

B3 | The global health worker crisis

At last there is explicit recognition of the fact that many countries worldwide face a health worker crisis. In 2004 the 57th World Health Assembly passed a resolution on the international migration of health personnel, recognizing that the migration of skilled health workers from poor countries to rich countries represented a serious challenge for health systems in developing countries, and asked WHO to undertake a number of tasks. It even asked the DG to consult the UN and specialized agencies on the possibility of declaring a year or a decade of Human Resources for Health Development. The Joint Learning Initiative, established by WHO and other agencies to develop a series of working papers on the human resource crisis, launched its final report at the Inter-Ministerial Summit on Health Research in Mexico, 2004. At regional and country level, public health professionals and NGOs are recognizing the need to strengthen human resource management systems if they are to make any headway in reaching the MDG targets. The realization that health worker problems in Africa are directly linked to policies in rich countries such as Canada, the UK and the US has resulted in global coalitions of NGOs and academics from different continents attempting to address the problem holistically.

This chapter's focus is on the global dimension of health migration, although it recognizes that the agenda for coherent and comprehensive health systems development discussed in part B, chapter 1, must place human resources at its centre.

The lifeblood of health care systems

Medicines, clean water, diagnostic equipment and the physical infrastructure of clinics and hospitals are all essential components of a functioning health care system. However, it is the nurses, porters, drivers, laboratory technicians, pharmacists, doctors, cleaners and health managers that are central to drawing together the full mix of inputs to provide high quality and effective services. All aspects of a health care system ultimately depend on people (human resources) to run smoothly and well.

The prospects for achieving 80% coverage of measles immunization and skilled attendants at birth are greatly enhanced where health worker density exceeds 2.5 per 1,000 population. However, 75 countries with 2.5 billion people fall below this threshold (JLI 2004). Figure B3.1 illustrates a positive association

between health worker density and infant, under-five and maternal mortality in different countries. This does not mean that the density of health workers is the sole determinant of health outcomes – other determinants (e.g. socio-economic development) improve outcomes and are also likely to contribute to greater availability of health personnel.

However, despite the obvious centrality of health personnel, the planning, production and management of human resources for health has been for decades (and in many respects still is) the least developed aspect of health systems policy and development. The technical knowledge of diseases far outstrips the application of practical knowledge of how to plan, develop and care for human resources. Human resource directorates in governments, as in international organizations, are undervalued and underfunded. Donors and agencies are part of the problem. ‘Many classify human resources as recurring expenditures, not as an investment. Amazingly, buildings are considered capital assets, while human capital is considered a recurring burden’ (Chen 2004). Furthermore, fears of inflation have led the international financial institutions to advise poor countries to cap spending on wages. This approach is slowly beginning to change, as the scale and seriousness of the health worker crisis begin to be appreciated.

WHO has collected global data on health workers for many years, but has only recently started to pay it closer attention. There is often very inadequate information on who works in the health system, especially among the groups of staff who are not doctors. Routinely, for example, even in rich countries, statistics fail to differentiate between a qualified nurse and an unqualified

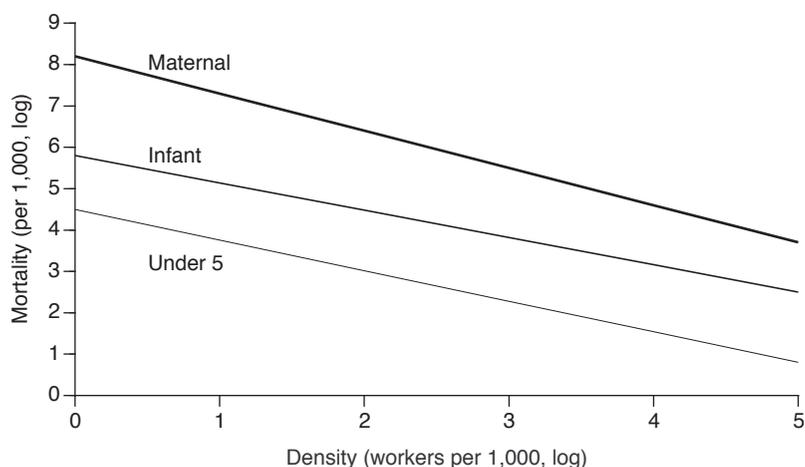


Figure B3.1 The negative correlation between mortality rates and health worker availability (Source: JLI 2004)

