Migration of Nurses from Sub-Saharan Africa: A Review of Issues and Challenges

Delanyo Dovo

Objective. To assess the impact of out-migration of nurses on the health systems in sub-Saharan Africa (SSA).

Setting. The countries of SSA.

Design and Methods. Review of secondary sources: existing publications and country documents on the health workforce; documents prepared for the Joint Learning Initiative Global Human Resources for Health report, the World Health Organization (AFRO) synthesis on migration, and the International Council of Nurses series on the global nursing situation. Analysis of associated data.

Principal Findings. The state of nursing practice in SSA appears to have been impacted negatively by migration. Available (though inadequate) quantitative data on stocks and flows, qualitative information on migration issues and trends, and on the main strategies being employed in both source and recipient countries indicate that the problem is likely to grow over the next 5–10 years.

Conclusions. Multiple actions are needed at various policy levels in both source and receiving countries to moderate negative effects of nurse emigration in developing countries in Africa; however, critically, source countries must establish more effective policies and strategies.

Key Words. Sub-Saharan Africa, migration, nursing systems

This paper was commissioned by AcademyHealth to “identify and review reports, documents and data relating to nursing workforce dynamics” in sub-Saharan Africa (SSA) with the objective of analyzing, synthesizing, and presenting key information on nurse migration in the region. It reviews trends and impact of nurse migration derived from previously published work by various groups including the Joint Learning Initiative on Human Resources for Health (JLI), the WHO Africa Region (AFRO) report on Migration, International Council of Nurses (ICN) Global Nursing Review Initiative, and reports to the High Level Forum (HLF) on the millennium development goals (MDGs) on the human resources crisis.

SSA faces a crisis with human resources for health. The WHO has estimated that though SSA has 25 percent of the world's diseases burden, it possesses only 1.3 percent of the trained health workforce (WHO 2004a, b, c). This situation is linked to an emerging health crisis—for example, it has been reported that life expectancy fell in 17 of the 48 SSA countries due to rising incidence of communicable diseases and the impact of HIV/AIDS (Sanders et al. 2003). It is almost a certainty that health-related MDGs will not be met, and workforce shortages will be a factor in missing these targets. In 2004, a report by the JLI further confirmed the conventional wisdom that availability of trained health workers influences the attainment of health goals and found, for example, that maternal mortality responded best to increases in availability of trained service providers (JLI Report 2004). In relation to shortages, the migration of nurses and other health professionals to developed countries is considered a major contributor to the health crises in SSA. This paper reviews the available information on trends and impact in nurse migration from SSA.

This review assessed published and unpublished literature on the nursing workforce situation in SSA. Meeting reports and semiformal publications were solicited from country sources and collated where available. Documents were scanned for relevant information and data on migration, stock and flows, management systems, and contextual issues affecting the nursing workforce; the recommendations and conclusions reached in previous reports were also assessed. One critical finding was that few of the papers reviewed were based on primary quantitative data. This paper attempts to extract relevant content material from these previous studies.

“Push and pull” factors encouraging nurses to migrate have been discussed extensively in some of the papers reviewed for this paper (e.g., Dovlo 1999; Meeus 2003; Padarath et al. 2003). These provide a helpful frame in which to assess the overall impact of various factors on trends in migration of nurses.

Push factors are influences that arise from within the source country and facilitate a potential migrant's decision to leave. Pull factors reflect actions and omissions of recipient countries that create the demand for, or encourage potential migrants to leave home (CRHCS 2003; Dovlo and Martineau 2004). These factors cover a broad range of issues including income (or remuneration) levels between source and destination countries; job satisfaction and perceptions of the work environment and ability to utilize one's professional

skills; the organizational environment and career opportunities as well as workers' perceptions of trust in the management of health services; general political and administrative governance; encompassing bureaucratic efficiency and fairness; occupational risk and protection because of HIV/AIDS and poor availability of protective gear; and the welfare, security, and benefits of health professionals during employment and after retirement.

Padarath et al. also suggest that "pushes" exist in both source and recipient countries, but are mitigated by "stick" factors in source countries and "stay" factors in destination countries. "Stick" factors include family ties, psycho-social links, and the potential cost to be incurred to migrate, while "stay" issues include reluctance to disrupt family life and children's schooling, lack of employment opportunities at home, and the higher standards of living enjoyed in the recipient country (Padarath et al. 2003).

