

**Medical Exceptionalism" in International Migration:
Should Doctors and Nurses Be Treated Differently?**

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SUMMARY

This paper examines what we know, and don't know, about international migration of medical professionals. Although migration is extensive within and among neighboring countries, this paper focuses on South-to-North international migration. By considering the consequences and causes of migration, the paper considers public policy options for sending and receiving countries. A central policy challenge is whether medical migration should be treated differently from the movement of other highly skilled professionals?

The paper is motivated by a simple chain of observations: that health workers are a key input into producing good health outcomes, that the number of health workers in crisis countries would need to double in order to meet the MDGs on child and maternal mortality, and that the few existing health workers are migrating at an ever-increasing pace. Without increasing the scarce human resources for health in many developing countries, we cannot meet the MDGs or address major health crises.

The statistical base is very weak, although administrative data on professional certification pieced together can provide a snapshot of global migration patterns. Exports are mostly from sending countries in Africa, the Caribbean, Southeast Asia, and South Asia imported into countries like Australia, Canada, France, Belgium, United Kingdom, and the United States. The flows are propelled by "push" and "pull" forces along channels facilitated by labor market incentives, linguistic compatibility, socio-cultural affinity, professional equivalency, and visa policy. Evidence points to increasing migration, especially for nurses in the past decade.

Northern importing countries, especially Anglophone countries, are dependent on Southern sources for nurses and doctors. Demand is due to under-production as well as the demographics of aging, advances in technology, changes in family structure and consumer demand. As complete cessation is politically infeasible, Northern countries should aim for self-sufficiency in professional education and adopt ethical codes of conduct in recruitment. A massive re-investment fund financed by richer countries should be launched to compensate poorer sending countries for the involuntary loss of public education subsidies. Return contributions by the diaspora and others in technical skills, entrepreneurship, and new ideas are also worthy of exploration.

Exporting Southern countries are of two types, policy-supported and not policy-supported. The former consists of countries like Cuba, India, Egypt, and the Philippines that export workers to earn foreign exchange. The latter consists of many countries in Africa, the Caribbean, and Asia where out-migration is driven by global labor markets, contravening national health policy. These involuntary sending countries should urgently implement retention strategies by improving compensation and work environments and also accelerating the production of workers.

International migration flows of medical professionals should be treated differently than other highly skilled migrants. Push and pull forces are conditioned by political stability as well as differential wages, which indicate functioning international labor markets. Yet the human resource crisis in some of the world's poorest countries compromises the health of populations. An individual's decision to emigrate in search of a better life is rational and legal – yet that same decision may leave whole communities without access to life-saving health care. As a matter of life and death, policies to address medical migration should adopt “medical exceptionalism” based on moral and ethical grounds.

As international flows are likely to increase in the immediate future, our knowledge base should be urgently augmented. Six priority research themes are commended – improved data and analyses; policy effectiveness; migration and trade in services; diaspora political economy; ethical analyses, and mapping of international institutions.

Introduction

*In February 2004, the South African Medical Association organized a public protest complaining about working conditions that sparked the emigration abroad of 4,000 doctors over the past four years. "The most depressing thing is that, without exception, all the good people you train leave. All the friends from the old days are in private practice or abroad."*¹

*Fearing the flight of Czech physicians after EU expansion on May 1st, The Lancet featured crisis planning in the Czech Republic. With neighboring EU countries offering wages four times higher, the Czech Republic anticipated mass exodus. One coping strategy is to recruit nearby Slovak doctors.*¹

At the May 2004 World Health Assembly, the "brain drain" of medical professionals was debated. Issues included the human resource crises in low-income countries, unethical recruitment by importing countries, the chronic dependency of richer countries on human resources of poorer countries, and the consequent deepening of global health inequity.

In July 2004, The New York Times featured an article by Celia Dugger on the brain drain of nurses from sub-Saharan Africa. At the epi-center of the HIV/AIDS epidemic, Malawi's largest 1,000-bed hospital has only 30 nurses remaining, 26 of whom have expressed the intention to migrate. The NHS in the UK, meanwhile, has ambitious plans to expand care through continuing importation of nurses from abroad.

These cases are illustrative of growing controversy surrounding the international movement of medical professionals. The debate has recently intensified, partly because the capacity of many of the world's poorest countries to address health crises is severely crippled by acute shortages of workers exacerbated by out-migration of medical professionals.² The double crises of escalating disease and personnel shortages have refocused attention on medical migration. The fact that these medical labor movements are considered part of the "globalization" process pours fuel over the controversial social effects of accelerating transnational flows in our global era.

At one extreme are those who defend the basic human right of professionals to move, irrespective of occupation. They also cite the potential benefits of open international labor markets, including economic and efficiency gains, diaspora remittances (now twice the size of official overseas development assistance), and "brain circulation" including the return flow of new ideas, entrepreneurship, technology, and contacts. Joining these labor market proponents are those who seek freer movement of labor for equitable globalization. They argue that restriction on labor movements accentuates global economic inequities. Rather than less migration, these proponents argue for more and freer movement.

At the other extreme are those who charge Northern countries with exploitative predatory behavior towards Southern countries. They argue that poaching the best and brightest of human resources exacerbates global health inequities. A normative lens is cast on unethical recruitment practices and the self-serving Northern policy of selective immigration that captures public educational subsidies from Southern sending countries. As health conditions worsen in some Southern countries, the depletion of skilled health workers has rapidly reached crisis proportions. In many sending countries, the concerns of ministries of health are in conflict with the labor export policies of ministries of finance and planning.

¹ Kapp p 3 of article.

² Narasimhan et al 2004

In the midst of these debates, two questions naturally arise. First, what is the knowledge base? Although the debate generates much passion, what are the facts? What are the causes and consequences, and what can be done? A second question relates to public policy. Are the social consequences sufficiently alarming to warrant policy intervention? If so, should migration of doctors and nurses be treated differently than other highly skilled professionals? In other words, should "medical exceptionalism" prevail – and if so, how?

These questions are addressed in this paper. Through a literature review, the paper focuses on the longer-term migration of medical professionals from sending countries in the South to receiving countries in the North. It is recognized that intra-national migration (especially rural-to-urban movement) and intra-regional migration (among neighboring countries) are important; indeed, there is a continuum and circularity of migration from community to national to global levels. But our focus is on the most politically controversial of these flows, South-to-North transfer of highly skilled medical professionals.

Health Workers, Health, and the MDGs

The well-being of the world's 35 million health workers is of intrinsic value. Their human rights must be protected; their skills must be cultivated; they need the freedom to follow their professional and personal aspirations. At the same time, health workers are instrumental to the health-related aspects of others' well-being. The *Joint Learning Initiative on health and human resources* notes that the current stock of health professionals varies greatly from less than 70 health workers per 100,000 in the population to over 1820 per 100,000 (Figure 1).