TABLE B3.1 Density of doctors and nurses in rich and selected poor countries

	WHO norm	Rich countries	Sample of 8 African countries
Nurses per 100,000 population	100 minimum	Several hundred to over 1000	8.8 – 113.1
Doctors per 100,000 population	20 minimum	200 – 400	3.4 – 13.2

Source: JLI 2004

nursing auxiliary. Without such data, planners, managers and educators are working in the dark since they do not really know how many staff they have, let alone how many are needed in future and what kind of work they should do.

The health worker crisis

For many people, especially in developed countries, access to competent health workers is not usually an insoluble problem. Those with money can always buy health care from private providers, from abroad if necessary. However, for the poor with the highest burdens of disease, competent health workers may not be available or accessible even to manage such common conditions as diarrhoeal disease, acute respiratory infections and childbirth. The sheer lack of health personnel in some countries is staggering, especially when compared to developed countries, or to recommended norms (see Table B3.1). In Malawi, there is one doctor per 50,000–100,000 people, compared to one per 300 in the UK.

The inequitable global distribution of numbers of health personnel is strikingly illustrated by Figure B3.2, which shows how countries with the highest disease burden have the lowest health worker density, particularly in Africa. Asia, with about half the world's population, has access to only about 30% of the world's health professionals. To make matters worse, 'the predominant flow of health professionals is from developing countries, where they are scarcest relative to needs, to developed countries, where they are more plentiful' (Woodward 2003). There is a global shortage of more than four million health workers; Sub-Saharan countries must nearly triple their current number of workers – adding the equivalent of one million – if they are to tackle the health MDGs (JLI 2004).

In addition to the overall lack of staff in many countries, health personnel

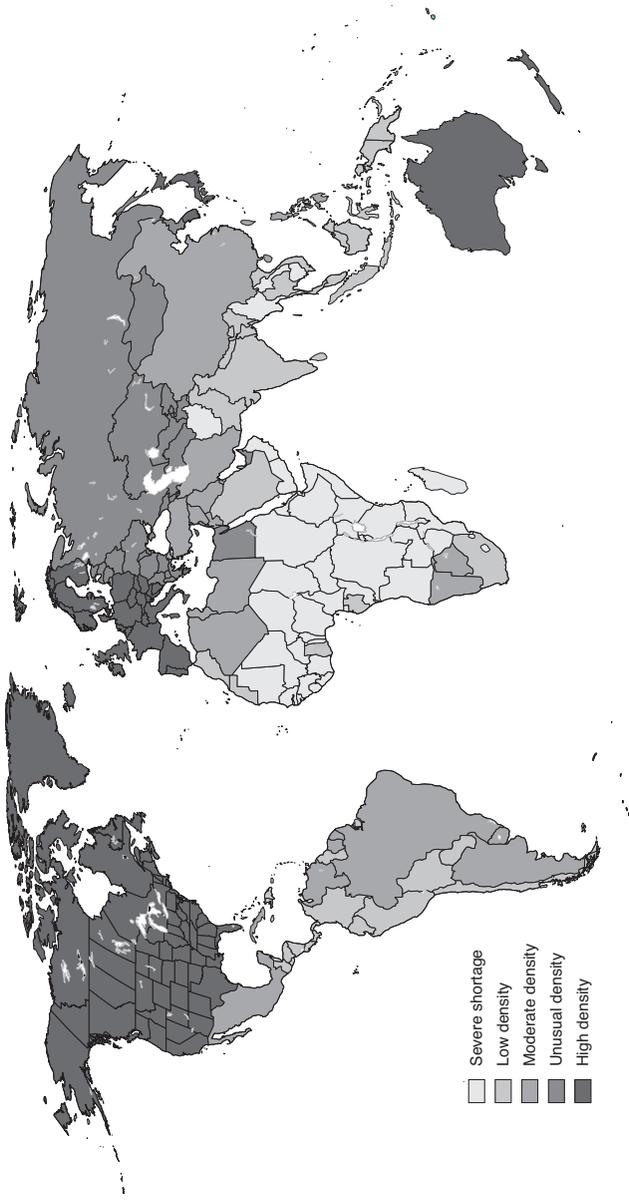


Figure B3.2 Health worker density (Source: JLI 2004)