It should also be noted that one difference between health professions found in migration in SSA countries is that while doctors are usually passively recruited (i.e., look for the jobs for themselves), nurses are usually actively recruited by agents, sometimes for a fee (Dovlo 2006; Mensah, Mackintosh, and Henry 2005)—the role of recruitment agencies is now in itself a significant pull.

AN OVERVIEW OF NURSING IN SSA

The nurse workforce in SSA is a significant component of its health workforce, perhaps more than on other continents. Nurses constitute 45–60 percent of the entire health workforce with nurses responsible for a broad range of services. Generally, the nurse to physician ratio is much higher in SSA than on other continents. Analysis by Munjanja, Kibuka, and Dovlo (2005) shows nurse to physician ratios ranging between 20:1 and 11.6:1 in Tanzania and Ghana, respectively, to a low of 2:1 and 2.5:1 in Madagascar and Central Africa Republic (Munjanja, Kibuka, and Dovlo 2005).

While the ratio of nurses to doctors may be high, the ratio of nurses to population in SSA tends to be much lower than in most other regions of the world. This is in part a reflection of low availability of resources, but other factors play a part. For example, many countries are unable to expand the workforce significantly even when some supply is available because of fiscal restraints imposed by international loan conditionalities. For example, employment is frozen and staff retrenched especially in from the public sector. A few countries (e.g., Uganda, Kenya) report unemployed health workers but examples from Lesotho and Ghana suggest that lengthy employment

processes and lethargic civil service bureaucracy can also reduce the pace of recruitment of health workers (Dovlo 1999).

Another factor impacting on supply of nurses has been the decision in some countries to ban continued training of “enrolled”¹ nurses who formed a major component of the health workforce (Munjanja, Kibuka, and Dovlo 2005). A further, relatively new, constraint to the supply of nurses in Africa is a rise in nurse deaths possibly as a result of HIV/AIDS, which may also influence supply through a perception of risk that may deter young job seekers (Tawfik and Kinoti 2001; WHO 2004a, b, c). A recent upsurge in nurse migration has worsened the situation as inflows from training schools are unable to maintain existing poor staffing levels. A WHO study in 2004 showed a general reduction in the availability of nurses with some countries having as much as a 12 percent decline over a 3-year period (Awases et al. 2004).

Adding to this poor supply context is the fact that while most countries in SSA have one or more nurse training institutions, many lack the required number of trainers and training materials and have limited student facilities. This negatively influences the schools’ ability to increase the supply of newly trained nurses (Munjanja, Kibuka, and Dovlo 2005). Thus, a complex of factors and influences have affected supply of nurses into the workforce and reduced the ability of health systems in SSA to absorb the impact of nurses’ emigration.

NURSE MIGRATION IN SSA

The paradox of the situation is that SSA countries with very low concentrations of nurses (ranging from 0.30 to 4.0 nurses per 1,000 population) are supplying nurses to countries in other regions, which already have much better ratios of nurse to population (with densities from 7 to 15 nurses per 1,000) (see Table 1).

Migration has become more significant in SSA due to recent rises in departure of nurses especially from Anglophone² African countries; there are suggestions that migration from other countries is less pronounced (e.g., a study from Portuguese-speaking Mozambique reported that health worker migration was not seen as a major issue [Ferrinho and Omar 2004]). An examination of data on foreign-trained health workers in Organisation for Economic Co-operation and Development (OECD) countries (recipients) shows smaller proportions found in France and other non-English countries (OECD Ad Hoc Group 2003). While not all of these workers are from developing countries, the data indicate these countries’ potential to absorb foreign health workers. In the United Kingdom, some 8.34 percent of all nurses

Table 1: Nurse Availability Data—Selected SSA Countries

<i>Country</i>	<i>Stock</i>	<i>Stock per 1,000 pop</i>	<i>Compare Stock per 1,000 pop in Some Recipient Countries</i>	
Botswana	4,753	2.65	United States	9.37
Burkina Faso	5,518	0.41	United Kingdom	12.12
Cameroon	26,042	1.60	Ireland	15.2
Central Africa Republic	1,188	0.30	Canada	9.95
Ghana	19,707	0.92	Australia	9.71
Kenya	37,113	1.14	New Zealand	8.16
Madagascar	5,661	0.32	France	7.24
Malawi	7,264	0.59	Portugal	4.36
Mauritius	4,550	3.69		
Nigeria	210,306	1.70 (2003)		
Senegal	3,287	0.32		
Seychelles	634	7.93		
South Africa	184,459	4.08		
Tanzania	13,292	0.37		
Uganda	16,221	0.61		
Zambia	19,014	1.74		
Zimbabwe	9,357	0.72		

From WHO World Health Report (2006).
pop, populations.

working in the United Kingdom in 2001 were foreign, 21.2 percent of these are from SSA (Simoens, Villeneuve, and Hurst 2005), emphasizing the English-speaking phenomenon discussed earlier.