Furthermore, empirical studies have found that health worker density is correlated with better health outcomes such as, for example, lower under-five mortality rates and higher immunization rates. To meet the Millennium Development Goal of reducing child mortality, an estimated 150 health workers per 100,000 would be needed; to meet the goal of maternal mortality this would rise to 250. Thus just to reach the MDGs, the stock of health workers in over 15 African countries would need to double. Anecdotal evidence confirms that health workers have become, in many areas, the effective "bottleneck" for medical delivery – rather than facilities or even antiretrovirals.

Against this backdrop of health worker scarcity, the accelerating outmigration trends of health workers is examined as an issue of some urgency.

Data and Information

Statistics on international migration are weak, fragmentary, and incomplete.³ For doctors and nurses, administrative necessity for professional certification, licensing, or registration

³ Bach 2002. See also U.N. Population Division. 2002. *Measuring International Migration: Many Questions, Few Answers*, 26 June; International Labor Organization. 2001. *Strategies for Developing Statistics on the International Migration of Workers*. U.N. Statistical Commission and UN Economic Commission for Europe, 4 May; *Report of the May 2001 joint UNECE-Eurostat work session on migration statistics*. 1 June 2001.

generates supplemental information. An incomplete picture of global medical migration, therefore, can be pieced together from three primary sources:

First are educational and certification data in sending or source countries. In some sending countries, data are available on pertinent matters such as application for permission to leave, sample surveys of intention to leave, or the proportion of school graduates who have emigrated abroad. But, as **Graph 1** indicates, accuracy and consistency are variable. The source country data from South Africa (bottom line) severely underestimate migration recorded in destination countries (top line). Likewise, Ghana's medical service estimated that 1,200 physicians were in the US in 2002, where as the American Medical Association had licensed only 478 to practice as physicians.⁴

Second are administrative or immigration data on stocks of foreign-trained health workers in receiving or destination countries. These offer snapshots of foreign-trained health workers in rich countries. Definitions can be quite complicated, as illustrated in Anglophone destination countries (Australia, Canada, Ireland, UK and US). While Ireland and the UK have one single point of entry, Australia has multiple entry points. In the United States, each state licenses professionals independently, and some professionals are licensed in more than one state.⁵

Third, the World Health Organization compiles data on national stocks of doctors, nurses, midwives, dentists, and pharmacists.⁶ Although silent about migration and various categories of workers, these data count the pool of medical personnel in sending and receiving countries.

Demography of International Migration

Who are medical migrants? Medical migrants consist of professionals who enjoy equivalency certification in sending and destination countries. Nurses and doctors, including highly-skilled specialists, are especially sought, but also in demand are dentists, pharmacists, and technicians. Excluded in this analysis are low-skilled migrants who perform cleaning and other low-paying menial tasks in the health sector. These workers may find medically-related work in destination countries but their migration was not determined by their education or skills.

In the year 2000, the world had about 8.5 million doctors and 15.2 million nurses and midwives, giving an average world density of 1.4 doctors and 2.6 nurses per 1,000 population.⁷ There were 1.8 nurses for every doctor. Figure 2 shows severe regional maldistribution. Although Europe and North America have only 21 percent of the world's population, these two wealthy continents commanded 45 percent of the world's doctors and 61 percent of its nurses. In contrast, Africa which contains about 13 percent of world population has only 3 and 5 percent, respectively, of doctors and nurses. Africa as a whole averages only 1.4 of these skilled workers per 1,000 in comparison to Europe's density of 10.3, a seven-fold difference.

⁴ Friedman p 2, citing Amy Hagiopian, unpublished mimeo.

⁵ Buchan Summary p 1

⁶ WHO Estimates of Health Personnel 2004

⁷ WHO Estimates of Health Personnel 2004

What is the net redistribution? Net movement of workers is distorting these imbalances even further. The pool of graduates departing from sending countries and the stock of foreign-trained health workers in receiving countries reflect these shifts. The proportion of foreign-trained health workers is particularly high in Anglophone countries, reflecting several decades of net accumulation. Graph 3 shows that that 23-34 percent of physicians in New Zealand, the UK, Canada, the US, and Australia are foreign-trained. Not all immigrants come from developing countries, of course. There is, for example, considerable within-OECD circulation from the UK and Canada into the United States. About a quarter of US medical practitioners are foreign-trained. Of these, 20 percent have become US citizens; 33 percent are green card holders (permanent residents); 7 percent have H1-B (business) visas, and 30 percent hold non-renewable J1 (temporary work) visas⁸

While the percentage of foreign-trained nurses may be lower than doctors in the workforce, the absolute numbers are higher. In 2002, the UK National Health Service reported more than 30,000 nurses of foreign origin (8.4%) out of a total of 356,500.⁹ Table 4 shows the cumulative stock of South-African-born medical professionals practicing in Anglophone OECD countries in 2001. Health workers have a history of mobility, and of long-term migration to, and accumulation in, certain countries.

Is the rate increasing? Historical rates of migration have varied considerably, and it would be mistaken to conclude that recent exchanges are unprecedented. “In 1970 more Filipino nurses were registered in the USA and Canada than in the Philippines”¹⁰ Historical rates of migration also characterize Jamaica where “almost two-thirds of nurses trained in Jamaica during the last twenty years ...emigrated, mainly to the United States.”¹¹

Yet, migration streams appear to be accelerating, especially in the past decade. Trends are difficult to establish globally because the data are neither uniform nor universally available. However, the migration of nurses in particular displays an increasing trend. For example, the number of non-EU nurses and midwives that have registered in the UK has increased ten- to fifteen-fold in one decade. Similarly, in Northern Ireland, the number of non-EU nurses has increased and recently surpassed the number of new nurses from either Ireland or the EU.¹² Turning to source countries, we find that even in comparison with the relatively high earlier rates of Filipino migration, recent trends are markedly upward, with a three- to four-fold increase over only five years (Graph 6)! Despite shortages of their own, emigration from a number of African source countries to the UK continues to rise (Graph 7). In 2001 in Zimbabwe, of the 737 graduates from nursing programs, 473 nurses went to UK alone (vs 26 in 1997).¹³ South Africa is an example of a country which is both a source and destination country. But time trend data shows that for various reasons over recent years its emigration has increased while its immigration has decreased. The same general trend is observed for doctors, nurses, and other emigrant health professionals.

⁸ Dumont and Meyer from Biviano and Makarehchi 2002.

⁹ Wolf 2004.

¹⁰ Martineau et al 2002 p 2

¹¹ Dumont and Meyer 2004 p 135 citing Thomas-Hope 2002.

¹² Buchan et al 2003 p 20

¹³ Vijeic et al 2004.

What are the observed pairings? The pattern of medical professional migration is complex. Some migration is short-term or reciprocal exchange. Other flows are clearly long-term. Most migrants leave open the possibility of return. Also, many source countries may in turn try to replace emigrants with immigrants from other countries, as in the Czech Republic and South Africa. Migration follows what Martineau refers to as a “carousel” rather than unidirectional flows. Figure 9 gives a sense of this for a select sample of countries.

