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The global health workforce crisis

The shortage of health personnel limits poor countries' ability to give primary health care and to achieve economic development. Migration from poor countries to rich countries is a contributory cause, while adequate education of health personnel has not been assigned sufficient priority. In Norway efforts are underway to develop corresponding domestic and foreign health personnel policies, and Norway will act as a driving force in the international arena.

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In 2006 the World Health Organization (WHO) described the approaching shortage of health personnel worldwide (1). In World Health Report 2006 «Working together for health» WHO estimates that there is already a shortage of 4.2 million health workers, and maintains that this affects the poorest countries in particular. Africa bears 25 % of the disease burden but has only 1.7 % of the world's health workers (1). A large number of health workers leave their home countries to work in more affluent countries.

It will always be the case that people migrate to seek a better life for themselves and their families, but rich countries should not promote this by actively recruiting health workers from poor countries.

Corresponding national and global health personnel policies

Norwegian politicians have pledged to follow a recruitment policy that does not affect poor countries and that refrains from actively and systematically recruiting staff from poor countries that themselves suffer from a shortage of health workers (2). Norway has been a driving force in the lengthy process of putting in place a global Code of Practice for the recruitment and fair global distribution of health personnel. In May 2010 WHO adopted the Code (3). Since the implementation phase has now started, it is vital that monitoring processes are initiated and that data on development

trends within health personnel migration are systematized and published. Norway must continue to play a proactive role in this connection.

In 2007, the Directorate for Health and Social Affairs published the report «Recrutment of Health Workers: Towards Global Solidarity» (4). The report presented several proposals on how such health workforce policies can be carried out in practice. Two working groups were established as a follow-up to the report. One working group, headed by the Directorate, examined national initiatives targeted at the global health workforce crisis (5). The other working group, headed by the Ministry of Foreign Affairs, examined proposed measures in Norwegian foreign and development assistance policies to counteract the global health personnel crisis (6). The reports of the two groups are viewed in correlation with each other to create the greatest conformity in Norwegian policies on this complex area.

The UN's adoption of the Millenium Development Goals (MDGs) in 2000 led to a growing recognition that the shortage of health personnel will be a major bottleneck in the work on achieving the health-related goals. At a High-Level Forum meeting on MDGs in Geneva in 2004 it was already clear that international actors would have to join forces to deal with the problem (7). The Global Health Workforce Alliance (GHWA) was established in 2006 with good help from Norway. Two years later the Alliance reached agreement on the Kampala Declaration, a global action plan with the vision that «all people, everywhere, shall have access to a skilled, motivated and facilitated health worker within a robust health system» (8). The action plan has six specific interconnected strategies:

- Building coherent national and global leadership for health workforce solutions
- Ensuring capacity for an informed response based on evidence and joint learning
- Scaling up health worker education and training

- Retaining an effective, responsive and equitably distributed health workforce
- Managing the pressures of the international health workforce market and its impact on migration
- Securing additional and more productive investment in the health workforce

In January 2011, a progress report was published which reviewed what had been achieved through the action plan both in individual countries and worldwide (9). At the national level there are many positive measures and signals, but nevertheless much remains to be done if the vision of the global health workforce alliance and the health-related MDGs are to be achieved by 2015.

It has been acknowledged at both the national and global level that the shortage of health personnel affects many different areas – such as migration, working conditions, education and research.

The driving force behind the migration of health personnel

What are the reasons for the draining of health personnel from poor countries? The contrasts between rich and poor countries in themselves promote a flow of health workers from the countries with least resources to those with most. The reasons are often divided into so-called «push» and «pull» factors. The «push» factors are linked to the country of origin (source country) and the conditions there which push health workers from their home country, while the «pull» factors are the qualities of the host country (destination country) and the opportunities offered to the migrants who move there (Table 1) (10).