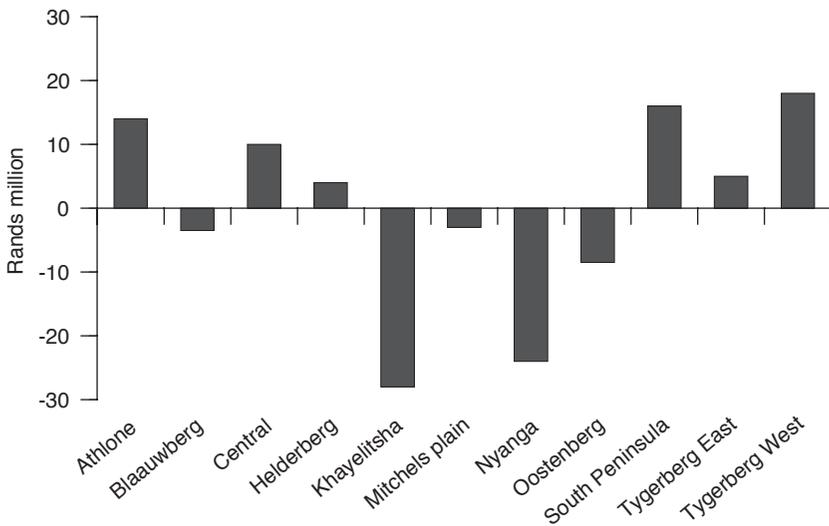


Figure B3.3 Inequity in public primary care expenditure, Cape Town (zero line represents an average equitable expenditure) (Source: Sanders et al. 2004)

are also often poorly distributed. Typically, rural and remote communities are served by fewer doctors and nurses than urban communities; this may be associated with a disproportionate concentration of health workers at the secondary and tertiary levels of the health system. Attracting skilled professionals to rural areas has long been a challenge, including in developed countries such as Canada, Australia and the US, which have become reliant on foreign-qualified doctors and nurses to staff facilities in rural and remote areas.

As increasing numbers of people move to urban conglomerations, there is growing evidence of acute disparities between different parts of the same city, with health services relatively understaffed in slums. Figure B3.3 shows the wide variation in public sector health care expenditure in Cape Town, with black townships hugely under-resourced compared to suburban areas (Sanders et al. 2004). The lower the funding allocation, the more likely it is that fewer staff will be employed, and with fewer qualifications.

There are also differences in the availability of health personnel in different segments of a health care system. Private health care services, particularly those tailored to the rich, are typically better staffed than services for the poor. In some countries there is also a growing divide between public sector services and better staffed nongovernment health care providers serving the poor. The channelling of large sums into HIV/AIDS programmes in relatively stand-alone structures and systems, many delivered through donor agencies and NGOs that offer higher salaries than the public sector, drains staff from the public

sector and thereby weakens mainstream health services – though sometimes the labour market competition can drive up terms and conditions for all.

Finally, there is a need to consider the human worker crisis in terms of quality. In many developing countries, health workers are demoralized and demotivated as a result of the collapse of public health financing, decline in salary levels and increase in workload, in some cases arising from the HIV/AIDS epidemic (see Box B3.1). Staff who feel demoralized and demotivated may be tempted into various forms of petty corruption, extortion (e.g. under-the-counter charges) and taking on second jobs.

The fragmentation of health care systems and the collapse of public sector bureaucracies in many developing countries have also resulted in inadequate health support systems (e.g. erratic and unreliable medicine supply systems, poor transport management etc.) which means that even motivated health workers may not be as effective as they could be. Meanwhile the commercialization and commodification of health care, and the erosion of trust within health care systems, have resulted in a deterioration in professional ethics and standards of care.

