An introduction to this issue:

This issue focuses on the effects of emergencies on local health workers. Little has been documented on approaches to support them during a crisis and on strategies for their development when the crisis is over. The editorial points to the need for getting the balance right between international and local health workers, starting from remuneration. This point is developed by Van Lerberghe and Porignon, who discuss the poaching of local health workers by international agencies. Pavignani gives an overview of the impact of protracted crises on the health workforce and discusses strategies for redressing distortions that were induced or exacerbated by the crisis. Stilwell introduces the issue of migration of health professionals: a common pattern in countries affected by chronic crises (see also the article on Zimbabwe, page 10).

Managing people in crises—page 8—argues that good management practice can go a long way in effectively hiring and retaining health staff. Schneider analyses the HIV/AIDS impact on health workers in Southern Africa.

The Angola, Mozambique and Timor-Leste strategies in restructuring the health workforce after the conflict are discussed on pages 11, 12 and 14. Their lessons could be relevant for other contexts, such as Liberia and Cote d’Ivoire.

Finally, the personal experiences of health professionals who grew up in countries affected by chronic crises (Sri Lanka, Iraq and Angola) and ended up working for WHO, are told in the final section of the newsletter (page 17 and following). A short annotated bibliography on health human resources is included on page 20, providing key recommended readings to the reader interested in a more profound study of the topic.

National health workers in crises: a neglected asset

A. Paganini, UNICEF New York

International humanitarian assistance constitutes a huge and multibillion dollar industry open to every agency, institution, organization and individual willing to become involved. Excessive reliance on international relief workers, however, is not justified and can be counterproductive. In the health sector, it is unwise to discount the potential contributions of local professionals and the resilience of local systems. Exploring avenues to have local health professionals, including Ministry of Health (MoH) staff, paid by international aid provides constructive alternatives.

Many donors and international financial institutions argue that this measure undermines the financial sustainability of the health system. It can be counter-argued that the influx of hundreds of international health workers often negatively affects national capacity. Fragmentation of projects, parallel support systems, ad-hoc recruitment of national health professionals, etc., can all weaken the MoH. Coordination is the key to ensuring that external inputs strengthen local capacity. However, coordination cannot remain, as it is often the case, a vague concept embraced by all and practised by few. It must be embodied in a structure—a public health authority—representative of the main stakeholders and with the power to make and enforce decisions. In countries in crises where the state is weak, it can consist of the MoH and a small number of representatives from UN agencies and NGOs. This authority could maximize the effectiveness of responses, ensuring that external aid workers are needed and qualified. In addition, it must guarantee that local health professionals are properly supported, as they are the first to carry out the services in demand. The establishment of such an authority is a condition for retaining local staff in a way that is consistent with saving lives and not undermining the national public health system.

In the absence of a designated public health authority, local professionals are usually only employed through externally driven projects or time-bound activities like vaccination campaigns. Conversely, if left to fend for themselves, they move into individual curative care based on a fee for service. In both scenarios, as remuneration is based on “contract” projects or on precarious patients’
Despite the benefits of employing local health professionals using international aid, there is a resistance among donors to do so. This must be addressed, lest the unsustainable and foreign-dominated “project” approach to health action in crises be perpetuated.

There are complexities in designing an efficient mechanism for allocating international aid for the payment of local health professionals. For this reason, a public health authority must be charged with this task from the onset of an emergency situation. WHO and other international bodies working in the country have an important role to play in the designation process, by assessing an authority’s governance and co-ordination capacity.

**Humanitarian gaps**

**Q:** Who addresses the gaps that are not covered by the mandates and capacities of the Humanitarian Actors?

**A:** Those of the affected people who survive.

*(from an exchange at the UNDAC course, Geneva, May 2001)*

fees, local health professionals are under extreme pressure and often unable to financially sustain themselves and their families.

Redirecting international aid to pay for local health professionals can serve as a lifeline for the public health sector. It promotes sustained stability by providing communities with essential health services. It also paves the way for transition to post-emergency reform and rehabilitation, and invigorates the local economy through the injection of salaries.

A positive experience in this direction comes from the Democratic Republic of the Congo (DR Congo). In 2001, a joint WHO/UNICEF assessment mission found that the health administration was the only system in the country that was still recognisable as a nationwide, state structure. Even with critically little or no support, the health administration had continued to command allegiance from local health professionals. In light of this, a significant sum of international aid was designated for the remuneration of Congolese public health specialists which, with targeted training, carried out the public health interventions most needed to address excess mortality.

At the core of the issue is the need to choose a *system* rather than a project approach. Enabling local health professionals to continue serving within the national or local public health care delivery systems is a strong move towards real empowerment and capacity-building. In turn, these professionals contribute very valuable knowledge of the sociopolitical and historical context in which relief work is being carried out. They also possess lingustic skills and a cultural understanding that international relief workers cannot master. In terms of efficiency, it must be noted that the cost of a local health professional is only a fraction of that of an expatriate. Furthermore, especially in situations of violent instability, salaries for local health professionals are often neglected by donors who prefer to fund international agencies, target infrastructure or deliver supplies.

**Partnership or patronage: strengthening local capacity**

Donor reluctance to invest in national staff could be defined as myopic: there is enough evidence of the severe crisis affecting health human resources in many countries. Data from Sub-Saharan Africa, where most emergencies occur, shows the serious and worsening shortage of qualified health workers in key categories, both in absolute and relative terms. Their distribution is imbalanced with a strong urban bias. Insufficient salaries, poor working conditions, political instability and expectations are at the root of the increased migration of doctors, nurses and pharmacists to developed countries. At the same time, it is estimated that AIDS accounts for 19-53% of all deaths of government health staff in African countries, substantially contributing to the overall attrition of the workforce. The crisis of human resources for health should be of concern not only to humanitarian actors. It has been estimated that US$46 billion per year would be required to scale up health services in order to achieve the Millenium Development Goals (MDG). Without addressing the above issues with a substantial investment in national human resources - which are key to any sustained development of health systems - it will be impossible to move toward achieving the MDGs.

In the area of humanitarian assistance, where the immediate priority is to save lives, partnership with, and strengthening of local institutions is often perceived by external actors as an obstacle that delays the delivery of relief. But, to use Minar’s words “can a relief operation be considered a success if, although the patient survives, the local emergency team that will treat the patient’s next emergency remains marginalized or incapacitated?”.

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**Endnotes**

1 Quoted in Liese B. Et al., WB 2003
Of coping, poaching and the harm they can do

W. Van Lerberghe, WHO Geneva and D. Porignon, Université Libre de Bruxelles, Brussels

Public sector salaries in poor countries are well known for being grossly inadequate. Paid too little too late, and often nothing at all for months at a stretch, many health workers cannot possibly make ends meet. The contrast with work in the private sector is often stark. One study found that in 25 low-income countries, the salary of a mid-level or senior doctor was equivalent to 14% of the income generated by a small private practice of 15 outpatients per day.

Even in a stable context, such problems can lead health workers to indulge in predatory behaviour: drug pilferage, under-the-counter fees and the like. Such behaviour acts as a de facto financial barrier to access. It also de-legitimises public health services and jeopardises the necessary relation of trust between user and provider.

Many doctors and nurses are unwilling to resort to blatantly unethical practices. Still, they have to look for other sources of income to cope with their difficult living conditions. Moonlighting in private practice, consultancies, research or teaching have become well-established individual coping strategies. Training per diems are a favoured way of boosting one’s income. These coping strategies eat into the availability of staff for their core duties and result in a net flow of resources out of the public sector. In Niger, for example, 340 out of an ‘active’ workforce of 1,100 nurses and doctors are presently enrolled in post-graduate training programmes and they are no longer available for clinical work. Low salaries thus paradoxically lead to high costs per unit of output.

One of the most visible effects is competition for qualified staff time. This directly affects access to clinical services, where full-time staff is often but a vague memory. Also, managers who provide expertise for development agencies are less available to run services and programmes. Agencies’ concerns for immediate effectiveness often outweigh considerations of long-term sustainability, as they prefer to poach the most productive and competent health workers.

This dislocation of health services is often exacerbated in complex emergencies. Relief agencies have immediate objectives of providing large numbers of people with emergency care, and to do so poach health workers from the public sector. This is easily done: in Central Africa, a salary package of US$ 500-1000 is extremely attractive for health staff with (uncertain) wages of US$ 25-100. Inter-agency competition and lack of transparency reinforces the salary gradient and accelerates the brain-drain out of public services.

Once poached, health workers are often unwilling to go back to their former working conditions, and are understandably demotivated when they do. Relief efforts thus push routine health services further into crisis, in a context where the overall goal should be to re-establish normal services as soon as possible.

It can be done differently. Where they were assisted and strengthened, routine health services have been able to adequately deal with the health consequences of complex emergencies. That this can be effective and sustainable, at a much lower cost than conventional external relief work, has been shown in such difficult circumstances as on the Guinea-Sierra Leone border or in Eastern Congo. Such work is much less spectacular and visible than conventional relief operations.