Accurate and up-to-date information on health worker stocks and flows was very difficult to obtain from the documents reviewed and many SSA countries have inadequate human resources information systems. In Table 1, we have summarized the quantitative situation of nurses in SSA using data from the recent World Health Report (WHO 2006) to build a picture of the shortage situation.

The result shows wide variation in availability of nurses but a generally low level compared with levels in the rest of the world. Some information on workforce stocks derived from Nursing Boards may not be accurate, as until recently some countries only required registration at initial entry into the workforce. Also, source country migration data obtained from verification of qualifications (a requirement by destination countries), provide estimates of *intention* to migrate and not definitive movement. At best this illustrates trends in the interest of nurses to migrate and suggests their intended destinations.

Registration data related to nurses arriving in recipient countries may provide more accurate data on foreign-trained nurses who come to

practice, but again these numbers may not reflect those nurses who take on nonnursing jobs or spend time in “adaptation” before receiving formal registration to practice.

Charting the mobility relationship between source and recipient countries is not a simple linear task. For example, nurses from Africa may first enter the United Kingdom, work for a few years, and then move on to Canada or the United States. Some intra-Africa migration also occurs and Zambia’s verification records, for example, show that almost 70 percent of enrolled and registered nurse requests were intended for either South Africa (32.7 percent) or Botswana (32.2 percent). This may not be true for many other countries in Africa. Ghana’s verifications between 1998 and 2003 showed that only 0.8 percent of nurses verified for South Africa (compared with 80 percent for the United Kingdom) while in Malawi only 6.5 percent sought verification for other SSA countries (compared with 82 percent for United Kingdom) (Padarath et al. 2003; Buchan and Dovlo 2004; Munjanja, Kibuka, and Dovlo 2005).

Some studies highlight troubling data. For example, between 1999 and 2001, 114 nurses making up 60 percent of the workforce left a single hospital in Malawi; 500 nurses who left Ghana in 2000 made up more than double the number graduating from training schools in the country (Buchan and Sochalski 2004).

The “push” factor of wage difference is one of the most important factors in health worker migration and pay differences between recipient countries and SSA source countries can be very high. For example, purchase parity pay for nurses in Australia or Canada was 14 times that of a Ghanaian nurse, 25 times that of a Zambian nurse, and twice that of a South African nurse (Vujicic et al. 2004). However, when the salary differentials are compared with intentions to migrate, Ghana and South Africa had similar levels of intentions to migrate despite the vastly different salary differentials while Uganda, with similar differentials to Ghana, showed intentions at less than half of both countries (Awases et al. 2004).

The differences raise the importance of the role of nonfinancial factors in improving retention. Studies by Deutsche Gesellschaft fur Technische Zusammenarbeit (GTZ) on nonfinancial incentives in Kenya and Benin suggest that a mix of both financial and nonfinancial incentives were effective in addressing motivation. The research highlighted the potential of using various approaches including group and effort-based awards, team building, career development and transparent promotion schemes, continuing education, and supportive supervision, all supported with staff satisfaction surveys (Mathauer and Imhoff 2004). The 2004 WHO migration study

Table 2: Staff-Motivating Factors in Six SSA Countries (from Awases et al. 2004)

Country	<i>Factors of Motivation</i>			
	<i>Better/Realistic Remuneration (%)</i>	<i>Conducive Working Environment (%)</i>	<i>Continuing Education/ Training (%)</i>	<i>Better Management of Health Services (%)</i>
Cameroon	67.8	64.2	66.6	54.9
Ghana	84.8	80.75	66.9	70.1
Senegal	90	No data	No data	No data
South Africa	77.5	67.85	51.9	57.8
Uganda	83.5	36	29	29
Zimbabwe	76.6	69.3	50.6	63.3

(Table 2), while finding remuneration to be rated highly as a retention factor, also found that nonfinancial factors were very highly rated by health workers among “push” factors influencing a decision to emigrate (Awases et al. 2004).

