

It is evident from my research findings that the brain drain of health workers is a very complex phenomenon driven by global, institutional, and personal forces. My research project tried to address several questions, but many other questions remain unanswered. As the U.S. and the global community start to address the issue of brain drain, we should keep the following questions in mind:

1. While it would be both impractical and in my view, unethical to restrict the immigration of health workers into the U.S., the dire need for health workers in many low-income countries calls for an urgent response. What ideally should be the responsibility of the U.S. and of the global community, and the roles that they ought to play in alleviating the health force crisis in these countries?

2. Given that the countries that experience brain drain incur an immense loss both in terms of the financial resources used to train those health workers and in the sheer number of talented physicians and nurses who emigrate, should recipient countries such as the U.S. remunerate those countries for the use of their human capital? If so, in what ways?

## **Tables and Figures**

### **Nurses**

<b>Country</b>	<b>Number of interviewees</b>
Pakistan	1
China	1
India	3
South Korea	1
Nigeria	1
Caribbean	1

### **Physicians**

<b>Country</b>	<b>Number of interviewees</b>
South Africa	3
Pakistan	2
Argentina	1
India	2
China	1

**Figure 1.** Participant Demographics