Box B3.1 The impact of HIV/AIDS on health worker retention and performance

Health workers have had to bear a triple burden in the HIV/AIDS epidemic. First, they themselves have increasing morbidity and mortality. In South Africa, for example, prevalence amongst nurses has been estimated at 16–20% (Shisana et al. 2002). Second, they are caring outside work for sick and dying family and community members for whom they are often the first port of call. Third, they shoulder the increasing burden of disease at work, having to deal with many more patients, and also much sicker and incurable ones – heavier workloads compounded as rates of absenteeism rise, and as more health workers leave because of illness or migration. This leads to accelerated burnout and decreased productivity.

Fear of infection is an additional stress factor. Despite overwhelming evidence that the risk of infection is low for health workers, characterizing the risk as low is unhelpful because ‘health workers are likely to perceive the situation as one of “risk” or “no risk” and when exposed to possibly infected blood are not going to consider gradations of risk’ (Gerber, quoted in Horsman and Sheeran 1995). The close association of health workers with the disease can result in social contagion and stigmatization – studies

The global brain drain

The brain drain of skilled health workers from poor countries to richer ones is a major dimension of the health worker crisis in many developing countries. There has been an upsurge in migration of health workers since the late 1980s. For example, the number of non-European Union nurses registering with the Irish Nursing Board rose from less than 200 a year to more than 1800 between 1990 and 2001. In the UK, the proportion of overseas-trained nurses admitted to the professional register each year rose from just over 10% in 1990 to more than half in 2001 (Buchan and Sochalski 2003). The countries that experience high levels of out-migration are often those that can least afford to lose skilled personnel, such as Zambia, where an estimated 550 of the 600 doctors trained since independence have gone abroad. The migration of teachers and academics from poor countries has also damaged countries' capacity to train new health workers.

The migration pattern generally follows a hierarchy of wealth, from poorer to wealthier countries, and from rich countries where terms and conditions are inadequate to other rich ones (the UK, for example, is seeing a drain of nurses

report that health workers treating HIV patients feel shunned by friends and neighbours, and that exposure to people living with HIV and AIDS is affecting family relations (Horsman and Sheeran 1995).

Helping health workers to cope with this triple burden should include giving them the material tools required to provide effective clinical care. Training programmes can strengthen their capacity to cope with the workload psychologically and emotionally.

The Mildmay Centre for Palliative Care in Uganda is an example of an innovative training programme which has implemented educational programmes to help improve care, with an emphasis on building local capacity. Participants include health workers (doctors, nurses, counsellors, social workers, volunteers, community health workers and so on); government and NGO staff (including policy-makers and the media); students and teachers in schools; workers; and men, women, children and adolescents living with HIV/AIDS. The mobile clinical training team takes training to the rural districts, visiting health centres run by the MOH, conducts a needs assessment, and develops a training programme. Trainees spend a week at the training centre, and then, over a year, are given follow-up and further training (UNAIDS 2000).

to the US, including some recruited from poorer countries). There is also migration from rural to urban and public to private, increasing inequity along the way (see Figure B3.4). There are a number of drivers. There is a growing demand for health care from the ageing populations of the developed world. At the same time there is inadequate local production of health workers in some of these countries – the US, for example, will need over a million more nurses by 2010 (US Bureau of Labor Statistics 2004). Active recruitment – proactive hiring and advertising in low-income countries by recruitment agencies acting on behalf of rich country health systems – has also encouraged migration.

These demand pressures have been reinforced by globalization and commercialization. Research in Ghana shows that technological change, notably the Internet, has dramatically increased knowledge of jobs and conditions elsewhere, and developed world health journals with recruitment advertising are widely available. Commercial investment in recruitment agencies is also facilitating migration, making obtaining visas, jobs and accommodation much easier (Mensah et al. 2005).