The major source regions of migrating medical professionals are Africa, the Caribbean, Southeast Asia, and South Asia. For Africans, the major destination countries are Australia, Belgium, Canada, France, New Zealand, UK, and USA.¹⁴ Caribbean immigrants more often head to North America and Southeastern and South Asians migrate to oil-exporting economies, North America, and occasionally Western Europe.

Some patterns of migration are empirically well documented. English-speaking countries are a primary destination of emigrating health workers.¹⁵ Some countries have developed regional pairings. For example, 20 percent of migrant physicians in the UK are from Africa; 30 percent of migrants to the US are from India and Pakistan. In most cases, including the US and UK, medical migrants come from a relatively small number of source countries. While the greatest *percentage* of foreign-trained relative to nationally trained health professionals is in New Zealand, the greatest *number* of immigrant medical professionals reside in the US or the UK.

The United Kingdom’s overseas registration statistics for nurses and midwives from the leading source countries (not including those trained within the European Union).¹⁶ As is evident, migration from a dozen countries accounts for most of the flows. Interestingly, applications for registration increased in 2001-02 by 43 percent (from 29,119 to 41,656) from just one year earlier.

Causes of Medical Migration

The causes of medical migration are complex, and most analyses categorize the forces into “push” factors in sending countries and “pull” factors in receiving countries. Devlo identifies six “gradients” that capture these push-pull forces:

- Income (or remuneration): salaries and living conditions.
- Job satisfaction: good working environment and utilisation of one’s skills to the best technical and professional ability.
- Career opportunity: for career advancement and specialisation.
- Governance and work environment: political governance and administrative bureaucracy reflected by the efficiency and fairness.
- Protection and risk: personal safety, security and risks especially lack of protective gear from HIV/AIDS in Africa.
- Social security: adequate and fair retirement security.¹⁷

¹⁴ WHO “Recruitment” 2004

¹⁵ OECD 2002 p 6

¹⁶ UK CC 2004. See also Buchan 2002, Vjicic et al 2004

¹⁷ Dovlo 2003, Arusha, Tanzania.

In this paper, we describe clusters of push-pull forces in sending and receiving countries, as summarized in Table 11:

- Demographic and Health
- Remuneration and Work Environment
- Personal and Security

Demographic and Health: The basic pull forces in destination countries operate as magnets to attract medical migrants from sending countries. The demand may be attributed to longer-term demographic and epidemiologic transitions. Changing patterns in the burden of disease have implications for care requirements, as does the aging of populations. The demand for health care workers is further accentuated by shifts toward nuclear family structures, institutionalized elder- and child-care, advances in labor-intensive health technologies, and changing consumer preferences.

For different reasons, sending countries' requirements for health workers may also be increasing but their "pull" is far weaker. The HIV/AIDS pandemic certainly creates a higher demand for medical attention. Along with the growth of population, an increase in education and public awareness, over time, will enhance the demand for health services. Source countries, however, are unable to translate their increasing need in the labor market to attract and retain highly skilled medical professionals. They lack the financing to generate an effective demand in the labor market.

Remuneration and Work Environment: The most important factor driving migration is the wage differential between source and destination countries. In source countries wages may be deeply insufficient, and public sector health wages may drop sharply during periods of fiscal austerity. In a WHO study of five African countries, dissatisfaction with remuneration was the most significant determination of the decision to emigrate.¹⁸ While many countries have unfilled vacancies, the wage differential between the main source and destination countries provides a significant incentive for migration. Consider the demand presented by the UK alone which needs to recruit 35,000 new nurses while 50,000 retiring nurses will need replacement by 2008.¹⁹ A South African nurse's salary will double if s/he moves to the UK; a South African physician's salary will increase three to five-fold if s/he emigrated to the United States. In fact, Vujcic reported that source-destination country wage differentials (adjusted for purchasing power parity) were so large (3-15 times) that marginal increases in source country wages would, alone, not affect migration flows. Non-wage instruments or non-financial incentives are essential.

Migrants also consistently point to the work environment as a critical determinant of migration. Some report heavy work burdens. The environments may not offer job satisfaction due to insufficient supplies or equipment or inadequate facilities. The prospect for continuing education and career advancement may be limited. The social status of medical professionals may be low. Further, the management of health services may be inefficient – or corrupt.

¹⁸ WHO. 2004. "Recruitment"

¹⁹ Dumont and Meyer 2004 p 127

Providing an improved work environment needed to retain health professionals in sending countries is a significant priority in the short and medium term.

Noteworthy, destination countries are not able to fill medical positions from their own labor force. Partly this may reflect some of the same relative barriers – suppressed wages in comparison with other professions, for example. Also significantly, the respect and social prestige for health professionals (especially nurses and community health workers) may be lacking. This situation may be exacerbated by practices of physicians and others within the medical community itself.

Personal and Security: A significant if not distinctive cluster of causes relates to personal circumstances. For some, the motivation to emigrate may arise primarily from a desire to join family or to increase the opportunities for children or simply to experience living abroad. Others may remain in the source country in order to be near family or to serve a population to which one feels committed.

Another cluster of causes have to do with hazards of personal insecurity due to risk of infection, vulnerability to physical violence, and other kinds of hazards. Health workers in sub-Saharan Africa increasingly complain of the risk of HIV/AIDS infection. Indeed, a 1999 ILO study suggested that 18-41 percent of health workers in sub-Saharan Africa were HIV-positive.²⁰ Similarly, many source countries suffer from criminal violence. Women workers in remote locations are at particular risk to physical insecurity.

Consequences of Medical Migration

The social and economic consequences of medical migration are difficult to validate because of methods limitations. All sorts of ills or miracles may be attributed to migration but they are not easily proven because of the absence of counterfactuals – what would have happened without migration? Moreover, the consequences of migration would be expected to vary among individuals and sending and receiving societies. That winners and losers are generated seems likely. At least three areas of consequences should be considered:

- Migrants and Family
- National Health Status
- Education and Public Subsidy

Migrants and Family: The biggest “winners” in medical migration are the migrants and their immediate families, both those who accompany them and those who receive remittances at home. Assuming that they are able to avoid the exploitation of unethical recruitment agents, professional migrants are able to obtain employment with superior compensation, better working environments, opportunities for career advancement, and prospects of personal and family satisfaction.

²⁰ ILO, 1999.

National Health Status: Country-wise, the winners are destination countries while the losers are sending countries. As migrants strengthen the health care workforce in destination countries, the health status of receiving societies is presumably enhanced. Equity may also be enhanced because migrants work in rural or otherwise less attractive areas. In contrast, emigration exacerbates the shortage of skilled health workers in sending countries, potentially crippling health care systems. Thus, out-migration would be expected to compromise the national health of sending countries. Some would argue that it is the very lack of employment opportunities that has generated out-migration. In such circumstances with high levels of unemployed health workers (and low health outcomes), out-migration is a symptom of deeper malaise.