Many health agencies are eager poachers of public sector staff. The whole donor incentive system is geared to immediate and visible intervention, which is very labour intensive. Many health workers are eagerly poached. The resulting mix of good intentions and self-interest can have long-lasting harmful effects. One preoccupation in emergency situations should be to limit the damage due to interference with the regular health service workforce. Even in emergency situations, it makes more sense to provide regular services with extra staff, drugs and funds, than to empty public health services of their staff.

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Endnotes
The impact of complex emergencies on the health workforce

E. Pavignani, Independent Consultant, Mozambique

A crisis impacts a workforce in multiple ways. Some acute conflicts, such as those of Kosovo and East Timor, may give way to new political arrangements. Core groups of trained health professionals may leave the country while others, previously marginalized on ethnic or political grounds, take over. Changes in human resources are just part of the general redefinition of states, boundaries, and public sectors that emerges from these processes.

Protracted crises—leading to the wearing down of state entities and sometimes to their collapse—alter the workforce in incremental but profound ways, with long-lasting effects. Conflict-related violence can deliberately target health workers. In Cambodia, the workforce emerged from the conflict dramatically reduced in size, particularly within its most trained ranks. In other situations, the deregulated privatisation of training outlets leads to the proliferation of health personnel who expects to be absorbed by the public sector, irrespective of service needs.

This expansion can be very uneven. In Angola, basic-level training accounted for much of the workforce’s growth. In Afghanistan and Sudan, an expansion of medical schools resulted in too many physicians. Sometimes, certain categories of professionals are grossly under-represented. Both Angola and Afghanistan face a severe shortage of midwives, due to unrealistic plans in the former, and gender bias in the latter. In Iraq, nurses are in scarce supply. When relief agencies and NGOs have been active during protracted periods, like in Afghanistan, a proliferation of community health workers—often of disparate job descriptions and training history—is common.

A protracted crisis invariably affects the skills of the workforce. Training standards suffer, management systems collapse, working environments deteriorate, professional values decline, and the coping strategies adopted by health workers distort their behaviour and influence their morale. This unsurprising pattern is usually overlooked by decision-makers and donors, who may pay more attention to the rehabilitation of infrastructures than to the recovery of human resources. They erroneously assume that, once provided with adequate raw resources, health workers will make the best use of them.

Employment arrangements blur in a crisis, as many workers formally contracted by the public sector moonlight or practice privately within public facilities. Other health workers are hired by aid agencies and NGOs. Many maintain some relationship with the public sector, sometimes continuing to earn their salary despite their absence from the workplace. Payrolls and personal files become outdated or lost. In this situation, “ghost” workers proliferate. Managers may remain out of contact with staff deployed to remote areas, even for years.

Internal displacement towards secure areas is the norm and overstaffing ensues, while facilities in insecure areas are deserted. As payroll fails to register these movements, their size is often unknown or grossly underestimated. Given that rural primary health care facilities are usually more vulnerable than hospitals, conflict-induced redeployment swells the staff of the latter in detriment of the former.

Low productivity is a common finding in over-staffed and under-resourced facilities. The crippling of referral functions reduces service demand on hospitals. Conversely, patients can bypass primary facilities, seeking health care in hospitals. Health activities offering earning opportunities, such as curative care or immunisation campaigns supported by donors, expand at the expense of others.

If conflict has disrupted training facilities for long, the surviving workforce may be ageing. In countries badly stricken by HIV/AIDS, the attrition of health workers is excessive and even a large workforce may not be able to sustain health services without constant replacements.

Military health services expand during a conflict, competing with the health sector for trained professionals. Warring parties may establish their own health services, staffed by politically affiliated or forcibly recruited cadres. Once the conflict is over, these health workers may have to be absorbed by the health sector, irrespective of service needs and of the appropriateness of their skills.

Aid agencies and NGOs respond by financing in-service training initiatives. Although these initiatives have the support of personnel (for whom they represent important sources of income), they incur heavy opportunity costs and often negligibly impact on performance.

Most of the investment in human resource development before a protracted crisis is wasted. To redress this, a comparable investment, in the order of millions of US dollars, is called for. This investment may be instrumental in sustaining the sector during the conflict and paving
Main lessons learned in various crises

- Start planning the rehabilitation of human resources as soon as possible, better in wartime, so as to introduce corrective measures without delay when opportunities arise.
- Invest adequately in human resource development, which is a slow, long-term, resource-intensive endeavour. Severe, protracted disruptions call for robust corrective measures, possible only when generously resourced.
- Ensure political support to inherently controversial measures, such as those aimed at restructuring the workforce. A convergence of powerful players within government and among donors offers the best chance of success.
- Give attention to management and regulation of human resources, as well as to the incentives affecting their evolution, even if this implies difficult decisions.
- Set broad long-term goals and leave room to implementers for adaptation. Establish a strong monitoring capacity, to adjust plans according to the registered progress and to tackle evidence-free, but politically strong, proposals for change.
- Consider closely the existing training capacity. In most cases, it will be found in appalling conditions and in need of radical overhauling. The importation of competent trainers may stand out as one of the most needed, sensitive and difficult measures to be taken.

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Endnotes
1 See “Of coping, poaching and the harm they can do” on page 3 of this issue for more information on this trend.
2 Workers included in the payroll, but not any longer active (e.g., emigrated, dead, employed by other entities); see the Mozambique case study “Restructuring the workforce in a post-conflict health sector” on page 12 of this issue.
3 See “Re-integrating health workers of rebel groups: the experience of Mozambique and Angola” on page 15 of this issue.

Strengthening local capacity in emergencies

The time has come to break the invidious but accepted circle: outside actors do studies for outside use paid by outside resources using external criteria to judge internal capacity building.

Minear L., The humanitarian enterprise. 2002
**Summarising the impacts of emergencies on the health workforce**

**Emergencies and human resources: common patterns**

- Changes in the workforce: emigration, violent deaths, abandonment of health jobs, ‘ghost workers’, etc.
- Decrease of the workforce size (e.g., Cambodia) or, conversely, growth (e.g., Angola)
- Proliferation of training activities (NGOs, private sector, etc.): expansion of some categories, imbalances with regards to needs and absorption capacity
- Distorted deployment patterns and exacerbation of pre-existing biases, induced by lack of security
- Decrease in health workers purchasing power: low morale, decreased productivity; prioritisation of activities with earning opportunities, fragmentation of contractual/employment arrangements; brain drain
- Deregulated privatisation (private practice, under-the-table fees, embezzlement of drugs, etc.)
- Deterioration of technical skills

**Strategies to counteract these patterns**

- If the workforce’s size is too abundant, freeze recruitment and pre-service training and invest in in-service training
- Identify incentives (monetary, career, etc.) for correcting deployment distortions
- Assess how best to synchronise the reconstruction of the network with the upgrading of the workforce and allocate adequate resources to human resources development
- Pay equal attention to incentives affecting health workers’ behaviours and management and regulation of human resources
- Find measures for upgrading training capacity, which is often weak in countries in crisis

**Studying the health workforce: elements to be analysed**

A review of the human resources for health may start with the scrutiny of the aspects presented below.

**Number:**

- Trained (holding a formal professional qualification)
  - University-level, Mid-level, Basic-level (1-2 years of training)
- Volunteers / community (with short, informal training)
- Ancillary

Compare the size of the workforce with the country population and the size of the health sector.

**Composition:**

- Hospital-oriented (doctors, nurses, lab technicians, etc.)
- Primary health care-oriented (in health sectors where these categories were introduced)

Review the main professional categories and identify under-represented, as well as over-represented ones, in relation to each other and to population and network.

**Characteristics:**

- Citizenship (national vs. expatriate)
- Age structure
- Sex
- Ethnic or regional patterns of health workers, if relevant

**Supply:**

- Features of the training network (geographical distribution, ownership of training outlets, training capacity, by level and health discipline)
- Training outputs

**Management:**

- Civil service
- Professional associations
- Regulatory bodies

This information must be compared with that reported for previous years, in order to understand the changes under the brunt of the disruption. The future evolution of the workforce, in the absence of any purposeful intervention, can then be forecast.
On the move: health workers and migration

B. Stilwell, WHO Geneva

Migration is a complex subject, which can be understood from many perspectives. While its complexity means avoiding tempting but simplistic solutions, the rapidly increasing number of highly skilled migrants, particularly from countries where health systems are already weak, calls for policies and strategies to manage outflows ethically and ensure a balance between winners and losers.

The globalisation of information via electronic access means that jobs, and often education for jobs by distance learning, are available internationally, as are visa application forms and processes. As a result, it is increasingly highly skilled professionals who are migrating. This is undoubtedly costly for developing countries, not only in terms of skill shortages but also in fiscal costs from educational subsidies, when these have been available. The movement of health professionals has closely followed the upswing in migration of all professionals. Although medical practitioners and nurses make up only a small proportion of professional migrants, the loss of human resources for least developed countries usually results in a loss of capacity of the health system to deliver care equitably.

However, the effects of migration are often compounded by the other problems which countries face in trying to provide health care which is equitable and effective. These range from poor economic development leading to lack of flexibility in wages and bad working conditions, to weak information systems about the health workforce.

What is not yet clear is how the labour market in many of the poor countries could respond to the influx of workers if migration was reversed or stopped. And if there would be employment for those with education and skills learned overseas. Some of the return migration programmes have been less than successful because they have failed to identify posts for returning migrants.