SSA countries have tried a variety of actions aimed at mitigating the loss of health workers and Table 3 summarizes some of these actions. Financial incentives that were tried include South Africa’s “rural” and “scarce skills” allowances aimed at staff working in designated rural areas (it ranged from 10 to 15 percent of annual pay for “scarce skills” and from 8 to 22 percent for “rural location” depending on type of worker and location) (Department of Health 2004). Ghana has introduced an “Additional Duty Hours Allowance” (ADHA) that has significantly increased “take-home” wages for health workers. A separate “deprived location” allowance as well as a transport and housing loan scheme aimed especially at doctors and nurses have also been implemented. Generally, the implementations of the strategies have not been evaluated, although in Ghana, the “ADHA” is thought to have spurred migration of nurses due to dissatisfaction with the disparity between their allowances and that of doctors (Buchan and Dovlo 2004; Mensah et al. 2005).

The low level of supply of nurses in Africa is likely to persist as economic restrictions and the effects of HIV/AIDS limit any expansion in numbers. The internal demand for nurses in SSA countries is further strained by the demand from externally funded global health initiatives, nongovernmental organizations working in the health sector, and disease-specific programs such as TB, which may draw existing staff from regular health services (Kurowski

Table 3: Examples of Retention Strategies of Some SSA Countries (derived from Report: Commonwealth Workshop on Retention of Health Workers, January 2003)

<i>Country</i>	<i>Strategies/Actions Adopted</i>
Botswana	<p>International recruitment started</p> <p>Increased intake in schools of health sciences</p> <p>Proposals for a unique pay structure for four sectors. Salary Review Commission</p> <p>Thirty percent overtime allowance to nurses (15% for doctors)</p> <p>Proposed introduction of "Health Care Auxiliary Assistants"</p> <p>Institutional housing for staff</p>
Lesotho	<p>Draft HR retention plan</p> <p>Health Reform Project—MOHSW undertaking a study on HRH. Needs assessment</p> <p>Salaries: discussions on pay structure for health workers started for doctors, nurses</p> <p>New faculty of health science—to address production needs</p> <p>Revisiting the policy of retirement at 55 (raise age of retirement)</p> <p>Bilateral agreement with free state university on training and retention</p>
Malawi	<p>Propose separation of health sector from civil service</p> <p>Aggressive training and production of nurse midwifery and enrolled nurses</p> <p>Gap-filling training of nursing auxiliaries</p> <p>Career structure changes for nurses—senior technical promotions</p> <p>Discussions also with NORAD and other development partners</p> <p>National Health Plan 1999/2004 with strategies to improve things</p>
Mozambique	<p>Proposals to increase salaries waiting for approval of MOF</p> <p>Creation of two higher institutes for Health Staff training in Beira and Maputo</p> <p>Beginning of fellowship program with UNICEF and WHO support</p>
Namibia	<p>Hardship allowances for staff in remote areas</p> <p>Preferences for staff working in rural areas for fellowships</p> <p>Two years of community service policies being developed for all health professionals</p> <p>Improved working conditions+remunerations—all civil servant—pension, social security, medical aid, etc., even after retirement, govt. housing scheme at all levels</p> <p>Doctors, dentist, pharmacists fixed overtime. Nurses—hours based</p>
Swaziland	<p>MOHSW—2001 project to review schemes of service, career structure problems addressed submitted to MoPS awaiting cabinet decision</p> <p>Civil service public sector management program, review of allowances and incentives</p> <p>Institutional housing—quota to health professionals</p> <p>Standard benefits—all civil servants, housing, medical aid, etc.</p>
Tanzania	<p>Inventory of HR in 1995 and establishment of databank</p> <p>High HRH production</p> <p>Devolution to districts and health sector reforms</p> <p>Selected salary enhancement for top/middle management in health</p> <p>High production—four faculties of medicine now</p> <p>Training of alternative personnel—assistant medical officers for district and regional hospital levels</p> <p>Nursing assistants used by private sector as alternatives to registered nurses</p> <p>Mass promotions (stagnant promotions in past)</p>
Uganda	