Vacancy rates among departments of health in many source countries reflect these dire shortages. In 2002, the South African department of health reported more than 4,000 unfilled vacancies for physicians and 32,000 vacancies for nurses, more than a quarter of the total annual vacancies.²¹ In Ghana in 2002, 47 percent of doctor posts were unfilled, and 57 percent of the registered nursing posts were likewise vacant.²² Although some attribute these vacancies to out-migration, they may be generated by other factors such as low production and unattractive remuneration. These are the same factors that *cause* out migration, namely high work burdens, poor working conditions and low remuneration. Migration may simply be an aggravating factor rather than a root cause. “For example, there are approximately 7,000 South African expatriate nurses in the main OECD destination countries; at the same time there are 32,000 vacancies in the public sector, and 35,000 registered nurses in South Africa are either inactive or unemployed.”²³

Whatever the primary driver of vacancies, qualitative and case studies confirm that health status in some sending countries has descended into crisis proportions. The *New York Times* report of only 30 nurses in a 1,000-bed hospital grappling with an HIV/AIDS crisis in Malawi certainly confirms the deadly health impact of out-migration. Recently, the BBC reported that an entire cardiovascular unit in a provincial hospital in the Philippines collapsed because of the wholesale migration of all of the nurses in the clinical unit. Repeated and consistent case reports confirm that out-migration whatever its causes has harmful consequences for health among the poor in sending countries.

Education and Public Subsidy: The effects of migration on educational institutions can be two-sided. On the one hand, home institutions suffer from the loss of its graduates to national service – in terms of morale, prestige, and national contributions. The prospect of migration may drive the orientation of the curriculum more towards the export market than to the epidemiologic challenges at home. On the other hand, it could be argued that educational institutions that successfully export graduates demonstrate its quality and competitiveness. It improves its attractiveness to potential students seeking international opportunities. Indeed, it has been reported that Ghanaian medical students are required to take equivalency examinations for destination countries before certification examinations for practice at home. Some also argue

²¹ Dumont and Meyer 2004 p 122; ref Erasmus and Hall 2003.

²² Devlo 2003

²³ Dumont and Meyer 2004 p 130

that the prospect of entering into the international professional market has a positive incentive effect on the numbers of student applicants and the quality of higher professional education.

One definite negative consequence of international migration is financial. Governments invest in medical education to strengthen their national health capacity. As meager as such training facilities and investments are – two-thirds of Sub-Saharan African countries have one medical school or less – the misdirection of resources can be dramatic. In a situation of considerable emigration of medical professionals trained in public institutions, it is clear that emigration drains these investments away from the health needs of the national population. Furthermore, these costs can be considerable. The estimated cost of training a South African doctor approximates \$97,000; nurses approximate \$42,000.²⁴ Thus the overall ‘loss’ from investments in medical education “may be estimated at around US \$1 billion, equivalent to approximately one-third of the public development aid received by South Africa between 1994 and 2000.”²⁵ At the same time, the prospect of emigration may attract students to medical education who have, from the start, the intention to emigrate, rather than the commitment to serve domestic needs. Thus when medical education is publicly funded, emigration has the effect of shifting the government subsidy from being an investment in health to being either a privatized benefit to one person or an investment in foreign remittances that, it is anticipated, will benefit the country in indirect ways.

Policy Approaches

Understanding social and economic consequences is important because such determines whether public policy intervention is indicated, or not. Only if some aspects of social consequences are considered undesirable would public policies be indicated in sending and/or receiving countries.

No consensus exists with regard to the overall positive and negative consequences of international medical migration. Indeed, while most would accept that the process generates winners and losers, there is no consensus on which parties gain or lose by how much. Consequently, many policy-makers and economists would be reluctant to intervene in global labor markets. The positive externalities of international medical migration are so strong and sustained over time that the benefits far outweigh the costs.

Moreover, far more powerful forces shape the determinants of medical migration, not easily amenable to public policy. These powerful determinants are political stability and economic health. Countries undergoing conflict or political instability are not able to retain their middle-class, including medical professionals. Similarly, societies trapped in a vicious downward spiral of declining economy are unable to provide an inviting environment for professional workforce. These powerful contextual forces, many claim, are the primary drivers of migration. A major question is whether migration policies can modulate flows in the midst of these powerful political and economic forces.

²⁴ Dumont and Meyer 2004 p 130

²⁵ Dumont and Meyer 2004⁷ p 131

Others would advocate active policies. There are growing examples where the exodus of skilled health workers is linked to total systems incapacity to grapple with health crises – especially in sub-Saharan Africa. Even if counterfactual evidence is lacking, there is a strong case that very poor countries experiencing health crises desperately require their skilled human resources. And if compensation and work environment were important determinants of retention, governments and donors should prioritize their investments to ensure the retention of highly skilled workforce. There are, moreover, many arenas of public policy that are amenable to intervention. Policies to be considered among sending and destination countries are summarized in Table 12. In addition to national policies, one could argue for more effective global migration regimes in medical migration.

Source Countries: There are two distinct, although complementary, strategies that countries facing worker shortages may employ. Protective strategies would attempt to retain workers, slowing down out-migration of highly skilled professionals. Opportunistic strategies would invest in the production of health workers for both domestic and international deployment.

Protective strategies cannot be coercive. Slowing the pace of emigration cannot be done through prohibition of the human right to movement. Ethical issues arise if retention is promoted by restricting travel and punishing emigrants. It is better accomplished by a set of policy actions that reduce push forces as drivers of out-migration. Potential source country policies must address directly the disincentives to health personnel in the form of remuneration, working environments, and security concerns. This will require in many cases the restructuring of the health care system. Donors should prioritize investments in health workers, management experts, and training institutions, to improve remuneration and working conditions and thereby redress some of the causes of emigration while improving the national health system.

Opportunistic strategies recognize that the global demand for health workers is high and growing. Low-income countries could launch longer-term strategies to develop their comparative advantage in producing an abundant supply of highly skilled health workers. They would do so by investing in training institutions, or in encouraging private sector and donor-funded programs. Some countries such as the Philippines, India, and Cuba have deliberately encouraged emigration. For example, the Philippine national development strategy endorses international migration in order to gain remittance income. “In 2001, 13,536 nurses, about one-quarter of the nurses employed in Filipino hospitals, left the country for foreign jobs.”²⁶ The benefit for the source country rests in the remittances that migrants provide, as well as in the extra skills of returnees. While remittances from long-term migrants has been quite satisfactory in the short and medium term, the long-term pattern of remittances merits study, particularly if there is (as would be predicted) a weakening of remittance flows in succeeding generations.

One difficulty of sending country strategies that export medical professionals is internal equity. With the exception of Cuba, sending countries also suffer from internal maldistribution – insufficient medical professionals in rural, deprived, and backward areas in comparison to more lucrative forms and locations of health care. Exporters such as the Philippines and India suffer simultaneously from deprivation of coverage in backward regions while exporting to overseas markets. Moreover, the immediate challenge of a national and global shortage of health workers

²⁶ OECD 2002 p 19 citing Goss and Lindquist 95 for policy

must be addressed. The only strategies for the short-term are protection strategies to reduce out-migration and social mobilization to train paraprofessionals rapidly to assume the roles and work of more skilled professionals.