There is also an ethical dimension to the movement of people: we all have a right to move away from our country, and there are many difficulties in trying to control who is leaving, though of course visa restrictions may control who is entering a country. For many families, the money sent home by migrant family members is vital for their survival and for the education of children.

Creative solutions are needed. In terms of receiving countries, better planning for the health workforce would mean that they did not have to recruit from developing countries in the aggressive way which is now common. But it is also important to look at structural causes for migration—the economic differences between poor and rich countries have, in recent years, been growing. Is it any wonder that health workers want to migrate when salary differentials are so great? Migration is a political as well as economic and social, phenomenon.

Partnerships between institutions, which give each partner an advantage, seem to be worth considering. These might include having a contract that enables the health worker to work part of the contract in their home country and part in the recruiting country. Health systems in many countries have low wages, few incentives and poor working conditions. Tackling these problems, perhaps in partnership with donors, would not only encourage the recruitment and retention of staff, but would strengthen service delivery across the board.

Nursing deserves a special mention. There is currently a global shortage of nurses, and yet the nursing labour market continues to suffer from the disadvantages of female-dominated professions. Salaries remain unattractive, the status of nurses is low, working conditions are often poor and promotion prospects limited. No wonder that nurses move to the highest salaries possible. Is it not time for a rethink of nursing as a profession: if nurses are so valuable, then that should surely be reflected in the way that they are treated.

Emergencies call for health workers to be available quickly and in adequate numbers and a constant outflow of human resources through migration can significantly reduce the health workforce. But when an emergency occurs, it is already too late to address shortages of workers resulting from migration. Policies, planning and action are required to design effective retention strategies and keep health workers in the workforce and in the country. In emergency situations, health workers may leave the country in even greater numbers, especially if stressful conditions prevail for a long time. An inflow of health workers to strengthen the existing workforce is a significant part of international assistance in emergencies.

Migration has always been a feature of human life, and it is not likely to stop. The challenge is to derive benefits to all from migration, in a way that supports human rights and protects the most vulnerable.

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The import of qualified health professionals—trained at government expense—was regarded as: “a vast subsidy from the developing world to the developed, not fully mitigated by the considerable remittances to their families at home”.

Abel-Smith B., 2004
The aim of good management is to convert resources (human, financial and material) into the best results possible. Management of people (human resources) is the most important, and often the least well managed aspect of relief operations.

Rapid staff turnover and a shortage of funding for staff development are real constraints faced by agencies working in crises. The demand for staff can fluctuate dramatically in the different phases of a crisis and this makes human resource planning and preparation difficult. Finally, staff selection, hiring and management procedures are so cumbersome and inadequate for crisis scenarios that attempts at ‘good’ human resources management are met with major, practical difficulties. However, constraints can be addressed and overcome, even during crises, provided specific approaches are followed, including:

- assuring that all new staff get a well-planned briefing and induction that explains clearly and honestly their prospective contractual, working and living conditions
- establishing clear objectives through collective planning sessions
- developing realistic job descriptions with each individual
- giving staff honest, fair and clear feedback on their work
- consulting and listening to staff members regularly

Sound team management requires sound self-management, including good time and stress management. To be able to balance the urgent against the important, for example, and to recognize and address causes and symptoms of stress, are indispensable skills for an aid programme manager.

The concern for humanity espoused by humanitarian bodies should extend to staff welfare. The best results are achieved through respecting and building upon the capacities of the right people in the right place at the right time.

Staff management follows a set of logical steps, known as the ‘human resources management cycle’ similar but not identical to the ‘project management cycle’. This includes assessment and planning of needs (how many staff, of what profiles, to do what, where and when); selection and recruitment or assignment, preparation, support and guidance to carry out tasks (including rest, recuperation and personal health, stress and safety measures); and fair and transparent evaluation, with discipline or reward according to performance.

A major problem in aid programmes is that staff are often given responsibilities, but not the authority (e.g., over the allocation of resources) and means to meet those responsibilities. Delegation of authority to competent, professional, committed staff is a necessary component of good management. Delegation, in turn, needs to be accompanied by appropriate support and control systems.

The success of emergency/crises operations depends on the qualities of staff and how they work together more than any other aspect. Staff matter. Emergency management requires professional and considerate “people-management” with effective communication and information-sharing within the team.

All emergency staff are potentially managers. They have a responsibility to see that adequate, correct and fair resources (human and others), systems and procedures are established from the beginning. Emergency staff need to care for their health and personal welfare and that of colleagues. This includes the provision of reasonable working conditions and a reduction of the stress associated with emergencies.

Special consideration needs to be given to the management of human resource dilemmas, including the complexities of managing staff in multi-cultural scenarios. Specific preparation and support is required for staff to operate in cultures that are not their own.

Gender may have specific significance in certain contexts. In some cases, it may be more advisable for a female as opposed to a male staff member carry out certain tasks (e.g. to assess and attend to the emergency needs of females).

Stress management may be necessary due to exposure to violence, distress, and trauma. De-briefing or de-fusing may be required. Special Critical Incident Stress De-briefing (CISD) methods may need to be applied for particularly shocking incidents, such as violent attacks and exposure to death of beneficiaries or colleagues.

Beware that the termination of staff contracts, during or at the end of an operation, requires planning, preparation and sensitive management. Sensitivity and fairness are paramount to avoiding conflict, misunderstandings and even physical danger.

* This article is an excerpt from the Crisis Management Toolkit, WHO, 2003, by J. Telford.

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HIV: coping strategies of health workers in South Africa

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South Africa has what is referred to as an “explosive” HIV epidemic. Between 1990 and 2002, HIV prevalence in pregnant women attending public antenatal clinics grew from 0.73% to 26.5%. Of a total population of 44.8 million, 5.3 million South Africans are currently estimated to be HIV infected (Figure 1). HIV in this country bears all the marks of a social catastrophe—death and dying, orphans, household impoverishment—on a massive scale. It is difficult to make sense of the scale and speed of evolution of the HIV epidemic in South Africa, let alone find appropriate solutions. Moreover, the entry of HIV into the general population occurred as the country was undergoing a profound social, political and economic transition. In such a context, it is perhaps not surprising that HIV in South Africa has been the subject of so much denial, conflict and controversy.

In a short space of time, health workers and the health system have had to adapt to a completely new disease profile in which all other conditions are crowded by one crushing burden of fatal disease. They are also simultaneously exposed to new risks such as multi-drug resistant tuberculosis and needle stick injuries. These changes have occurred against a backdrop of more general restructuring and change in the health system, which has created confusion and uncertainty. Health workers are also themselves not immune to HIV; in a 2002 study conducted by the Human Sciences Research Council, HIV prevalence rates in primary health care professionals were 17.5%. The study estimated that 6,000 - 12,000 health workers could be dying annually of AIDS-related illness. For health workers, everyday work is thus a constant reminder of their own vulnerability to HIV. The need for health workers to assert their social status and create a social distance from poor patients and communities may make it doubly hard for them to accept their own HIV infection.

The impact of HIV on human resource development in the South Africa health system is two-fold. Firstly, there is a reduction in the pool of skilled human resources (a combination of high levels of mortality, reduced numbers of new recruits and more emigrating in search of less stressful work). Secondly, burnout and demoralisation accompany a rapidly worsening epidemiological profile combined with greater workloads and personal vulnerability to HIV. In a study of primary health care facilities in Gauteng Province in 2001, 69% of primary health care workers reported high or moderate levels of “emotional exhaustion”, one of the parameters of burnout.3 Burnout was significantly associated with both perceived personal risk of HIV as well as workload size. Burnout leads to greater absenteeism and turnover of staff, thus aggravating the loss of personnel caused by HIV/AIDS.

Apart from opting out of the system, are there positive ways of coping with HIV and its impact on health workers? From the experience in South Africa, strategies need to target two levels: the systemic and the local. At a systemic level, planning models need to incorporate the higher than expected levels of attrition and seek to increase the numbers of health workers trained. While there have not been steps to increase the number of professionals trained in South Africa, over the last few years there has been a significant growth in state resources for HIV community-based care and support leading to the emergence of a new form of community health worker. There are moves afoot to formalise this new cadre and to link them to a major new public works scheme announced by the President in 2003. The burden of dealing with HIV is thus spread more widely. Also in 2003, the South African government committed itself to universal access to anti-retroviral therapy (ART). Apart from reducing mortality and morbidity amongst health workers, this policy will begin to reverse the tide of helplessness the health system currently experienced in relation to HIV/AIDS.

In the study of primary healthcare facilities in Gauteng Province,3 two important additional factors were identified. Firstly, health workers had very poor knowledge of how to manage HIV/AIDS. They believed that nothing could be done for people living with HIV/AIDS and this fed a

Figure 1: HIV prevalence in public sector antenatal clinic attenders, South Africa, 1990-2002

The Impact of HIV/AIDS on Health Workers

- In Malawi and Zambia, the death rate of health workers has increased six-fold since the early 1990’s
- In Southern Africa, 25-40 per cent more doctors and nurses will need to be trained during 2001-2010 to compensate for deaths from AIDS

Mukherjee JS et al. Lancet, 2003
It is estimated that 25-40% more doctors and nurses will be needed in southern Africa until 2010 to compensate for deaths from AIDS. 