A key «pull» factor is that foreign health workers are often very attractive for rich destination countries that cannot satisfy their own need for health workers. Active recruitment of health workers has been taking place for a number of years, and in many cases this has resulted in health workers not only migrating on their own initiative but also being recruited by aggressive recruitment agencies. When the source country

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Two participants at the start of their two-year programme of continuing education under the auspices of Capa-Care's surgical training programme in Sierra Leone. After completing their education, they will work at the country's district hospital under the supervision of the ministry of health. Due to the lack of doctors, they can expect to be the clinicians best qualified to treat emergency surgical and obstetric cases. Photo: Håkon Angell Bolkan

represents insecurity and unstable working conditions («push» factors), it is tempting to try one's luck in Western countries.

As a rich country Norway has a responsibility to reduce both these factors to ensure that poor countries manage to meet the needs of their own national health services. Development assistance such as funding the training of health personnel in low- and middle income countries, and supporting the education of professionals in the organization and development of the health service will constitute important instruments in the long term for reducing the «push»

factors. The 2007 report from the Directorate for Health and Social Services outlines this as an objective (4).

Domino effect

The migration flow of health personnel can take place in stages or sequences of which Norway forms part. Recruitment from other countries to Norway that appears to be ethical can in turn promote active recruitment from a low-income country to the country Norway is recruiting from. This trend has been seen in Poland and the Baltic states, countries that to an increasing extent

send health personnel to Norway. These countries then satisfy their own needs for health personnel by recruiting staff from low-income countries. Little research has been carried out in this field, and it is currently difficult to find figures to prove that such a domino effect is taking place.

The impacts of the domino effect will be the same as they would be if Norway had recruited directly from poor countries. Rich countries like ours have a duty to invest sufficient resources in educating health personnel to cover our own needs. The Directorate's report «Utdanne nok og utnytte godt» (Educate well and use well) (2009) presents recommendations on how this can be accomplished (5).

Incentives for retaining health personnel in the source country

A sensible «retention» policy means establishing mechanisms that result in health workers remaining in their home country or providing incentives that ensure that well-qualified personnel want to return home after working in another country for a period of time. The mechanisms that function well in the various countries will differ. As yet there is insufficient knowledge of what raft of measures will actually be effective. Several developing countries, for example Zambia and Malawi, have drawn up comprehensive health personnel plans that are cost estimated, but the implementation of these has proved to be challenging. Often this is because the departments responsible for appointing health personnel in the national ministry of health are poorly equipped, and because the overview of the country's financial freedom of action regarding scaling up the number of employees in the health sector is inadequate. In addition, cooperation with important sectors such as the ministries of finance, labour and education is weak or minimal, and the actors in development aid demonstrate unpredictability and rather short-term planning and projections (11).

Development assistance work must be long term and promote the strengthening of capacity at all stages to support poor countries in their efforts to ensure that the authorities implement national health personnel plans. Scaling up the education of health personnel seems easy but it has no effect if the national health system is unable to employ staff, and this in turn leads to the migration of well-qualified personnel to rich countries.

Task shifting

Changes in the redistribution of tasks among the health professions, as well as the development of new job categories and specializations in the health sector, have helped to promote increased exploitation of available resources. This is often referred to as task shifting or task sharing in the international literature on the subject.

Table 1 Main reasons for the migration of health workers (10)	
«Push» factors (from poor countries)	«Pull» factors (to rich countries)
Low salaries	High salaries (remittances to families back home)
War, conflicts or political instability	Political stability
Few opportunities for continuing education	Opportunities for continuing education, specialization
Difficult working conditions (lack of equipment little access to advanced professional expertise, poor infrastructure, many patients)	, Good working conditions
Lack of positions and limited career opportunities	Good career opportunities and a great need for health personnel
High prevalence of infectious diseases, such as HIV/AIDS, tuberculosis and malaria	Good vaccination programmes and good oppor- tunities for treating infectious diseases
Financial instability	Well-financed health systems
Unstable and hazardous working environment	Active recruitment
	Travel opportunities
	Good living conditions

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Huge efforts have been made to increase the availability of medication for HIV patients. In order to distribute the drugs and commence treating the growing number of patients in developing countries it has been necessary to consider new ways of using available personnel. In the case of antiretroviral (ARV) treatment, untrained local personnel have received specific training in routine treatment and can refer the patient to a specialist if necessary (12).