Table 3 *Continued*

Country	Strategies/Actions Adopted
Zambia	PS reforms—production move from health to Ministry of Education
	Heavily decentralized framework—autonomous recruitment. Shortens recruitment process
	Mainstreamed allowances—combination. “Single Spine” pay structure.
	“Democratized Suffering”
	Career opportunities exist for different cadres
	Ten-Year HR Plan—training, recruitment and distribution and to track HR
	Health Sector Reform—Central Board of Health—service delivery body decentralized from MOH
	Recruitment of foreign doctors—Cuba and China. Also tutors for school of nursing.
	Pilot Car Loan system for health workers
	Development of action plan for housing loans.
	Rural Hardship allowance of 30% of salary since 1997
	Govt. Housing stock sold to health workers
	Govt. Civil Servants Union Collective Agreement concluded this year
South Africa	Short courses to update skills of nurses and review of curricula
	Award of diploma instead of certificate for RNs, new masters program for nurses
	Local bonding arrangements/part-time work arrangements, leave, and contract nurses
	Improved salaries and conditions of service
	Incentives to work in rural areas
	Overseas training opportunities linked to contractual binding
	Communication strategy to health workers
Kenya	Occupational risk study conducted
	Training of midlevel workers
	Government to government agreements to stop recruitment
	Exchange programs and work opportunities programs
	Strategies to attract returning migrants
	Increasing production of registered nurses while abolishing auxiliary nurses
	Better working conditions and higher pay proposed
	Converting/upgrading subtechnical staff into technical staff
	Doctors: The Government has improved doctors pay package by introducing “nonpractice,” “extraneous,” increased risk and transport allowances. For example, A medical officer intern now earned USD628 (Ksh.49,000) gross per month. Nurse interns has gross package of about USD225 (Ksh.17,500)

2003; WHO 2004a, b, c). The basic fact is that currently, Africa has an average of one trained health worker per 1,000 population compared with a world average of four per 1,000, while the estimated minimum required to sustain coverage of basic health services is 2.5/1,000 (JLI Report 2004). Whatever the future holds, even minor losses of nurses to migration will magnify the existing shortages.

IMPACT OF MIGRATION

Attributable impact of migration is difficult to assess, given the paucity of data and wide variety of other factors that affect health services. However, a basic framework is utilized below to discuss how migration might impact health services.

Effects on Health Service Delivery

Staff shortages are the most direct effects of health worker migration and it means that health systems are unable to deliver critical services (CRHCS 2003; Buchan and Sochalski 2004). The loss of key people with critical skills such as educators and specialists can be even more devastating. For example, international recruitment of two specialized anesthetists led to closure of a spinal injuries center in South Africa serving several countries (Martineau and Decker 2002). Financial losses include staff training costs, loss of professionals' contributions to the economy, and the effects on populations denied health services (Dovlo 1999). In Ghana, high nurse migration rates forced the government to significantly increase remuneration despite this having distorted the overall health budget, but the attraction of migration opportunity has brought new entrants into nursing training schools and encouraged establishment of private nursing training schools (Mensah et al. 2005).

Economic Effects on Source Countries

Two forms of economic effects are identified based on (i) the lost investment in the training of leavers and (ii) the loss to national gross domestic product

(GDP) of contributions from departed professionals (Dovlo and Martineau 2004). It is suggested, for example, that some \$60 m in training investment was lost to health worker migration by Ghana and that doctors leaving South Africa between 1989 and 1997 caused a loss of \$5bn (Martineau and Decker 2002). Similar effects may well be ascribed to nurse migration. A third (positive) economic effect arises from remittances made back home, which can be substantial. The level of remittances (by all migrants) is variable—in some SSA countries it is significant, occasionally surpassing official development assistance (ODA) as in the case of Nigeria and as high as 85 percent of the level of ODA to Eritrea (African Union 2003). There are no data available on the specific remittances of nurses. A paradoxical effect is that rising nurse migration generates new incomes for nursing councils, income from issuing verifications, but weakens nursing associations through loss of membership (Buchan and Dovlo 2004).

HIV/AIDS PANDEMIC AND NURSE MIGRATION

The issue of HIV/AIDS and its links to migration of nurses is not completely clear. The perception is that HIV/AIDS in SSA may have stoked increased migration of nurses. The pandemic increased workloads in hospitals and changed the kind of skill sets nurses needed to care for increasing numbers of terminally ill patients, including counseling needs and providing antiretroviral treatment. Even without increased occupational risk from HIV/AIDS, high infection rates within the community affect nurses and markedly increased deaths have been noticed in some countries. A South African study reported that 16.2 percent of health staff interviewed were treated for stress-related illness and two-thirds of these had to take sick leave (Shisana et al. 2004). HIV impact has been linked with stress, burnout, absenteeism, and decline in quality (Kinoti 2003; JLI Africa Group 2004; Shisana et al. 2004).