Destination Countries: As destination countries mostly benefit from international migration, there may not be much incentive for these countries to introduce and institutionalize protective policies. After all, importing medical workers enables a country to meet its human resource requirement quickly without the financial, time, and institutional investment in educational institutions. In order to protect its public, destination countries may establish professional norms and standards for foreign-trained medical personnel. On the grounds of human and labor rights, it will also want to protect immigrant labor from unethical and exploitative malpractices.

It should also recognize that it is inherently unfair for rich countries to capture educational subsidies from poorer countries. Proposals for compensatory payments have not been accepted thus far by importing countries. More feasible perhaps is that importing countries should develop self-sufficiency educational policies to produce sufficient numbers of medical personnel to meet their own needs. Alternatively, richer countries should launch a massive re-investment fund to build urgently human resources and capacity in poorer sending countries.

Destination countries should also increase temporary (3-5 year) work permits for health professionals from source countries. This form of migration is mutually beneficial: source countries economies benefit from returnee remittances and savings, and their health system benefits from returnees' improved skills and experience; destination countries benefit from the influx of highly skilled medical professionals who retire elsewhere; migrants themselves benefit from the experience for themselves and their family, the increased remuneration, and prestige. These temporary work permits would address the global economic equity challenges described later. However it might also have practical difficulties, for example, if young professional families with children became rooted in the host society after 3-5 years, making it difficult to return.

Commonwealth countries have adopted a Code of Ethics for the Recruitment of health professionals. The Code requires dialogue between source and destination countries. For example, destination countries should refrain from targeting recruitment (including via the internet) from countries experiencing severe shortages in human resources. Similarly, a quota or cap of visas might be imposed upon professional migrants from distressed countries. If the migrant was trained in a publicly funded educational institution, the migrant and/or the destination country would need to return the public subsidy in medical education. The effect of such a system would be to create a considerable but not unfair disincentive for migration.

Global Regimes: Actions by sending and receiving countries must be backed by more effective global regimes. The first and most important global function is informational and evidence base. There is an urgent need for more and better information to inform policies, as discussed later under research priorities.

A second arena of global policy relates to the interface of global economic equity and global health equity. Paradoxically, while long term migration clearly undercuts national health in many source countries, temporary labor migration can be positively perceived by both source and destination countries, and would generate widely distributed economic growth. Dani Rodrik has argued that:

“If [WTO] trade negotiators were genuinely interested in devising market-access rules that benefit developing countries, they would focus not on agriculture but on something else entirely: temporary labor mobility. The greatest demonstrable gains to developing nations from relaxing restrictions in the world economy today lie in the liberalization of temporary labor flows. It is hard to identify any other issue in the global economy with comparable potential for raising income levels in poor countries while enhancing the efficiency of global resource allocation. Even a relatively small program of temporary [3-5 year] work visas in the rich countries could generate income gains for workers from poor countries that exceed the predictions for all of the Doha proposals put together.”²⁷

Rodrik estimates that temporary visas for 3 percent of rich country labor force “would easily yield \$200 billion annually for the citizens of developing nations.” The return of temporary labor migrants would also, obviously, contribute to source country health, which is valuable in itself, and also is independently instrumental to economic growth.

If Rodrik’s estimates have validity, one can easily see the collision course among ministries of health versus ministries of finance in source countries. While the latter seeks global economic equity in exporting skilled human resources, the former wishes to constrain that flow from the health sector. In both source and destination countries, both short- and long-term migration are beneficial – indeed Rodrik argues that the liberalization of immigration restrictions would produce a far bigger “bang in terms of improved efficiency in the global allocation of resources” than removing agricultural protections, differential tax treatments of investment, intellectual capital protection, or financial market regulations. Political rather than economic arguments constrain migration flows from the global South to the global North. And health rather than economic arguments will have to govern the flow of medical professionals.

Research Agenda

The crisis of human resources in many countries will not disappear, nor will the contentious issues surrounding international medical migration. Policy-oriented research should be launched to provide a stronger evidence-base. Among priority issues, six stand out in our opinion.

Data and analyses – We must improve our data, information, and analytical base on international medical migration, probably by building upon current administrative records. Migration statistics are notoriously difficult and expensive to collect and maintain. Even more so for specialized aspects such as medical professionals. Medical migration data, however, are vital in terms of broader health policy demands. Administrative records can provide the broad

²⁷ Rodrik 2004 p 2. See also Rodrik 2001.

contours of monitoring trends in medical migration if they are well maintained, and slightly expanded, at little incremental expense. More analytical and specialized studies would be required to delineate causes and consequences of medical migration.

Policy effectiveness – Because it is controversial, the social consequences of medical migration among individuals and sending and receiving societies deserve high research priority. The positive benefits to individual migrants and to receiving societies can be inferred from the voluntary effort to migrate on the part of migrants and recruitment and admission on the part of receiving societies. What deserves more rigorous examination are positive and negative consequences, both short and long-term, in source countries. The overall impression – which needs to be subjected to further research – is that the emigration of health professionals from countries undergoing health crises to destination countries aggravates global inequality in health. It sharply diminishes the capability of people in source countries to enjoy adequate health. Long term migration is likely to have diminishing economic rewards, whereas short-term migration would have sustained benefits in the source country. Research is also indicated on policy effectiveness of efforts to stem these negative social and economic consequences. We understand very little of how to mitigate the negative consequences of migration.

Migration and trade in health services – Migration of medical personnel is only one of the several transnational flows of health resources. Not only do workers move from country to country, but diseases are transmitted across political boundaries. Moreover, patients may move to service providers and some services, such as radiology or other diagnostic tests, may be transmitted via new information-communications technologies. Some countries, such as Thailand, have deliberately over-cultivated their domestic specialized health infrastructure in order to attract “medical tourists” from abroad. In this case, the migrants are patients rather than providers. In Thailand, meeting the needs of “medical tourism” is estimated to absorb 15 percent of the highly skilled medical personnel in the country.²⁸ Some components of this service industry include remote diagnostic services (from X-ray reading to laboratory tests), or surgeries (laser surgery etc). The World Trade Organization has put services on its agenda with the aim of opening the service sector to global competition. While the economic implications of this model of addressing health worker shortages is uncertain both for the backward areas of the host country as well as for the migrating patients, this and other related flows complicate the pattern of migration yet further. As an emerging health-related international flow, the trade in health services merits priority research attention.