The international brain drain is also driven by a variety of other factors such as the widespread collapse of health systems in many low-income coun-

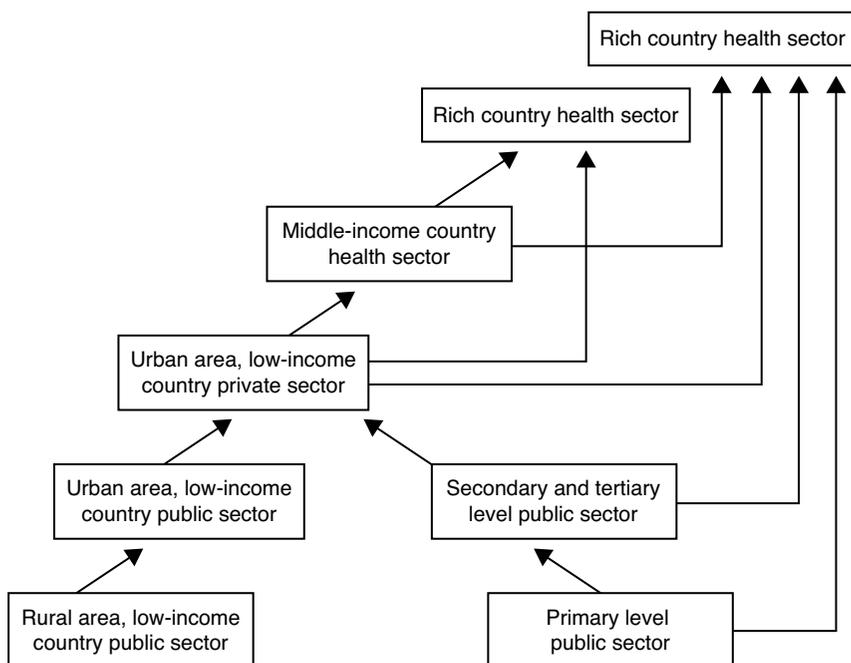


Figure B3.4 The global human resources for health conveyor belt
 (Source: Padarath et al. 2003)

tries, which have resulted in low-paid health workers struggling to survive financially. Bad working conditions, poor management, lack of continuing education opportunities and poor prospects are often cited. Migration may also be a consequence of broader problems such as war and civil violence, high levels of crime and a lack of education opportunities for the children of health workers.

A shortfall of health personnel can quickly trigger a downward spiral in the quality of care that is hard to reverse. The loss of institutional memory carried by experienced staff, for example, cannot be replaced with new and junior staff. As more staff leave, the workload and stress on those remaining increases, potentially a catalyst for them to leave as well. The migration of even a small number of highly skilled personnel can have a dramatic impact on under-resourced health care systems: the only referral unit for spinal injuries for an entire region of South Africa was closed in 2000 when its two anaesthetists were recruited to Canada (Martineau et al. 2002).

Policy responses

Investments in training by poor countries are lost in the process of migration, especially if health professionals do not return: low-income countries train doctors and nurses each year and then see the benefits from that investment redistributed to the wealthy nations. This redistribution is a perverse subsidy from the very poor to the rich. What can policymakers do to reverse it?

Ethical recruitment One policy response in wealthy countries has been to limit 'active recruitment' by their health services through introducing – in consultation with many governments from staff-short countries – a code of practice prohibiting hiring and advertising in developing countries unless there is a government agreement that allows it. The UK introduced a voluntary code that covered its national health service, which has now been extended to the private sector (reflecting the huge shortage of UK nurses willing to work in private nursing homes for elderly people). Yet registration of nurses in the UK from a number of low-income countries in Sub-Saharan Africa has been accelerating since the code was introduced in 1999 (see Figure 5).

It has been ineffective partly because it is voluntary, and thus often ignored. Active recruitment is in any case only one part of the process through which health care labour markets are becoming integrated. Increasing globalization, primarily through technological changes, and commercialization, through the growth of labour market intermediaries such as recruitment firms, are making the process of finding a job and migrating much easier. These labour market

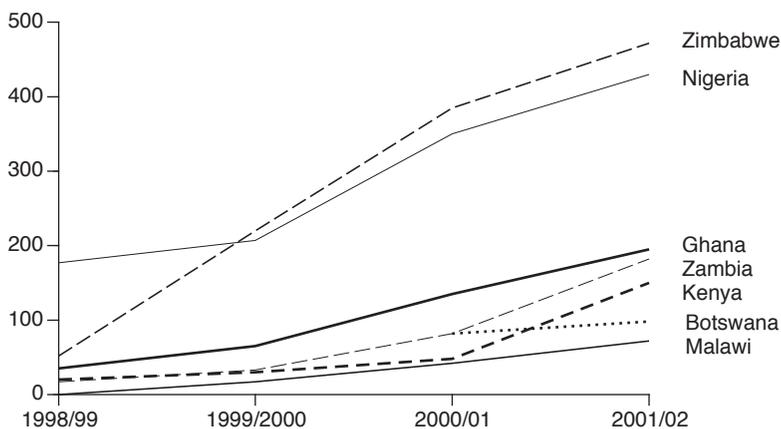


Figure B3.5 Nurse registration in the UK from selected low-income countries 1998/9–2001/2 (Source: Buchan et al. 2003)