A study of the possible role of HIV/AIDS on staff attitudes found that over 50 percent of staff (range 53.6–85.3 percent) worried about contracting HIV through work-related injury (Awases et al. 2004).

The epidemic in Africa further reinforces all the negative influences impacting the nursing workforce in Africa, seriously undermines morale and motivation, and may be a further factor stimulating migration to “safer” work environments.

A SUMMARY OF POLICY ISSUES AND STRATEGIC CHALLENGES

The health workforce crisis in Africa has elicited a high level of international attention. There have been a number of policy declarations and meetings on international recruitment of health workers (Commonwealth, ICN, UK-NHS, WHO) some of which have included calls for reparation/compensation for source countries.

A comprehensive and respected international framework is required to moderate losses of critical health workers and to design ways of reducing the impact of this loss on vulnerable communities. At the country level, there are some working examples. For example, Norway was praised for its international recruitment approach based on intercountry agreements covering *both private and government* sectors and managed by a single government unit (Simoens et al. 2005).

Within countries and internationally, managing the change process of migration will require strong political will and negotiating skills backed by

information and data. A critical aspect is to manage “turf” protection and resistance to change from the professions including nursing (WHO 2004a, b, c). There are standard templates for SSA countries to apply to resolve nursing workforce challenges. The papers reviewed made recommendations and called on countries to initiate steps for developing and implementing health workforce plans, however, most of the studies recognize the urgent nature of the crisis and a need to attain quick goals. Drawing from these publications, a range of options can be identified.

Firstly, to urgently increase its workforce of trained health providers in SSA, the potential to introduce new types of workers should be considered. “Health Extension Workers” in Ethiopia and “Community Health Officers/Nurses” in Ghana offer examples of actions to rapidly increase access for communities. These need significant investment in infrastructure and training, as well as development of good supervision and support systems if these mid-level workers are to be integrated with professional-level providers.

Secondly, increasing supply without attention to retention will undermine investments in training. Actions to improve motivation and provide performance incentives especially in rural and periurban poor populations are essential. Public sector pay increases present complex dilemmas in poor countries when particular health workers are singled out for improved pay (Awases et al. 2004). However, governments must provide “a living wage” at the minimum, supported with nonfinancial motivation schemes. An example is the use of debt relief funds from the Highly Indebted Poor Country Initiative (HIPC), which were used to fund incentives in Ghana (WHO 2004a, b, c).

Thirdly, health workforce information systems must be improved to support policy and strategic planning. The Kenya health workforce data project, for example, shows that this is feasible and that the status of the workforce can be monitored effectively (Kenya Nursing Workforce Project 2004).

Fourthly, international arrangements are needed to manage the effects of trade agreements and the labor market on nurse migration from SSA. Modifying the international environment is a challenge to SSA policy makers as effecting retention strategies will be difficult without active cooperation of recipient countries. There is at least a moral case for rich countries to manage the “pulls” attracting nurses from developing countries. International or intercountry agreements offer a way to maintain the rights of health workers while enabling countries to fulfill obligations to their populations.

Finally, there is need for appropriate investments in strategies and to find the evidence to back policies based on commonsense approaches and systematic monitoring and evaluation, coupled with improvements in health

workforce management capacity at the national level. SSA countries themselves have to initiate and drive the strategies and actions needed and seek support of development partners. Current efforts appear patchy and uncoordinated possibly due to the lack of capacity to design and pursue reforms. Regional and international organizations in Africa can help in sharing “good practices” and in creating shared technical capacity to support implementation, monitoring, and evaluation. A wider international consensus will enable a fairer playing field and the sharing of Asian and Latin American experiences on the issue of health worker migration.

ACKNOWLEDGMENTS

Ms. Naana Frempong was my assistant on the project and did Internet document searches and reviews in preparation for writing this report. Her efforts are much appreciated by the author.

Disclosures: This review was funded by AcademyHealth.

Disclaimers: The work for this report was concluded well before I joined WHO. The contents of this report do not reflect views, opinions, or otherwise of the WHO or any specific organization. This is a purely independent work.