*The Lancet, 2003*

sense of helplessness and hopelessness. Technical knowledge and skills can promote self-efficacy and positive belief in interventions and can lead to greater work satisfaction and motivation. Secondly, facility level relationships, particularly with managers, appear to be significant mediators of burnout. Health workers who indicated that they had a trusting relationship with their supervisors were much less likely to report emotional exhaustion than those who did not report such a relationship. Dealing effectively with conflict and creating respectful, fair and supportive local work environments may thus ultimately be the most effective strategies for coping with the impact of HIV/AIDS on health workers.

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Crisis and human resources for health in Zimbabwe

In the late 1980s and mid-1990s, the health system in Zimbabwe was a model for the sub-region. However, the situation has deteriorated over the years. Today, the Zimbabwe health system is reeling under severe economic decline compounded by a humanitarian crisis characterised by high HIV/AIDS prevalence, drought with resultant food shortages, high staff attrition rates and foreign currency shortages. These factors have contributed to the deterioration in the delivery of health and other basic social services. The population movements during the land reform process resulted in settlements being located in areas with no health infrastructure or access to health services.

A critical shortage of human resources came out prominently in the findings of the May 2002 Rapid Health Needs Assessment, which was conducted jointly with WHO and other UN Agencies in partnership with government departments under the Humanitarian Assistance and Recovery Programme (HARP). There has been a systematic, opportunistic recruitment by other countries of qualified Zimbabwean professionals. This “brain drain” in the health system could be attributed to poor remuneration and working conditions (shortage of basic medical supplies and logistics support), and security issues (family, food, economic, etc) which result in a search for greener pastures. The table below shows the gravity of the human resource constraints in the public health sector.

Donor response to the humanitarian crisis has been positive in terms of logistics and supplies, but poor in terms of funds for programme support. Donors prefer sending kits to strengthening local human resources. While it is easier to send kits, supporting local health human resources is the cornerstone to maintaining the health system during a crisis and avoiding its collapse.

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Public Health Sector Establishment (31/09/03)

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<td>55.1</td>
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</tr>
<tr>
<td>Dentists</td>
<td>59</td>
<td>16</td>
<td>43</td>
<td>72.9</td>
<td>725,000</td>
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<tr>
<td>Nurses</td>
<td>11,640</td>
<td>6,940</td>
<td>4,700</td>
<td>40.4</td>
<td>1,671</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>132</td>
<td>12</td>
<td>120</td>
<td>90.9</td>
<td>996,667</td>
</tr>
<tr>
<td>Environmental health officers</td>
<td>1624</td>
<td>764</td>
<td>860</td>
<td>53.0</td>
<td>15,183</td>
</tr>
</tbody>
</table>

Source: MOHCW, 2003
First steps towards healing a workforce: In-service training in Angola

M. Beesley and R. Scuccato, Independent Consultants, Mozambique

In Angola, the functional impairment of the labour force (manifested as low morale, poor professional standards, lack of support, congestion in urban settings for security reasons, informal charging of user fees, etc.) is compounded by a sustained expansion of its ranks. With at least 40,000 health workers in the National Health Service (most of them minimally qualified), around 10,000 in the army and some further thousands from former rebel areas, Angola offers one of the highest ratios of health workers to population in Africa. This impressive indicator, though, is unrelated to performance, as shown by low service coverages, utilization of health facilities and control of communicable diseases, all of which score among the lowest in the continent.

Huge problems grew unrestrained during more than 25 years of conflict. Some problems are consequences of disruption and devastation; others are rooted in ill-conceived and inconsistent health policies. Such policies include: a) lack of a clear option for equity, and priority to hospital-based tertiary care; b) over-emphasis on doctors as providers and managers of health care; c) fragmentation of the NHS along with vertical programmes; d) lack of an effective pharmaceutical policy, and de-regulation of this strategic sub-sector; e) unreliable information for effective decision-making. The labour force was planned according to standard teams, without due consideration to actual and projected workloads. The unregulated privatisation of training outlets worsened the picture.

Officials within the Ministry of Health (MoH) became aware of this discrepancy towards the end of the nineties. The Human Resources Development Plan 1997-2007 addresses the issue courageously, identifying two key objectives:

1. Downsizing the workforce, by keeping new training and recruitment below the expected attrition rate;
2. “Rehabilitation of the labour force” through a comprehensive in-service training programme.

Provincial experiences provided the inspiration for the design of the in-service training programme, which included several features:

a) In-House MoH Training. Employees of the MoH participate only in MoH-approved training. As MoH in-house capacity improves, staff will assume more responsibility for the running of the training. The initiative is to progressively shift from central authorities to provincial ones. The approved training is to be implemented by locally based provincial managers.

b) Integrated Training. All participants will receive training in all technical areas of his or her work during the same training episode.

c) High Quality Training. All training events must demonstrate long-lasting changes in actual working practices as a direct result of the training. In-service training is to be tightly linked to supervision.

d) Human Resource Centred Training. The learning needs of participants, rather than the needs of a particular vertical programme, are the point of departure.

e) Prioritisation. Staff most in need of attention or support will have priority during the selection of participants, independent of their area of specialty. The issue is equal opportunities. Priority will be given to under-represented staff from under-represented health centres.

f) Efficient Training. Funds made available for training should be used as efficiently as possible in order to promote regular, predictable and effective training.

These sound principles are modulated according to cost and their implications in terms of decentralization and decision-making.

In-service training does not occur in a vacuum and the Angolan Health System faces tremendous challenges. The success of the in-service training 1997-2007 programme depends on the interplay of a correctly designed plan with a set of “environmental” requisites conducive to effective implementation of what is being taught and learnt. The managers behind this ambitious programme must convey to politicians the gravity and urgency of the situation. Without a clear awareness of actual needs and firm political support, success is far from granted.

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Human Resource Centred Training.

The learning needs of participants, rather than the needs of a particular vertical programme, are the point of departure.
The workforce in the 1980s, composed of 16,000 staff, was slim for a country the size of Mozambique. This was due to a tight and steadily declining budget, limited training capacity, shortage of candidates with adequate education level and cumbersome civil service procedures. The workforce was internally distorted, with 50% unskilled staff. Of the skilled cadres, only 3% were trained at university-level and 11% at mid-level. Hospital-oriented personnel dominated. Primary health care (PHC) workers were trained in insufficient numbers. The training network, concentrated in the capital city and underdeveloped in the North, was severely under-resourced. No private training outlets existed. Deployment suffered from both a serious bias, aggravated by the war, with more than half of the professionals concentrated in cities, and from understaffing north of the Zambezi River. A rigid civil service structure and culture compounded the picture.

The Health Manpower Development Plan 1992 – 2002, formulated in 1991 as part of a post-war reconstruction strategy (Noormahomed and Segall, 2002), addressed these problems by restructuring the workforce on a sustainable basis. The total number of MoH employees was projected to increase by only 9%. However, professional staff were to increase by 45%, while the number of ancillary workers was to decline by 22%. PHC-oriented personnel were expected to account for most of the increase. Higher-level cadres were expected to increase by two to three-fold. Training capacity was to expand most in underserved provinces, where the health network was expected to grow significantly once reconstruction started.

The plan relied on a comprehensive sector analysis, that provided a robust rationale for the chosen goals. Broad implementation guidelines deliberately left room for adaptation. The plan, resulting from a year-long consultation involving all senior officials at the MoH, called for donor support, which was generously given. Major agencies carved out their commitments within the plan’s framework. The World Bank made the plan’s implementation a central component of its second loan to the health sector.

To implement the plan, the financing of training expanded dramatically. The investment targeting the training network was in the order of US$ 15 million. Recurrent expenditure for training exceeded US$ 4 million in 1997. In the same year, the average cost of graduating a mid- or basic-level health professional was estimated at US$ 10,000. These figures exclude university-level training (responsibility of the Ministry of Education) and training abroad. During the same period, investment in physical reconstruction was in the order of US$ 20-30 million per year.

Results

National staff employed by the National Health Service (NHS)

<table>
<thead>
<tr>
<th>Training Level</th>
<th>1990 (baseline)</th>
<th>Situation 2003</th>
<th>2002 Targets</th>
<th>Results vs. Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superior</td>
<td>207</td>
<td>662</td>
<td>500</td>
<td>+ 32%</td>
</tr>
<tr>
<td>Middle</td>
<td>865</td>
<td>2,698</td>
<td>2,720</td>
<td>- 1%</td>
</tr>
<tr>
<td>Basic</td>
<td>5,197</td>
<td>5,339</td>
<td>5,820</td>
<td>- 8%</td>
</tr>
<tr>
<td>Elementary</td>
<td>1,660</td>
<td>2,776</td>
<td>1,710</td>
<td>+ 62%</td>
</tr>
<tr>
<td>Ancillary</td>
<td>8,231</td>
<td>6,478</td>
<td>6,350</td>
<td>+ 2%</td>
</tr>
<tr>
<td>Total</td>
<td>16,160</td>
<td>17,953</td>
<td>17,340</td>
<td>+ 4%</td>
</tr>
</tbody>
</table>

In aggregate terms, today’s NHS workforce corresponds to a remarkable degree to the targets chosen in 1991. Skilled staff grew by 45%. The proportion of most skilled cadres has expanded three-fold, whereas unskilled staff has been reduced by 22%. Departures from the original targets are not a source of concern. The higher-than-projected increase of university-level cadres remains within affordable margins. Furthermore, the large growth of elementary health workers, resulting from decentralised decision-making (as foreseen by the plan) and responding to the objective need of staffing the most remote health facilities, has no serious budgetary implications, given the low salary level paid to these cadres.