changes are cumulative and self-reinforcing. Policies which work against their grain are not likely to succeed (Mensah et al. 2005).

South Africa has gone further and introduced a ban on registration of doctors from other African and Commonwealth countries, as an act of solidarity with its poorer neighbours. While this has reduced the entry of doctors from countries like Malawi, Ghana, Zambia and Tanzania, the overall effect on the outflow of doctors from those countries is unclear – doctors may simply have migrated elsewhere. Such measures also raise issues about professionals' right to freedom of movement.

Government service It is widely accepted in developed and developing countries alike that governments that invest in the training of health personnel are entitled to receive a return on that investment. Bonding measures that enforce public service have often worked well, especially in helping to increase the numbers of health professionals serving in deprived areas. Commentators have noted that bonding policies have played a role in the health gain of some 'high-performing' developing countries such as Thailand and Malaysia.

Bonding works in contexts where it is perceived as fair and legitimate. However, evidence suggests that in a number of staff-short, low-income countries facing large health worker migration, coercive measures work poorly (Mensah et al. 2005). Salary differentials are often so great – and working conditions so bad – that there is little incentive to honour the bond. Coercive measures may also backfire by creating incentives to leave – and not to return (Mensah et al. 2005, Bueno de Mesquita and Gordon 2005).

Division of labour Some countries are beginning to alter the composition of their health workforce to make them less vulnerable to recruitment from abroad, for example by making more use of paramedical staff, medical assistants, community health workers and unqualified staff. The rethinking of the health division of labour that this promotes may result in a better fit between population needs and workforce skills, and may be more resistant to international out-migration. One review concludes that expansion of the numbers and roles of staff whose qualifications are not internationally recognized has been ‘a quiet success story, providing large numbers of health workers who keep the system running in a number of countries’ (Hongoro and McPake 2005). The downside can be deskilling of the workforce, and a reinforcement of the current bias towards tertiary care, with the assumption that staff who work in primary health care/rural areas/poor countries need less training than those in hospitals/cities/rich countries.

Incentive schemes Countries are also responding to out-migration with retention strategies designed to mitigate the push factors that promote external migration. These include strengthening financial and non-financial incentives for health workers to stay in developing countries, or in rural areas (see Box B3.2).

Incentive schemes need strong management and must be applied fairly. A very popular scheme in Ghana – welcomed by all health workers when it started in 1999 – was the additional duty hours allowance which doubled or trebled take-home money overnight and reduced strikes for some time. Yet it has been subject to arbitrary local decision-making, and some health workers

Box B3.2 Strategies to retain health workers in rural areas in Thailand

The government of Thailand has had considerable success in ensuring a reasonably fair distribution of health personnel across the country over the last 40 years. The recruitment of students from rural areas has played an important role. Nurses, midwives, junior sanitarians and paramedics are recruited and trained locally and then assigned to placements in their home towns. Students recruited by the ministry of health receive heavily subsidized tuition and free clothing, room and board, and learning materials during their studies. In return, they agree to work in the public sector for 2–4 years. (Source: Wibulpolprasert and Pengpaibon 2003)

have been excluded: in 2004 grievances led to a 10-day countrywide nurses' strike demanding a 70% increase in the allowance for nurses (Mensah et al. 2005). Further research is needed on the incentives that will work best – an important and neglected area.

Restitution Incentives cost money, which is why there have been calls for financial support to come from wealthy countries that benefit from the training investment made by poorer countries. While health worker migration takes place between most countries, it is the flow from staff-short, low-income countries to the developed world which leads to a perverse, or unjust, subsidy.