Political economy of diaspora – The economics of health professional migration is complex. On the one hand, the source country’s investment in medical education, as well as all of the previous investments in basic education, does not serve the health of its population. These investments are both significant and lost in terms of public purpose. On the other hand, the migrant is likely to contribute economically through remittances – which will certainly benefit the family left behind. While remittances will not support the health sector or the teaching institutions, they do contribute significantly to the national economy. And in some cases, there may be a possibility of encouraging the return of the diaspora (with increased skills at no cost to the source country). Furthermore, the prospect of migration may stimulate private sector investment in medical education, which would improve remittance flows at no marginal cost to

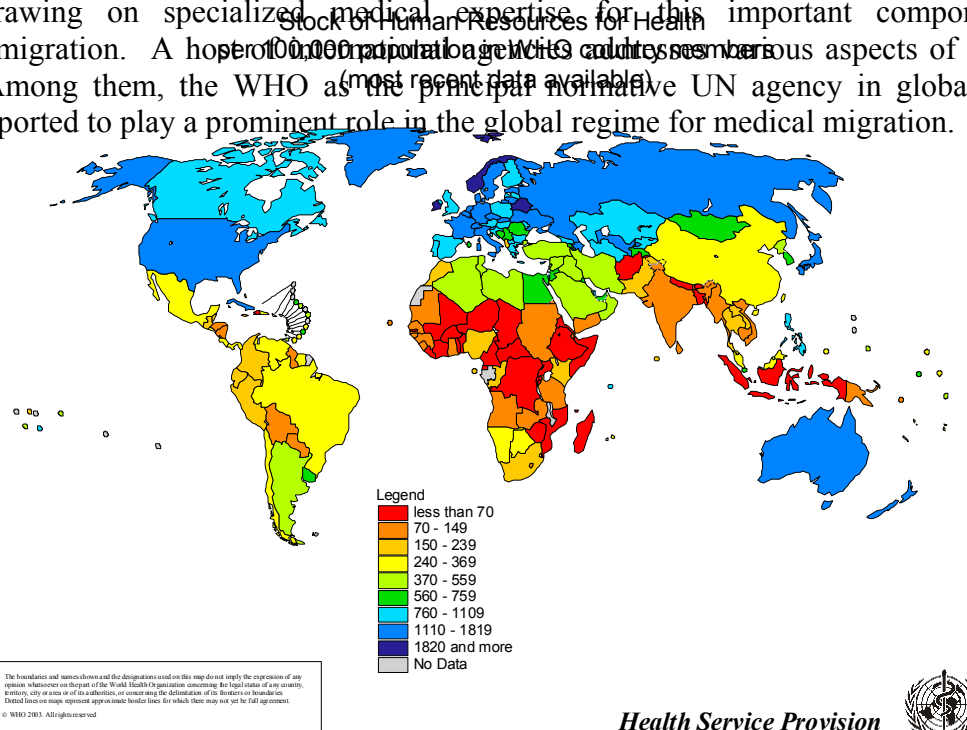
²⁸ Wibulpolprasert et al 2004.

the public sector. So the overall economic impact of health professional migration is likely to vary significantly.

Ethical analyses – The migration of medical professionals raises a number of ethical issues related to the migrant as well as to source and destination countries and their populations. These issues relate to the fair distribution of economic and professional advantage. One particular position, adopted in this paper, merits further discussion. A medical professional is him or herself a locus of human rights that are-to-be-protected, such as the freedom of movement, to the right to development, to safe working conditions, or to a living wage. A medical professional is also a crucial instrument of the very health care to which others in a population have a right. It is possible but unlikely to be constructive to frame this as a tradeoff that gives the right of a Botswana doctor to migrate greater (or less) weight than the right of hundreds of people of Botswana to have access to a physician. We reject, for example, coercive means of medical professional retention. Instead, we advocate the creation of economic and social incentives to attract and retain doctors in Botswana. However, given the “exceptional” urgency of the problem, we argue that policies to improve working conditions, increase remuneration, and provide opportunities for career advancement – are ethically imperative as well as functionally necessary. Without them, the MDGs will not be met, the HIV/AIDS programs will not be implemented, and people will suffer. Thus donors, the private sector, and governments of countries in health crisis must work together with an unprecedented urgency to address the push factors of medical professional migration. As crucial instruments of health, doctors and nurses should be treated differently – indeed exceptionally well, exceptionally soon – for ethical reasons that go far beyond their own well-being.

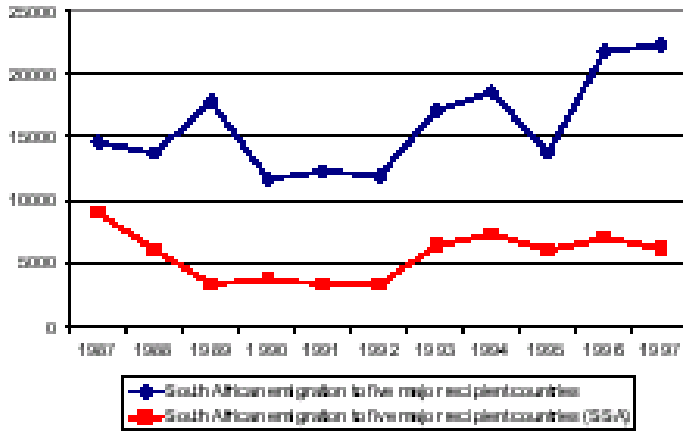
Mapping of international institutions – Medical migration is currently the concern of a plethora of international agencies. It suffers from the problem of “everybody’s business is nobody’s business.” Clarity should be achieved with regard to the complementary role of various international agencies and institutions in monitoring medical migration, developing policies and guidelines for regulating such flows, accumulating best practices and lessons learned, and strengthening an overall global medical migration regime. The structure should be imbedded in the evolution of the broader institutional architecture for work in international migration, drawing on specialized medical expertise for this important component of international migration. A hope of 100,000 population age 15+ culture members (most recent data available) should be supported to play a prominent role in the global regime for medical migration. Among them, the WHO as the principal normative UN agency in global health

1 – Figure



1 – Figure

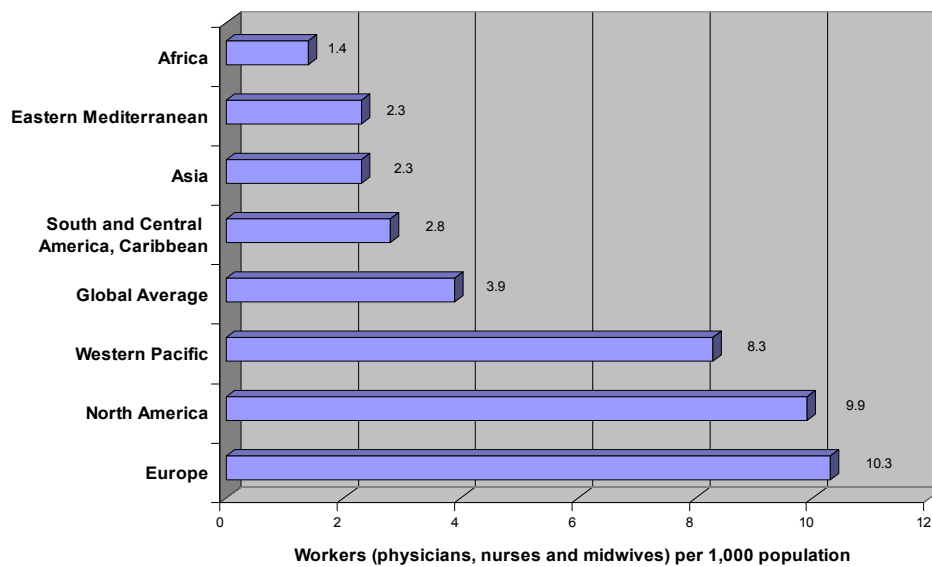
1 – Graph: Discrepancy between Two Data Sources on South African Emigration