Roughly mid-way in the implementation of the plan, a census of the workforce identified and removed 2,000 ghost workers from the payroll. Supposing that an unknown portion of them already existed in 1990, the actual expansion of the ranks is larger than that officially acknowledged.

PHC-oriented cadres grew less than planned, due to several reasons, including the difficulty of recruiting appropriate trainers. The scrutiny of the workforce by categories shows sizeable divergences between planned and actual strengths; none of them, however, of worrisome proportions.
Deployment of Skilled Health Workers, by Region

Deployment patterns improved in aggregate terms, with the Northern region reducing its gap and the South losing some of its comparative advantage. Once these figures are disaggregated by level of training, they show that the correction of the old bias is only partial. In fact, Maputo City retains 44% of national university-level cadres.

The change in staffing patterns is remarkable. Whereas total average teams expanded modestly, in tune with the expansion of facility sizes, the proportion of staff with university and mid-level training within each average team increased spectacularly. Health posts present a pattern apart from other facilities, as they offer only rudimentary services in remote, low-density areas.

From 1993 to 2001, average workloads (i.e. the weighted sum of in-patient and out-patient main health activities) expanded by 29%. Global outputs grew by 69% during the same years. The salary bill increased in the second half of the 90s. By 2001, once adjusted for inflation, it was 122% higher than the 1991 baseline.

The expanded and strengthened training network has become a considerable asset one decade later to respond to augmented losses within the NHS ranks, and augmented service workloads, both induced by HIV/AIDS.

Shortcomings

The quality of the training is among the weakest aspects of the work done. Given dramatically-increased inputs, there are still margins for improving the skills gained by trainees. Sustainability of the MoH’s training system in the long term is also matter of concern. In 1997, 47% of recurrent costs was covered by donors; the World Bank’s soft loan added 29% and only 24% was paid by the Treasury.

Most efforts concentrated on the supply of personnel. Crucial areas, such as their management and regulation as well as the incentives affecting their behaviour, were not adequately addressed. A key recommendation of the plan—the training of professional health administrators—was ignored. As a result, the NHS is largely run by hospital-oriented medical doctors without specific management skills.

These drawbacks limit the full exploitation of the returns that the reform might have provided. The still significant understaffing of the region north of the Zambezi River might be better addressed by proper incentives and more flexible management practice, rather than by relying solely on local training of new cadres, as has been so far the case.

The same holds true for the strong urban bias, which has remained at the same levels as the decade before. Even excluding the skilled staff belonging to central and peripheral health authorities, 54% of the skilled workforce is posted to urban health facilities. Eighty-five percent of university-level and 68% of mid-level cadres work in cities.

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References


The Health Action in Crises (HAC) web site provides information on emergency situations (health situation reports, epidemiological surveillance, needs assessments etc.) and what to do about it (technical guidance). http://www.who.int/disasters

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0.6</td>
<td>0.5 2.0</td>
</tr>
<tr>
<td>Mid</td>
<td>0 0.1</td>
<td>0.1 0.4</td>
<td>0.4 3.8</td>
<td>3.2 13.6</td>
</tr>
<tr>
<td>Basic</td>
<td>0.4 0.6</td>
<td>2.1 2.0</td>
<td>9.2 11.3</td>
<td>27.5 21.3</td>
</tr>
<tr>
<td>Elementary</td>
<td>0.4 0.8</td>
<td>1.5 1.6</td>
<td>5.8 5.7</td>
<td>6.4 7.5</td>
</tr>
<tr>
<td>Average Team</td>
<td>0.8 1.5</td>
<td>3.7 4.1</td>
<td>15.4 21.5</td>
<td>37.6 44.3</td>
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</table>
Before 1999, in Timor-Leste as elsewhere in Indonesia, the civil service was inflated. The health sector operated a large number of under-funded and under-utilised facilities. The workforce, with approximately 3,500 staff, was oversized due to single skilling.

Most of the senior health management, medical speciality and medical practitioner posts were held by Indonesians, who left the country in 1999. There were only 31 qualified Timorese doctors, including one specialist. There was however an oversupply of mid- and lower-level workers, particularly nurses and midwives. As the Indonesians withdrew, 80% of the infrastructure was destroyed. A large Timorese health workforce, 2,632-strong and trained in the Indonesian health system, remained in place. Health personnel records were rescued from the Department of Health as it was being burned. The resulting Human Resource Development (HRD) database was used for verification of qualifications for future recruitment and as a tool for workforce and educational planning. However, NGO workers assumed they would have to train most cadres from scratch. This was a source of frustration and friction for both the Timorese health professionals and the NGO workers.

An analysis of the training undertaken by NGOs in April 2000 showed that only one training initiative followed a proper curriculum. Much of the training undertaken by NGOs was ad-hoc, on-the-job training with little of the training carried out by experienced educators. There was no documentation of who had achieved what level of competence to allow for accreditation.

The size and structure of the future workforce will bear little resemblance to the old one. A review of the prevailing conditions in the health sector led to a drastic downsizing of the planned network with the induced contraction of the workforce. According to these plans, fixed facilities would pass from 406 to 158, while the number of health workers was originally set at about 1,500. Later, budgetary concerns led to further cuts, fixing the future establishment at 1,087. The recruitment of the new, trimmed-down workforce took place during 2001, with understandable difficulties.

With greatly reduced ranks, the roles and functions of most health workers will have to change. The training content must change accordingly to reflect these new responsibilities. Nurses will have to take on a wider mid-level practitioner role, relieving the limited number of doctors of the burden of common conditions, so that they can deal with serious cases and referrals. Single-skill health workers will have to acquire additional skills. National job descriptions, developed in this new perspective, were used to recruit the ranks of the new civil service, as well as to identify training requirements to prepare the newly appointed staff for their new roles and functions (in conjunction with the HRD database).

The establishment of a medical school is not an option in a poor country with a population of less that one million. Medical students will continue to go overseas for training. Also, only a limited number of school leavers will hold the educational qualifications for entry into the field of medicine. Medical students will require training in an appropriate foreign language before commencing studies abroad. Meanwhile, to staff hospitals, the health sector is importing foreign doctors. Given the current oversupply of nurses and midwives, basic training in these fields is not required, at least in the near future. Future basic health worker training requirements have to be identified as part of overall national health sector development.

The current priorities of the MoH in the human resource field include strengthening management capacity, training a cadre of professional administrators, facilitating the acquisition by health workers of the new skills required by the emerging health sector, consolidating training capacity and progressively reducing the gap within medical ranks (particularly in relation to specialist physicians).

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Source: UN, January 2001

**Strengthening local capacity: is there a terminology or conceptual issue?**

The categorization of humanitarian agencies/actors into “international” and “national” can be misleading, as Minear suggests: “Why is a national or local NGO in an emergency-affected country that manages funds from 10 different donors any less international than an NGO based in Europe that works in ten countries?”
Mozambique and Angola: Re-integrating Health Workers of Rebel Groups:

P. Balladelli, WHO Angola, S. Colombo and N. Zagaria, WHO Geneva

One of the consequences of civil wars is that when a peace settlement is reached, ex-combatants and members of the losing factions become job-seekers. This occurs at a time of low absorption capacity in the labour market. To defuse tensions, donors are increasingly devising re-integration strategies that include benefit packages and vocational training. Some ex-combatants or members of rebel groups were previously health workers, who then volunteered for or were forcibly “recruited” into the rebel health services. Some received various and limited types of training but, after years of isolation and harsh working conditions, most need re-training.

Re-integrating health workers into the national health service is difficult, both for political and technical reasons. Frequently, they lack documentation of training (both pre- and in-service) and working experience. This is a major problem for deciding on equivalencies or further training required before they can be re-absorbed into the Government payroll. This short article describes the experience of re-integration of ex-Renamo and ex-UNITA health workers in the health services of Mozambique and Angola.

Mozambique

After the peace agreement signed in 1992 and within the framework of the demobilisation process, the issue of dealing with the health care providers operating in rebel areas demanded special attention. A survey of about 500 people, carried out by the UN and NGOs in collaboration with the MoH and Renamo representatives, showed very low schooling levels (4 years on average) and minimal professional training (only 5% of the interviewees held a formal qualification). By extrapolating these findings, 700 “health workers”, of which perhaps only 30 could be straightforwardly integrated into the National Health Service, were reckoned to be active in rebel areas.

A large training programme was designed to equip these workers with skills in line with NHS standards. Those workers able to enroll in professional courses were trained and absorbed into the civil service. Many others, penalised by their educational background, received training to become community health workers. The integration programme took place over several years and required substantial inputs provided by donor agencies.