A recent study tried to measure the size of the subsidy in the case of Ghanaian-trained workers employed in the UK's national health service (Mensah et al. 2005). First it could be measured by calculating the training costs the UK has saved. Multiplying the numbers of Ghanaian doctors and nurses registered in the UK by an approximate current cost of training in the UK gives a figure of around US\$ 200 million. Alternatively – and more appropriately – the value put on the benefits from the services of the Ghanaian staff could be assessed. One measure of value is salaries paid to those staff by the UK NHS, which yields a figure of around US\$ 70 million a year (Mensah et al. 2005). The calculations are crude, but they illustrate the order of magnitude of the perverse subsidy.

Such figures – perhaps supplemented by others such as costings of 'health benefits lost' in Ghana or the training investment lost in the country of origin – could inform a financial restitution effort focused on rebuilding health systems in Ghana and similar staff-short countries, with good working conditions for health professionals and good quality health care.

Serious debate about restitution began at the 2004 World Health Assembly and needs sustained attention. Objectors point to remittances sent by migrant workers. These are valuable and substantial, but they do not go back into the health systems from which the investment has been lost. Others argue that restitution would not be well used. Yet Ghana and other countries have established financial channels for managing aid to health services that could be adapted to manage flows of restitution funds. The management problems can be solved case by case.

The most serious objection to restitution – though the least presented – is that it represents a tax on migrants and would jeopardize their right to freedom of movement. To deal with this problem, restitution payments should be detached from links to individual migrant staff. Instead, the extent of reliance in the UK on staff from a particular low-income country should inform and motivate government decisions to increase transfers of funds to rebuild



9 African surgeons are operating in a global labour market.

that country's health system in a manner that tackles the root causes of out-migration. This would also acknowledge wealthy nations' obligations under international human rights law to help fulfil the right to health of people in other countries (Bueno de Mesquita and Gordon 2005).

Restitution can come in other forms. There are many links between rich and low-income countries' health systems and staff, and these partnerships should be built on when they are effective and genuinely support capacity in poorer countries, with the objectives of improving conditions in poorer countries, increasing incentives to stay and return and allowing for career-enhancing migration. The Ghanaian diaspora in the UK for example plays an active role in contributing funds for health care in Ghana. Professional associations in origin and destination countries could support each other in the fight for better pay and conditions. One of the most serious effects of health worker migration is the 'beheading' of the system – the loss of leadership and high-level skills. Health professional academia could therefore be involved in supporting research and development, the capacity for local leadership and badly needed postgraduate specialization opportunities (Mensah et al. 2005).

Conclusions

This chapter has argued for positive policies to address health worker shortages in the world's poorest countries. Developing nations should be supported

to undertake greater experimentation, from the development of new health worker roles, through to financial and other incentives which improve health worker motivation and build the public sector ethos (Hongoro and McPake 2005).

Rich countries should do something in return. 'Ethical recruitment' policies can help ameliorate but cannot solve the problem. The developed world should help poor countries to strengthen their health systems and enable them to provide incentives for health workers. Restitution would be one way of providing the funding (and other types of capacity) to enable them to do this. Professional associations and health service bodies in the developed world can also play their part in restitution efforts, in a way that strives to develop local capacity effectively. Harmful policies such as caps on public sector wages imposed by the international financial institutions should be abandoned.

WHO's current work in the field of human resources for health should be supported and enhanced where appropriate, and it can play a key advocacy role. Its efforts to improve data collection through strengthening country capacity in collecting, managing, and evaluating such information should be a priority, and should focus on a number of key indicators such as health worker to population ratios, geographic variations in health worker density, and trends related to the balance of public and private sector health staff. Civil society in all countries should insist on such data being collected and publicized by ministries of health. Civil society in rich countries should also highlight health worker shortages in their own countries and campaign for them to be redressed.

WHO could also encourage countries to experiment with a system of compensation, involving effective partnerships to strengthen health systems in poorer countries. This would be in line with the 2004 resolution's call to 'establish mechanisms to mitigate the adverse impact on developing countries of the loss of health personnel through migration, including means for the receiving countries to support the strengthening of health systems, in particular human resources development in the countries of origin'.

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