Untreated surgical conditions represent a considerable health burden in low- and middle-income countries. In addition, the distribution of health personnel is uneven in poor countries. For example there are only ten surgeons in the capital of Sierra Leone, Freetown. They constitute 90% of all surgeons in the country and they are responsible for a population of 5.3 million (13). In order to remedy this imbalance, a training programme for local health workers in Sierra Leone was set up in 2010 with the help of Norwegian expertise.

In East Africa the training of Clinical or Assistant Health Officers has proved to be a successful measure, also when relatively advanced surgery must be conducted. In Mozambique such health officer are called *Tecnicos de Cirurgia*, and several publications indicate that they deliver just as good services as fully trained doctors within specific clinical fields, also when compared with Western data. Tanzania and Malawi

have the same experience (14). In many places this group of health workers will constitute the foundation of the public health system where there is no access to specialists. Further development of a system of training programmes for personnel who can carry out defined surgical operations may be one solution for improving health services in Africa even though this approach will not solve all the problems.

Training of health personnel

The education of doctors, and not least their specialization, is both time-consuming and costly. Many low- and middle-income countries are unable to educate medical specialists in their own country. When doctors have to leave the country in order to enhance their competence, there is a strong likelihood that they will not return.

Every year approximately one million new doctors, nurses, midwives and other health personnel are trained. The majority are educated in Western countries. The US has more than 150 educational programmes in medicine while 36 countries offer no medical education whatsoever. Most of these countries are to be found in sub-Saharan Africa. This gives clear focus to both a lack of education in the poorest countries and a highly distorted distribution regarding where the education takes place (15).

In November 2010 *The Lancet* published a review of health professional education

globally (15). The commission that compiled the review was composed of representatives from all parts of the world headed by Julio Frenk, the dean of the Harvard School of Public Health. They examined the terms for the coming generation of health professionals and the changes that are required to meet future health challenges in an optimal manner. In particular they stressed that the potential of information technology has not been exploited well enough in the context of education. Much more can be achieved locally, nationally and globally. Learning tools, the Internet and communication media can make professional expertise accessible in a simpler and better way than traditional classroom teaching. Young people in poor countries have proved capable of mastering new digital advances faster than their counterparts in rich countries. At the same time it is vital that the education is adapted to the local context in which they will be working (15).

Norwegian instruments for development cooperation

The New African Connections conference that was arranged in Oslo in June was a great inspiration for Norway. Influential people such as Kofi Annan, Ted Turner and Gro Harlem Brundtland participated and directed attention to enhancing the effectiveness of the health system through the use of new technological solutions that benefit the poorest people worldwide. Exploiting the possibilities offered by the incredibly rapid expansion in the use and availability of mobile technology in Africa in recent years is now vital (16).

The Global Health and Vaccination Programme (GLOBVAC) managed by the Research Council of Norway (RCN) is entering a new phase. Research into and development of robust technological solutions that exploit professional competence in poor countries in the best possible manner should be one of the subject areas in RCN's next call for proposals.

FK Norway (www.fredskorpset.no) manages the ESTHER programme which targets the exchange of health personnel between Norway and countries in Africa. This should be further developed so that it becomes a better instrument for development cooperation between hospitals and capacity building in low- and middle income countries. By the same token efforts are now being made to restructure and merge the two former programmes – the Norwegian Programme for Development, Research and Education (NUFU) devoted to PhD education, and Norad's Programme for Master Studies (NOMA). The new programme (NORHED) must constitute a key instrument for Norwegian educational and research institutions in long-term cooperation with institutions in low- and middle income countries.



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The Norwegian parliament, the Storting, has announced that a white paper on global health will be published in the autumn. The white paper must underscore the important role Norway has undertaken as a driving force for a fair global health personnel policy and must promote the strengthening of the health personnel situation in Norway's partner countries.

Our expectation is that the Norwegian authorities in cooperation with Norad will prepare appropriate tools for Norwegian educational and research institutions, NGOs and health enterprises, which will help to strengthen the commitment needed to counteract the global shortage of health personnel.

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