In the end, most rebel ‘health workers’ benefitted from training compatible with the standards demanded by the National Health System (NHS). This defused a source of tension and brought together workers from opposing warring sides. It was jointly agreed by government and rebel authorities, but carried out by government cadres (even if sometimes hired as ‘consultants’ to increase trust), according to public sector terms and regulations. The low capacity level of the rebel side left them with little room for negotiating better terms. In situations where rebels feel more confident and rely on stronger capacity (as could be now the case in South Sudan), the nature of the integration programme might be substantially different.

Angola

During the prolonged and unfinished demobilization that started with the signature of the Lusaka Peace Protocol (1994), special attention was paid to the reintegration of the UNITA health workers into the national health system. In December 1996 a “Technical Committee” (TC) for the incorporation of the demobilized military health personnel into the national health system was set up. It included representatives of MoH, Angolan Armed Forces, UNITA Military Forces, WHO and UCAH (Unidade de Coordenação da Assistência Humanitária - Humanitarian Assistance Coordination Unit). This Committee defined the equivalence criteria between the UNITA health service and the NHS, adopted a standard methodology, interviewed 1,513 UNITA health workers and identified their role and appropriate category. They were subsequently incorporated into the NHS. Based on this positive experience, the mandate of the TC was extended to integrate the civilian health workers present in the territories previously controlled by UNITA into the NHS.

A protocol was developed and interviews began before the war broke out again.

In 2002, with the death of Jonas Savimbi and the formal cease-fire, the reintegration of the UNITA health workforce has become a key programme within the demobilization process. Approximately 7,500 UNITA health workers have been registered, of whom 27% have four years of schooling.
while the remaining 73% are eligible for re-fresher and upgrading training. Technical groups have been established at the provincial level to deal with equivalencies and to plan the re-integration of health workers who fulfill standard requirements. Training activities have started, focusing on management of health units, case management of common diseases and HIV/AIDS and STDs. WHO is actively involved with the MoH and other partners in the programme.

Lessons learned
These experiences suggest that:
1) Given the sensitivity of the issue, a conspicuous investment in addressing it is largely justified;
2) the whole process must be thoroughly prepared in advance of the operational phase, carefully managed and adequately resourced;
3) a legal framework for the re-integration of health workers should be developed to pave the way for the transition period. The process of re-integration of military health personnel can subsequently be replicated for civilian personnel.
3) If not prepared in advance, the integration of hundreds of rebel health workers requires sustained efforts during a long period;
4) the financial implications for the government of absorbing a large number of health workers in the payroll can be substantial.

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Endnotes

Cuban health cooperation with countries in crisis
C. Dolea and H. Mercer, WHO Geneva

Cuba has a long tradition of international health cooperation. As a consequence of the hurricanes Mitch and George that affected Central American and Caribbean countries in 1998, Cuba developed a new cooperation structure, which was aimed to provide health services to populations under critical situations. They learnt that the consequences of natural disasters in poor countries have more long-term consequences and an approach based on building or rebuilding basic health structures should be established to cope with these situations.

What at the beginning was an approach to cope with natural emergencies became a cooperation model, where the Cuban teams provide complete health coverage in areas previously agreed with national governments. With this new approach, health teams were sent to other Latin American and Caribbean and then African and Asian countries and remained there for a longer period of time. The co-operation included health services provision to the population of the catchment area and the establishment of demographic and epidemiological data gathering systems. In less than five years, Cuba was able to provide 6,100 physicians and other health personnel to work in remote and undeserved regions of 23 countries including Burundi, Burkina Faso, Cambodia, Eritrea, Equatorial Guinea, the Gambia, Guinea Bissau, Ghana, Lesotho, Mali, Namibia, Niger, South Africa, Tanzania and Zimbabwe. In addition to the development of basic health systems, Cuba is offering educational opportunities to 700 students from those countries to study in Cuba, and assisting some countries to establish medical schools.

The Cuban health workers have a collective contract for two years, after which they return home. This contract is an agreement between the two governments. The Cuban government pays the salaries and maintains the original jobs of the health workers. The receiving government provides the travel, accommodation and a small daily allowance. To overcome language and cultural barriers, induction and language courses are given to the Cuban health workers.

Two examples can highlight other aspects of the Cuban co-operation. In the Gambia there are currently 285 health workers from Cuba, distributed particularly in rural areas. This is a mobile and adaptable workforce, as the government can decide where to locate these workers.

In Mali, the co-operation is aimed to accomplish with another purpose. Malí is under a strict structural adjustment policy, which doesn’t allow recruitment of more public sector personnel. Importing physicians are a means of fulfilling the need without affecting the economic agreement. In Mali there are (a.i) 58 Cuban physicians, 48 family doctors and 10 specialists, representing less than 1% of the local physicians.

The deployment of such a large health workforce in distant and culturally different countries implies a complex planning structure considering the logistic, financial, political, and epidemiological dimensions of such an endeavour. The Cuban experience is being followed with attention by governments, developing countries, donors and international agencies.

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Endnotes
Surviving and helping others survive in Sri Lanka

G. Gamhewage, WHO Geneva

For nearly two decades, Sri Lanka was caught up in a bloody civil war that claimed over 65,000 lives, displaced nearly a million and created another million refugees. Although officially an armed conflict between the Government of Sri Lanka and the Liberation Tigers of Tamil Eelam (LTTE), none of Sri Lanka’s 18 million population was spared. People on all sides—men, women and children, combatant or civilian—were sucked into the spiral of violence and uncertainty that characterises all conflicts.

In many ways, the Sri Lankan conflict resembled other conflicts around the world. It was a protracted war given relatively little profile on the international agenda. For an entire generation of children and young people, violence, death, suffering and the inevitable cycle of hatred was the norm. But in one aspect it was different. Sri Lanka was the only government to continue state support, albeit limited, to areas not under its control. For 19 years, the government of Sri Lanka sent food rations, medical and surgical supplies and other essential items to the North and East of the country much of which was controlled by the LTTE. It continued to pay the salaries of medical and public health staff and provided limited support for infrastructure. Days of tranquillity enabled polio vaccination campaigns to be held even during the years of fighting.

As the conflict continued this support was nowhere near enough, the health infrastructure was damaged throughout the North and East and personnel disappeared and were replaced by volunteers. The Ministry of Defense often limited medical and surgical supplied to be sent to the North and East. Nearly a million people were displaced and lost access to routine health care. Water and sanitation deteriorated as infrastructure was damaged and pressure on limited resources increased due to large waves of displacement. Communicable disease control become more and more difficult.

Sri Lanka was considered a model for a developing country with social indicators that matched developed countries (HDI: 0.711, life expectancy at birth: 73 years, literacy rate: 90%). Also, Sri Lanka offers free health care to all its population (health expenditure accounting for 3.1-3.5% of GDP is health expenditure). But Sri Lanka is feeling the long-term cost of war. WHO estimates maternal mortality in the North and East is more than triple and infant mortality double that of the rest of the country. One in four newborns are of low birth weight in the North and East compared to one in six in the rest of the country. Malaria is now a major health issue in part of the North and East.

What is it like to survive in Sri Lanka? It is like survival under any really challenging situation. One tries harder, complains less and concentrates on the task at hand. The task is overwhelming (3,000 vacancies in the North and East, excluding teaching hospitals), resources are at best limited and people’s suffering is unimaginable.

As a medical or public health worker, your own suffering seems insignificant in comparison to those whom you serve.

As a simple example, in an area subject to severe mental health pressures (Sri Lanka has one of the world’s highest suicide rates, is one of biggest consumers of alcohol globally and the population has been exposed to extreme inter-personal and communal violence), there is one psychiatrist for one million people in the Eastern province.

Many lessons were learnt as well. We learned to become even more resourceful and skilful. We came to admire the dedication of health volunteers, driven by the unmet needs of ordinary people. Some of us who were based in or ran mobile services in “uncleared” areas, were not deterred by the daily exposure to death, injury or the risk of being kidnapped. Work continued despite threats to our personal safety. We learnt that whether we liked it or not, we were part of the conflict and would be considered the enemy by one or both sides. We listened more than we spoke and learnt to heed our instincts. We learnt things that cannot be taught. Health workers were probably the first (after the Military and the LTTE) to learn that both sides were losing and suffering because of the conflict. Health workers from both sides of the conflict, were amongst the first to bridge the ever-widening gap between the North and East and the rest of the country. We found ways to work together through health and lay the foundation for the beginnings of peace that are now, at long last, beginning to be realized.

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Endnotes

HUMAN RESOURCE DEVELOPMENT IN CRISES - CASE STUDIES

Iraq 2003: Human Resources in the crisis

N. Al Ward, WHO Iraq

The political climate and economic sanctions during the 1990s in Iraq resulted in the massive emigration of health workers. Those who remained experienced economic and social hardship, which undermined their professional motivation and competencies. The situation was exacerbated by isolation from the international public health community. Iraqi health workers had very limited access to up-to-date information resources and international training opportunities, and interactions with health representatives from international agencies/organizations were restricted. This resulted in the further deterioration of health workers’ capacities, including their ability to prepare for and respond to crisis situations, and coordinate, develop and present donor appeals.