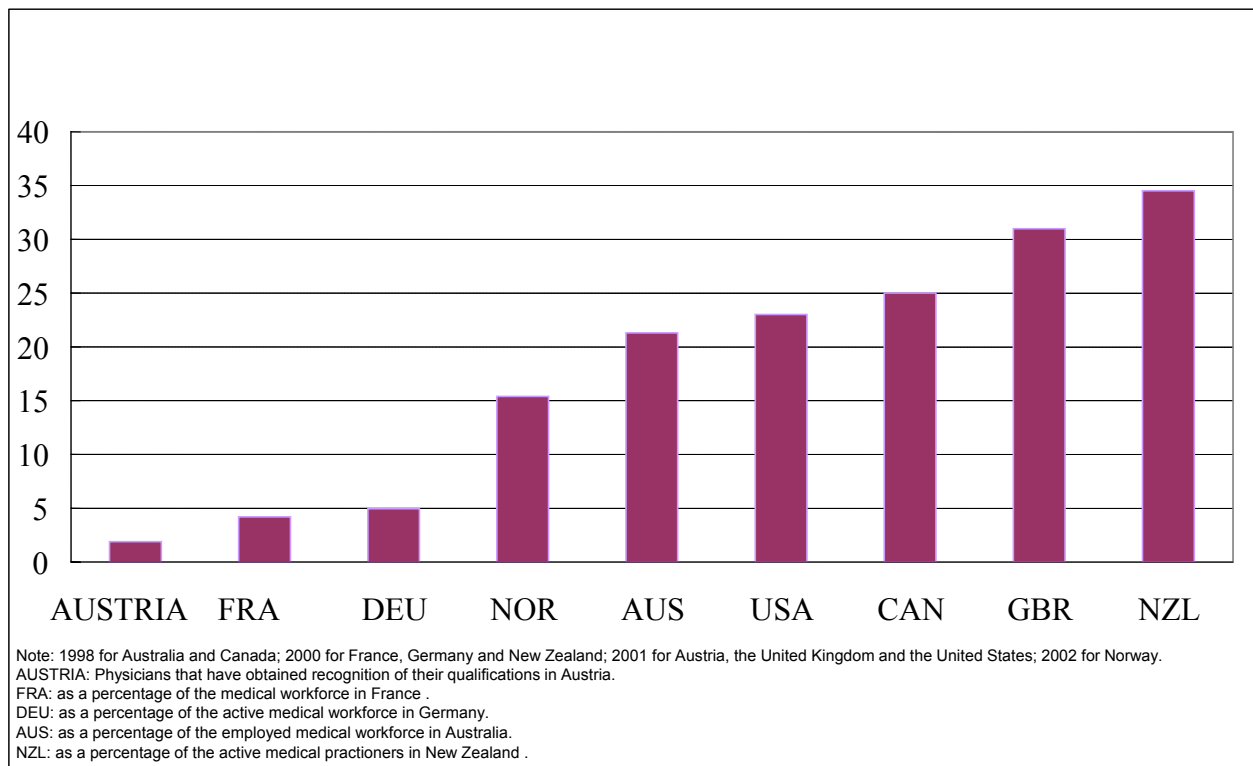
Stilwell et al 2003

2 – Graph:

Worker Density By Region



3 – Graph: Stock Foreign-Trained Physicians (% of total) in Selected Countries (2000)



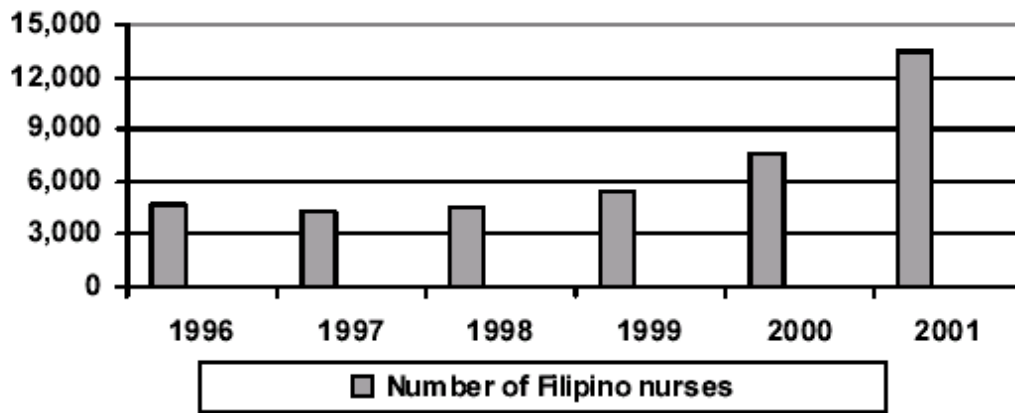
Source: OECD 2002 p 5

4 – Table: South African-Born Workers Practicing Medical Profession in Certain OECD Countries in 2001

		Primary	Secondary	Higher	Number
Australia	2001	22.1%	34.9%	43.0%	67 441
Canada	2000	20.4%	17.6%	62.1%	54 501
United States	2001	17.2%	42.1%	40.8%	90 759
New Zealand	2001	3.5%	41.7%	54.7%	19 875
United Kingdom	2001	10.2%	42.8%	47.0%	115 426
European Union ¹	2001	12.1%	43.6%	44.3%	158 679