NOTES

1. Enrolled nurses are subprofessional nurses trained for 2 instead of 3 years and entering nursing with basic primary/middle school certificates instead of secondary school qualifications. In the United States the equivalent would be licensed practical nurses. Several countries have reintroduced versions of these cadres to help tackle the crisis.
2. Anglophone countries are those where English is the main, or most commonly spoken, language of European origin; Francophone countries are those where French is the main language; Lusophone are where Portuguese is the language.

REFERENCES

- African Union. “The Role of the African Diaspora in the Development of Their Countries of Origin.” First Ordinary Session. LSC/9 (XXVI). Labour and Social Affairs Commission of Mauritius. Port Louis, Mauritius. April 10–15, 2003 (Obtained from Prof. E. Buch, Health Advisor NEPAD).
- Awases, M., A. Gbary, J. Nyoni, and R. Chatora. 2004. “Migration of Health Professionals in Six Countries: A Synthesis Report”. World Health Organization WHO-AFRO DHS Brazzaville [accessed on May 17, 2005]. Available at <http://www.afro.who.int/dsd/migration6countriesfinal.pdf>

- Buchan, J., and D. Dovlo. 2004. "International Recruitment of Health Workers to the UK: A Report for DFID. March 2004" [accessed May 14, 2005]. Available at http://www.dfidhealthrc.org/Shared/publications/reports/int_rec/int-rec-main.pdf
- Buchan, J., and J. Sochalski. 2004. "The Migration of Nurses: Trends and Policies." *Bulletin of the World Health Organization* 82: 587–94.
- The Commonwealth Regional Health Community Secretariat (CRHCS) for East, Central and Southern Africa. "Strengthening Human Resources Capacity for Effective Health Systems in (East, Central and Southern) Africa." July 2003, Arusha, Tanzania.
- Department of Health: Media Release 2004. *Substantial Allowances Ready to Roll for Health Professionals*. Pretoria, South Africa: Department of Health.
- Dovlo, D. 2006. "Ghanaian Health Workers on the Causes and Consequences of Migration." In *Globalizing Migration Regimes, New Challenges to Transnational Co-operation, Chapter 8: Research in Migration and Ethnic Relations Series*, edited by K. Tamas and J. Palme. Stockholm: Institute for Futures Studies.
- . 1999. "Issues Affecting the Mobility and Retention of Health Workers/Professionals in Commonwealth African States." Consultancy Report—Commonwealth Secretariat, London.
- Dovlo, D., and T. Martineau. 2004. "A Review of the Migration of Africa's Health Professionals." Paper Commissioned by the Joint Learning Initiative on Human Resources for Health. Africa Working Group [accessed on January 2004]. Available at <http://www.globalhealthtrust.org/doc/abstracts/WG4/DovloMartineauFINAL.pdf>
- Ferrinho, P., and C. Omar. 2004. "The Human Resources for Health Situation in Mozambique." Final Report May 2004, Associação para o Desenvolvimento e Cooperação Garcia de Orta, Lisbon & Maputo.
- JLI Africa Working Group. 2004. "The Health Workforce in Africa: Challenges and Prospects." Unpublished Report of the Africa Working Group of the Joint Learning Initiative on Human Resources. WHO, World Bank & Rockefeller Foundation. Global Health Trust. March 2004.
- Joint Learning Initiative. 2004. "Human Resources for Health—Overcoming the Crisis" [accessed on May 17, 2005]. Harvard University. Available at <http://www.globalhealthtrust.org/Report.html>
- Kenya Nursing Workforce and Training Analysis Project. 2004. Presentation by Mrs. Agnes Waudo at the ECSA Region Health Minister's Meeting; Victoria Falls, Zimbabwe, November 1–5, 2004.
- Kinoti, S. N. 2003. Commissioned Paper Joint Learning Initiative (Africa Working Group). September 2003.
- Kurowski, C. 2003. "Scope, Characteristics and Policy Implications of the Health Worker Shortage in Low-Income Countries of Sub-Saharan Africa." Joint Learning Initiative on Human Resources for Health. Background Paper
- Lowell, B. L., and A. M. Findlay. 2001. "Migration of Highly Skilled Persons from Developing Countries: Impact and Policy Responses." Synthesis Report. International Labour Office, Geneva. October 2001 [accessed on May 15, 2005].