Prior to the 2003 conflict, some contingency planning was conducted by the Ministry of Health of Iraq (MoH). During late 2002 and early 2003, MoH/Iraq had conducted training on the emergency staffing and supplying of health facilities, particularly hospitals. However, training was inadequate; Iraqi health workers found themselves unequipped and/or unable to perform key tasks once the conflict commenced. Preparative measures taken by the health sector did not match the scale of the crisis. In addition, many health workers, particularly women, could not go to work due to transportation difficulties and complete lack of security. Collapse of the health services soon after the conflict began was not a surprise.

Public health is not taught in Iraq and the medical and administrative hospital-driven culture of the MoH was not conducive for health workers to improvise in emergency circumstances. However, the revival of health services has happened, often on a voluntary basis. In some areas of the country, like the south, the majority of health workers never abandoned their work. When most of the official health centres were still closed, many mosques and churches—in coordination with international NGOs—started to recruit health workers. They asked them to work mornings and evenings in order to serve the inhabitants of residential areas. As the MoH warehouses were either looted or inaccessible, the NGOs also provided drugs and supplies to these new “health centres”.

Key health services that are particularly labour-intensive were gravely affected by the crisis. Immunization coverage deteriorated to less than 40 per cent in many areas due to the disruption of the cold chain and the absenteeism of health workers. The DOTS strategy—the implementation of which requires not only the availability of drugs, but also the dedication of health workers to provide and supervise the intake of the anti-TB drugs—was also affected. All maternal and child health services have been undermined, as were the chronic disease services delivered through public clinics. The failure of the health workers to return to work in public clinics during the conflict and for the weeks that followed undermined this service.

The Iraq crisis shows the critical value of all individual, community and institutional systems in contributing to a country’s health system in its more general sense. Looking closer at the health sector, the crisis illustrates that national health workers are the most precious resources for ensuring that basic health services are provided, even in the harshest environment.

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From refugee to health worker: interview with a WHO Desk Officer

Like many other developing countries, fast, violent changes started in Angola in the 1960’s, with the processes that would eventually lead to independence and decolonization.

L. Simao, now with WHO Geneva, grew up in Zaire as a refugee from the crisis in Angola. He attended the primary and secondary schools in Zaire and medical school in Luanda—Angola. The interview below tells us of his experiences developing his career and coping with the challenges as a health worker in crisis situations.

Q: What was your first interaction with international aid workers?

A: At the end of my Medical School programme, I spent three months in Luanda visiting all the programmes run by the Department of Public Health of MoH. Then, I was sent by the Ministry of Health (MoH) to Mbanza Kongo, an area affected by trypanosomiasis (the focus of my medical studies) where I served as the Responsible Officer for Health at the provincial level. During this time, I had my first exposure to international aid workers. My position required liaising with NGOs and UN agencies, and helping them to understand “who was doing what” at the municipal level, with the aim that local actors and international aid workers could collaborate, share information, etc.
Q: How did you make the transition from working with the MoH to being employed by the UN?

A: Due to the post-election conflict, I left the province and joined the Planning Unit of the MoH from 1992-1994 as the EHA focal point for health intervention coordination. This work increased my interaction with the humanitarian community in health including WHO, UNICEF, UNFPA and more than 50 international and national NGOs.

In 1994 and as a result of a meningitis epidemic in south and central Angola, I became very involved in planning responses to epidemics which was another crucial opportunity for interaction. This task further exposed me to the complexities of coordinating work involving both national and international actors. It was then that I decided to seek training opportunities, in order to improve my technical skills and to support the MoH in the management of emergency situations. With backing from the MoH and WHO, I attended a 9-month training programme (Master in Public Health - emergency oriented) at Louvain (Belgium). As complement to this training, I spent two months in Geneva, where I had contact with EHA/HAC Desk Officers and other UN agency/Organization staff working for health action in crises. Upon returning to Angola, I found that I did not have work and I was then recruited by the WHO country office.

I was contracted to prepare the implementation of a rehabilitation project in 4 provinces, supporting UN volunteers medical doctors. Several short term contacts were offered over five years. Although another UN agency offered a fixed-term contract my employer would not release me because of staffing pressures.

Q: What does having worked and lived a country afflicted by crisis enable you to contribute to Health Action in Crises?

A: There are certain cultural and linguistic benefits that apply to working in Angola. I know the language and the culture which is important for efficient fieldwork, especially in crisis situations. There are also lessons that one acquires that are applicable to emergency work in diverse countries in crisis. This includes an understanding of working within a national government and typical responses of national actors when working with international actors. At the HQ and the Regional Office levels, there can be very skilled people that draft policy-related documents and strategies. However, understanding the political/historical context and the socio-cultural landscape in which the policies and strategies will be applied is very important. For example, when the MoH is informed by international actors that they need to produce a public health strategy document. Often this is a very costly process spearheaded primarily by international aid workers. The production of this document may occur despite the prior existence of a strategy. The end result is ineffectiveness by the international actors, because often the MoH will not have been 1) convinced of the need for the strategy in the first place, and 2) sufficiently involved or consulted in the drafting process. Someone who has lived as a national and worked in a country in crisis is more likely to understand these complexities.

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**Bam earthquake: reflections from a relief worker**

There was an extraordinary response, and what really impressed me was the coordination and cooperation between Iranian agencies. The MoH, Red Crescent, Governors representatives, Armed Forces and commercial enterprises all worked as a team and on a vast scale. I have never seen anything like it, and we as foreigners from 26 nations were coordinated by national agencies. Each injured person was stabilised and accompanied during their evacuation to tertiary care by a Red Crescent nurse or doctor and a soldier. Meanwhile they improved the primary and secondary care provision of the existing (sometimes heavily damaged) health clinics in Bam itself. The Red Crescent reception centres for unsolicited and solicited medical donations was an interesting concept and appeared to be very efficient and integrated into the overall health response.

There was interestingly no place for international agencies (and the only strongly involved UN specialist agency in Bam appears to be WHO). There were complaints of a stream of NGO representatives arriving “to help”, never having stepped into Iran, no money, no contacts, no sleeping bag, no tent and even wanting food to be prepared for them. In the midst of such a strong Iranian response and commitment, one questions the right of an NGO with a turnover of millions to arrive and not be prepared to prefinance any humanitarian intervention unless a government pays them to do it in advance. I think the Iranian Authorities will keep a very tight reign on international NGOs. The Red Cross/Iran Red Crescent field Hospital will be in Bam for one year, and is the sort of official, short term “replacement” for the two destroyed Bam hospitals. The other field hospitals from all sorts of nations are superfluous, and will be packed up now.

There is a need for professional longer term support for disaster management in Iran, focusing on the mitigation, prevention, public awareness areas, which are perhaps weaker than the immediate preparedness and response—which was stunning.

Anonymous
**Recommended Readings**

This annotated bibliography presents few selected papers on health human resources. Further references are included in the documents below and can be found in the World Bank web page www1.worldbank.org/hnp/hsd/humanresources_reading.asp#Lessons. Readers can contact the Human Resources for Health Department of WHO (dalpozm@who.int) or go to the web sites:

- WHO Human Resources for Health
  www.who.int/hrh/en/
- WHO Human Resources for Health on-line journal
  www.human-resources-health.com/
- Eldis human resources for health dossier
  www.eldis.org/healthsystems/dossiers/ht/

**Smith J.: Human resources for health: exploring experience and opportunities for change in a post-conflict environment; draft. WHO HAC/Osd, 2004; available on request from: griekspoora@who.int or dalpozm@who.int**

The document addresses key issues of health human resources management and development in a transition context. The first section discusses the main challenges for policy-makers: how to assess the workforce, re-establish the MOH structure, build management capacity within the MOH, link training to service delivery, financing, etc. The second section covers the different components of HR development, identifying the key issues that need to be addressed. Approached, tools and suggested readings are also provided, as well as real-world examples and case-studies from Afghanistan, Cambodia and Timor-Leste.


The article discusses the most important HR issues relating to health care reforms: reducing costs and increasing efficiency of staff, improving performance, increasing equity in the distribution of services and developing capacity in HR policy and planning. The article argues that no effective health reform can be implemented without improvement in the ways health workforce is planned, managed and developed. The article is a useful introduction to the analysis of the main aspects of HR that policy and decision-makers have to deal with. Even if the authors do not draw examples from countries in crises, the issues discussed are relevant also in an emergency context.


The paper presents a framework for analyzing factors affecting the development and implementation of HRH policies and strategies. The framework was applied in 18 countries, of which some affected by crisis (Angola, Indonesia, Sri Lanka, etc). The paper shows how policy analysis can help identify gaps between policy formulation and implementation. It concludes that attention to the overall context and adequate policy-making processes are key to the re-dressing of HR imbalances.

**Ferrinho P., Van Lerberghe WV.: managing health professionals in the context of limited resources: a fine line between corruption and the need for moonlighting**

The paper analyses coping strategies of public sector health professionals with unsatisfactory living and working conditions (the norm in most poor countries). The authors argue that an explicit discussion of these issues is essential for dealing with the negative consequences that some of the coping strategies—particularly predatory behaviours—exert on the public sector and its users. They conclude that corrective measures should be devised based on the analysis of the causes and logic of the most negative coping strategies. Measures include anti-corruption initiatives, regulation of the private sector, pressure on donors and from users. The article, which complements the short contribution by Van Lerberghe in this newsletter, is a brilliant example of how sensitive and complex issues should be analyzed and counter-measures sought.