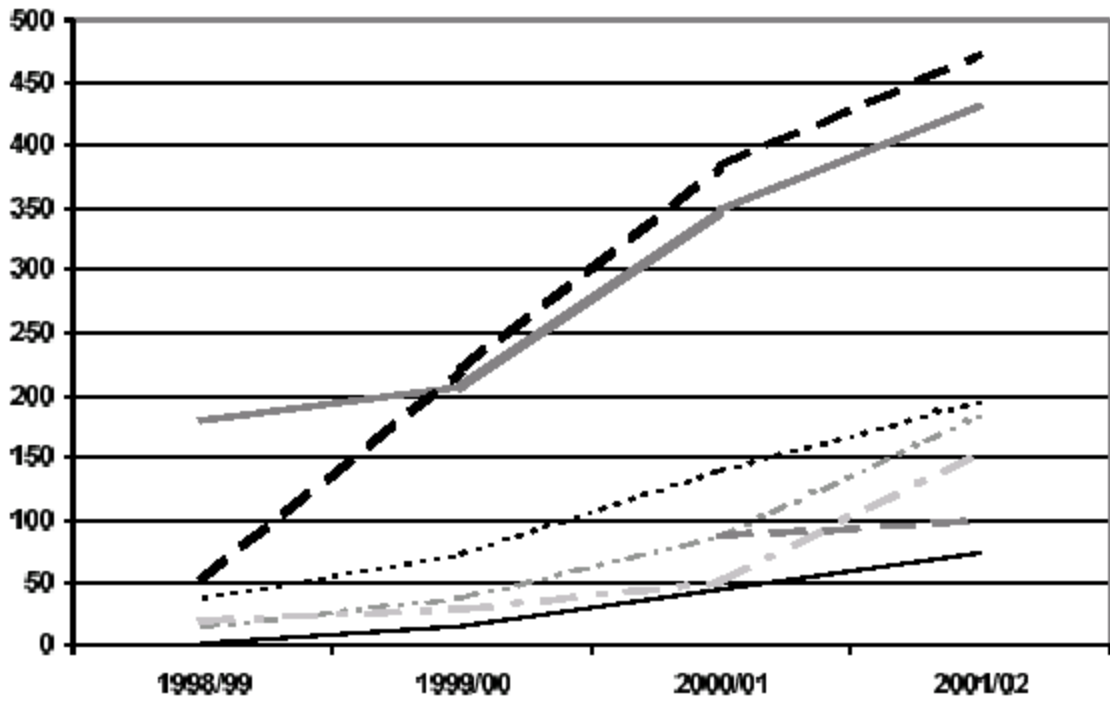
Dumont and Meyers 2004 p 126

6 – Graph: The Philippines: Outflow of Professional Nurses 1996-2001



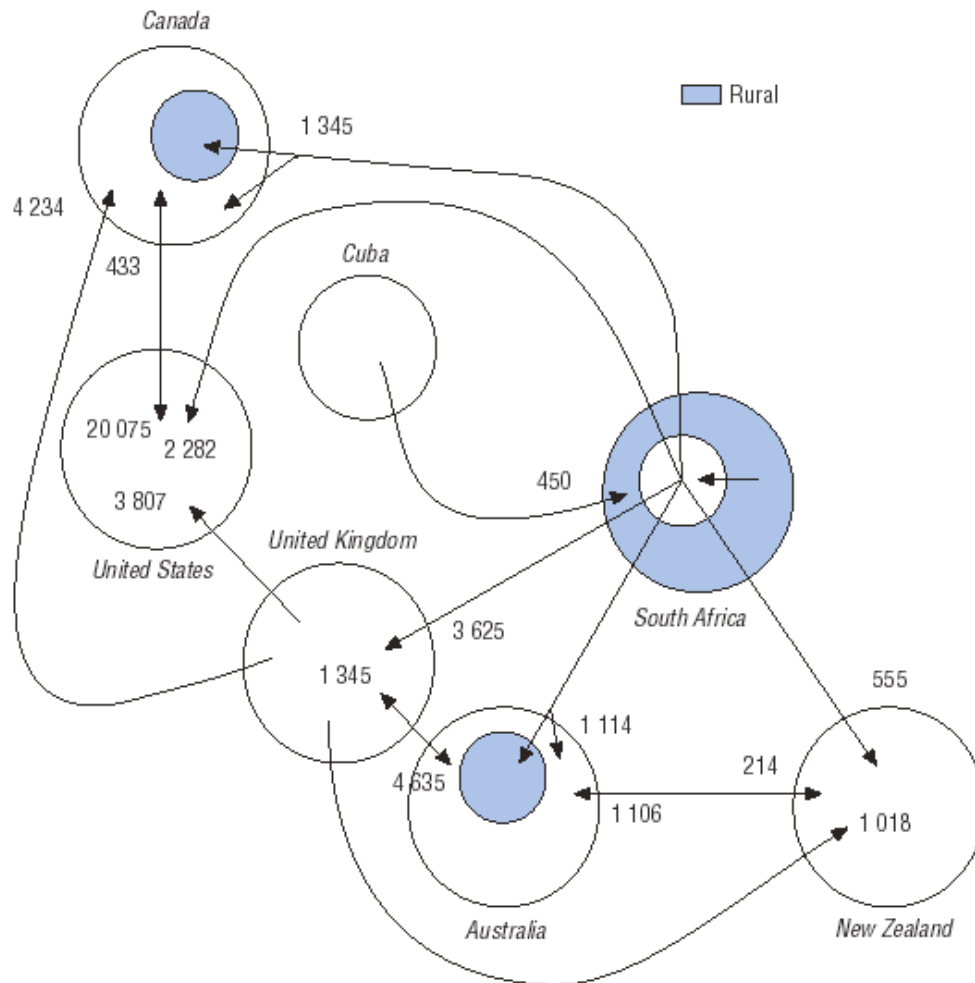
Buchan et al 2003 p 30

7 – Graph : New Registrants on UK Nursing Register from Selected Sub-Saharan African Countries 1998-2002



Buchan et al 2003 p 47

9 – Figure. Principal Axes of International Mobility of Health Professionals between the Old Commonwealth Countries, the United States and Cuba (by Country of Birth).



Dumont and Meyer 2004 p128

11 – Table: Causes and consequences of medical migration

[GRADIENT?]	SOURCE COUNTRIES	DESTINATION COUNTRIES
	CAUSES	
1 Demography and Health		
Disease burden	High	Chronic diseases
Demography	Youthful	Ageing
2 Remuneration and Work Environment		
Income	Low	High
Job satisfaction	Low	Variable
Career opportunity	Limited	Prospects
Management	Rigid, unfair	Variable
3 Personal and Security		
Personal	Family preferences	Children's future
Security	Safety, HIV risk	Protective practices
	CONSEQUENCES	
4 Migrant and Family		
Financial	Remittances	Higher living standard
Social	Higher status	Immigrant - variable
5 National Health Status		
Health systems	Paralysis, collapse	Public sector, backward regions
Health status	Reduced	Increased
6 Education and Public Subsidy		
Educational curriculum	Export oriented	-----
Public institutions	Loss products	
Private education	Growth for export	-----
Public financing	Lost	Captured

12 – Table: Policy options for source and destination countries

Policies	Source Countries	Destination Countries
Protective	<ul style="list-style-type: none"> • Improve working conditions • Improve remuneration • Improve health management systems • Discourage recruiting countries • Bill émigrés for public education • Bond medical graduates • Establish database on migration 	<ul style="list-style-type: none"> • Adopt ethical guidelines or codes • Strengthen code implementation • Monitor compliance with codes • Quotas on immigrant health workers • Attempt self-sufficiency in HR • Transparent recruitment strategies
Opportunistic	<ul style="list-style-type: none"> • Train excess health professionals • Encourage outmigration • Encourage short term migration • Provide incentives for returnees • Facilitate remittance flows • Increase immigration as needed • Negotiate compensation from destination countries • Encourage private medical schools 	<ul style="list-style-type: none"> • Increase temporary work permits • Facilitate immigrant visa/certification • Provide tax holidays • Compensate for educational costs • Increase debt relief / health aid

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¹ Mareckova 2004.