- Available at <http://www.ilo.org/public/english/protection/migrant/download/imp/imp44.pdf>
- Martineau, T., and K. Decker. 2002. *Briefing Note on International Migration of Health Professionals: Leveling the Playing Field for Developing Country Health Systems*. Liverpool: Liverpool School of Tropical Medicine [accessed on November 9, 2006]. Available at <http://www.liv.ac.uk/lstm/research/documents/InternationalMigrationBriefNote.pdf>
- Mathauer, I., and I. Imhoff. 2004. "The Impact of Non-Financial Incentives and Quality Management Tools on Staff Motivation." A Case Study from Benin and Kenya, GTZ (German Technical Cooperation), June 2004. In JLI Africa Working Group Report 2004.
- Meeus, W.E.A.M. 2003. "Wilhelmina Everarda Antonia Maria (Wilma): 'Pull' Factors in International Migration of Health Professionals." An Analysis of Developed Countries' Policies Influencing Migration of Health Professionals. University of Western Cape School of Public Health, Masters Thesis. April 23, 2003.
- Mensah, K., M. Mackintosh, and L. Henry. 2005. "The 'Skills Drain' of Health Professionals from the Developing World: A Framework for Policy Formulation MEDACT, UK" [accessed on May 5, 2005]. Available at <http://www.medact.org/content/Skills%20drain/Mensah%20et%20al.%202005.pdf>
- Munjanja, O., S. Kibuka, and D. Dovlo. 2005. "The Nursing Workforce in Sub-Saharan Africa. ICN 2005 Issue 7: The Global Nursing Review Initiative" [accessed on May 16, 2005]. Available at <http://www.icn.ch/global/Issue7SSA.pdf>
- OECD 2003. "Ad-Hoc Group on the OECD Health Project." Factors Shaping the Medical Workforce—Annex Tables and Figures. SG/ADHOC/HEA (2003) 6. April 4, 2003.
- Padarath, A., C. Chamberlain, D. McCoy, A. Ntuli, M. Rowson, and R. Loewenson. 2003. "Health Personnel in Southern Africa: Confronting Maldistribution and Brain Drain." Equinet Discussion Paper Number 3. EQUINET Health Systems Trust (South Africa) and MEDACT (UK).
- Sanders, D., D. Dovlo, W. Meeus, and U. Lehmann. 2003. "Public Health in Africa." In *Global Public Health: A New Era*, edited by R. Beaglehole, pp. 135–55. Oxford: Oxford University Press.
- Shisana, O., E. Hall, K. R. Maluleke, D. J. Stoker, C. Schwabe, and M. Colvin. 2004. "The Impact of HIV/AIDS on the Health Sector: National Survey of Health Personnel, Ambulatory and Hospitalised Patients and Health Facilities, 2004" [accessed on May 17, 2005]. Available at www.hsrc.hsrcpublishers.ac.za
- Simoens, S., M. Villeneuve, and J. Hurst. 2005. "Tackling Nurse Shortages in OECD Countries." OECD Health Working Papers No. 19. Directorate for Employment, Labour and Social Affairs. Employment, Labour and Social Affairs Committee. DELSA/ELSA/WD/HEA(2005) 1 (P. 36, Table 5).
- Tawfik, L., S. Kinoti, and the USA Agency for International Development (USAID). 2001. "Impact of HIV/AIDS on the Health Sector in Sub-Saharan Africa: The

Issue of Human Resources" [accessed on February 15, 2007]. Available at http://www.dec.org/pdf_docs/PNACP346.pdf

- Vujicic, M., P. Zurn, K. Diallo, O. Adams, and M. R. Dal Poz. 2004. "The Role of Wages in the Migration of Health Care Professionals from Developing Countries." *Human Resources for Health* 2 3.
- WHO. 2004a. "Addressing Africa's Health Workforce Crisis: An Avenue for Action." Abuja: High-Level Forum on the Health MDGs [accessed on May 17, 2005]. Available at <http://www.human-resources-health.com/content/12/1/3/>, .
- . 2004b. "Health Workforce Challenges—Lessons from Country Experiences." Paper for the High-Level Forum on the Health MDGs; Abuja (December 2004). WHO, Geneva, Switzerland [accessed on May 17, 2005]. Available at <http://www.hlfhealthmdgs.org/Documents/HealthWorkforceChallenges-Final.pdf>
- . 2004c. *Addressing Africa's Health Workforce Crisis: An Avenue for Action the High Level Forum on the Health MDGs*. Geneva: WHO.
- . 2006. "Working Together for Health." In *The World Health Report*. Geneva: WHO.