The book covers the main dimensions of human resource development in health, providing the reader with a comprehensive overview of the state-of-the-art debate in this area. The leitmotiv along the contributions is the controversial nature of most of the issues related to human resources that policy-makers and planners have to address. As a result, only processes of HRD that give
voice to main stakeholders and look at the political and social context are likely to succeed.

In the books by A.Green, An Introduction to Health Planning in Developing Countries, Oxford University Press 1999 and B.Abel-Smith, An Introduction to Health Policy, Planning and Financing Longman Group 1994 there are chapters covering health human resources and providing-from a planning perspective-useful linkages with other components of the health system.

Chapter seven of the WHO’s World Health Report 2003 explores how to address the global health workforce crisis, identified as one of the key challenges to the development of health system.


Iraq: Reconstructing the health sector
C. Diaz-Herrera, WHO Geneva

After the end of the war in Iraq, UN agencies and the World Bank, in close consultation with the national authorities and the Coalition Provisional Authority, conducted a joint assessment to determine the reconstruction needs of the country. WHO was chosen as Task Manager for the health sector.

The assessment revealed that health outcomes in Iraq were among the poorest in the region and, in some cases, similar to those of third-world countries. Maternal and infant mortality and malnutrition were high, as were levels of communicable and non-communicable diseases.

The centralized and hospital-based health care delivery system was unable to meet the needs of the population. The system relied on expensive imports of medicines and equipment with inadequate funding for health services.

Access to health care was limited and unequal; only one-third of women had deliveries attended by a qualified health worker. Widespread looting, irregular electricity and water supply, and general insecurity further weakened the system capacity.

Health services must be restored to a level of coverage and quality of care to effectively meet the most urgent health needs of the population. However, recovery and rehabilitation offer a unique chance to reconsider the whole health sector and address allocation distortions in order to increase the effectiveness, equity, appropriateness and efficiency of the system.

Taking a long-term perspective, interventions targeting the most urgent needs of the population must be synchronized to those that pave the way to the reconstruction of the health sector.

The cost of restoring basic health services and reconstructing the infrastructure has been estimated at US$56 per capita per year (referring to public spending only). This level of spending represents a substantial improvement when compared to the resources available over the past years. A huge investment is required for repairing the damaged infrastructure and expanding the services, for upgrading the workforce, and for ensuring the payment of adequate salaries and a regular supply of medicines. The formulation of a national health master plan—matching infrastructure with adequate human resources, support functions and projected funds for recurrent expenditure—will guide national authorities in defining priorities.

The priority of targeting the main determinants of the burden of disease, in order to reduce avoidable mortality, morbidity and suffering has been identified by the Ministry of Health of Iraq, with technical assistance from the Coalition Provisional Authority and the UN.

The reorientation of the sector towards Primary Health Care requires an expansion of health facilities and the delivery of public health services. An accelerated programme of human capacity development will be necessary to sustain a gradual decentralization in planning and management to the governorate level.

The introduction of standardized clinical protocols will guide health workers in better case management and will reduce the waste and inappropriate use of drugs. The strengthening of the health information system will provide policy makers and health managers with an adequate basis for decision-making, monitoring the health status and responding to emergencies.

The estimated financing requirements for health in 2004, from non-private sources, is US$1.5 billion; to cover both the provision of basic services and investment in essential infrastructure. It is expected that as much as two-thirds of this amount will be forthcoming from Iraq government sources. The investment for reconstruction has been estimated at US$1.6 billion over the 2004-2007 period.

The results of all sectors’ needs assessments were presented in the International Donors’ Conference for the Reconstruction of Iraq on 23-24 October 2003. UNDP and the World Bank established the International Reconstruction Fund Facility for Iraq to channel donor funding towards the strategies and plans outlined in the needs assessment. As of December 2003, donor countries pledged approximately US$22 billion. It is not yet known how much of that will be dedicated to the reconstruction of the health sector. To date, the USA, Japan, Ireland, Canada, Australia and the European Commission have announced that part of their contributions would go to support health programmes.

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Human resource development: a key to WHO 3x5 initiative

M. Dal Poz, WHO Geneva

At the UN General Assembly High-Level Meeting on HIV/AIDS on 22 September 2003, the World Health Organization declared the lack of access to HIV treatment a global health emergency.

Over 40 million people throughout the world are living with HIV/AIDS, of whom 95% live in resource-limited countries. WHO and UNAIDS estimate that at least six million of these have advanced stage HIV disease and are in urgent need of antiretroviral (ARV) treatment. Of the six million in need, 4.1 million live in sub-Saharan Africa, where health systems are weak and current access to HIV prevention, care and treatment is minimal. WHO and UNAIDS are leading an international effort, with a wide range of partners, to address the emergency. The “3 by 5” Initiative aims to have three million people in resource-limited countries on antiretroviral therapy (ART) by the end of 2005.

Human resources for health have been identified as a major constraint in implementing the “3 by 5” Initiative. In the context of capacity building for scaling-up the delivery of ARV treatment to people in need, WHO will help to establish dedicated country capacity building teams and support them in applying human resource planning methods.

In the short term, this process focuses on the development of national training and capacity building plans, founded on a rapid assessment of the human resource situation including a review of clinical and preventive tasks at various programme levels. The plan will focus on translating nationally adopted service delivery models into training needs, unleashing and strengthening existing training capacities, establishing partnerships with communities for sharing tasks and responsibilities in ART services, supporting stigma reduction strategies, devising short-term workforce-increasing measures where needed, improving conditions of work and occupational safety, devising incentives to aid recruitment and productivity gains, and establishing incentive systems for trainers.

In the medium term, human resource development plans will anticipate and steer system-wide workforce demand and supply. Supportive action will focus on changes in legislation and regulations to ensure appropriate investments in human resources and to maximize human resource use, the development of new cadres of health care workers, the identification of new human resource skill mixes, the development of policies addressing human resource retention problems and health worker substitution and increasing the capacity for monitoring and evaluation of human resource development.

At the national level, partners are encouraged to participate in WHO supported capacity building task teams, which include NGOs, community-based organisations, and representatives of international organisations. Task teams will help countries develop comprehensive training and human resource development plans that can steer workforce expansion in a sustainable manner.

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Preparedness at municipal level: a pilot experience in Nicaragua

S. De Vriendt, Programa de Emergencias y Desastres, WHO/PAHO Nicaragua

In disaster-prone countries like Nicaragua, which are prone to natural disasters, preparedness and mitigation activities, to be effective, need to have a long-term perspective and a focus on risk and vulnerability analysis. Since the health sector is progressively decentralizing responsibilities to the municipality level, the MoH of Nicaragua, together with PAHO/WHO, identified two municipalities—Telica and Moyogalpa, see map—where a pilot project in disaster preparedness will be started with the rationale of strengthening the response capacity near to where disasters occur. A needs assessment indicated the lack of resources and technical skills in the area of disaster preparedness. A manual was developed and tested in the two municipalities with the objective to strengthen local capacity (at municipality level) in: monitoring risks, preparing response plans to disasters, strengthening intersectoral coordination. Based on this successful pilot experience, the MOH requested the emergency program
Each year, one WHO Member State out of five faces a major crisis. This grave reality has led the Organization to create a three-year strategy to dramatically scale up Health Action in Crises (HAC) operations. The strategy will make the entire organization more reliable and effective in supporting health stakeholders in crises. The emphasis is on better health preparation and response to minimize death and suffering, thus opening the way to sustainable and healthier livelihoods for all.

Key Functions

The new strategy will result in the full engagement of technical and general management departments—at all levels of WHO—to support HAC. Specifically, the strategy will mandate that WHO be accountable for the following key functions within the next three years:

- Track the evolution and progression of crises in countries, ensuring that proper assessments are undertaken and acted upon.
- Coordinate support for, and the strengthening of, WHO country teams as they contribute to more effective preparation and response by governments, civil society, and other stakeholders.
- Manage—and re-route funds to support—technical backup to country teams from specialist groups in headquarters and regional offices, collaborating centres and/or technical networks.
- Evaluate the impact of crisis preparation and response work, and disseminate findings and lessons learnt.

- Establish standards for optimal health action in crises, agreeing on the levels of service to be provided by who in countries, monitoring organizational performance and instituting additional actions when necessary.
- Organize a regular and focused programme of competency development with training and specific guidance.
- Build and maintain effective links with other agencies in the un system, NGOs, the red cross and red crescent movement, and crises-active donors.
- Mobilize the right kinds of resources from donors for health action to anticipate, mitigate, and respond to crises, and support repair and recovery work. Track and report on these resources.
- Participate in planning and action for system repair and recovery after crises.
- Ensure optimal operational, logistic, administrative, security, human resource and related support for health action in crises work to maximize effectiveness of all who inputs in full cooperation with un system joint services.
- Disseminate reliable information to interested parties and—when appropriate—to the wider public.

The new WHO administration—led by Director-General Dr J.W. Lee as of 21 July 2003—has demonstrated its commitment to the greater involvement of the entire organization in the execution of the above functions. The Director-General has appointed a Special Representative for Health Action in Crises and brought the Department for Health Action in Crises to report directly to his office.
Health in Emergencies
World Health Organization

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