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OCCASIONAL PAPERS

Establishing Human Resource Systems for Health during Postconflict Reconstruction

Restoring health services is an essential component of any major nation rebuilding that follows prolonged periods of conflict.[1] Providing appropriate and good quality health services to the population reduces morbidity and mortality. This is an important goal in itself, but the delivery of health services also provides an important entry point for engagement between the government and civil society. Efforts to rebuild health services take place during periods of complex emergency, since conflict generally continues in pockets after any officially declared end to hostilities.

Postconflict countries generally take a *development approach* to reforming their health sector. With this approach, the future role of the ministry of health (MOH) is one of the most important early policy decisions. Newly formed ministries of health are faced with a major decision. Will they revert to their former, preconflict service delivery model, maintaining their role as a service provider? Or will they adopt a new role, as a *steward* of the whole health system that contracts out service delivery, taking on the role that has evolved internationally and one that the donor agencies strongly support?

Health workers are an essential, input to service provision. Decisions governing human resources are thus crucially important for rebuilding a health system. In many postconflict countries, however, little attention is given to identifying the effects of prolonged conflict upon the composition, skills, and deployment of the health workforce that is expected to provide services in a rebuilt health system. The urgency to restore health services perpetuates an *emergency approach* to developing human resources for health (HRH).[2] Pressures to undertake such ad hoc approaches to meet immediate needs are constant; for example, by responding to a severe shortage of fully-trained nurses with a crash course that trains "nurses" in only giving injections, suturing, and doing dressings. Many HRH problems that must be faced in the postconflict period derive from past short term emergency approaches.

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[1] Seth G. Jones, et al. *Securing Health – Lessons from Nation-Building Missions*. RAND Centre for Domestic and International Health Security, 2006, xv–xxx.

[2] Joyce Smith. *Health Workforce Development in Post-Conflict Environments*. Geneva: World Health Organization, 2005, pp. 9–12.

While such short-term approaches do address immediate problems, they may have considerable detrimental long-term implications and are not likely to be sustainable. A development approach to rebuilding the health workforce and its supporting human resource systems moves away from crisis responses toward building and strengthening the workforce in a planned and sustained manner.

This paper seeks to elucidate HRH issues in the critical start-up period of reconstruction in countries that have experienced relatively prolonged and major conflict. The examples are drawn mostly from Afghanistan and Cambodia, two countries that experienced more than twenty years of conflict. The examples from Afghanistan are drawn from the authors' experience in providing assistance to the Ministry of Public Health in health systems development through the USAID-funded Rural Expansion of Afghanistan's Community-based Healthcare (REACH) Program.

The paper starts by examining the issues and implications of restoring a health workforce within the intensely complex political environment that characterizes postconflict reconstruction. It then discusses the key HRH actions for health workforce reconstruction, using a development approach. These include:

- identifying available staff;
- developing HRH management structures, systems, and capacity;
- clarifying HRH roles and responsibilities;
- establishing health worker equivalencies and upgrading skills;
- supporting civil service reconstruction;
- widely disseminating HRH information.

The paper concludes by identifying the core elements of a well planned HRH approach, and highlighting the importance of sharing experiences and approaches.

SECTION 1: The Politics of Reconstructing the Health System

A prolonged conflict severely fragments the delivery of health services nationwide. When peace finally arrives, health services are delivered by a mix of nongovernmental organizations (NGOs) and factional health services, particularly outside the capital city. Government health services, where they still exist, are mostly limited to the national capital and main provincial cities. In 1992, Cambodian health services were provided by a combination of the four political factions, as well as by NGOs. During the Afghanistan conflict, approximately 20 NGOs provided at least 70% of the country's health services, mostly working in isolation from the government and each other.[3] Such disparate emergency-based health service delivery systems present a political and practical challenge for developing an effective and equitable health service delivery system in the reconstruction period.

The fragmentation brings a *de facto* decentralization of decision-making. Management and communication linkages that existed in the publicly-funded health system fray or break down, and local health offices become increasingly isolated from the central level. As government services crumble, new service providers increase in number and influence. Local and international NGOs and private providers are prominent among them, but the locally dominant political or warring faction is also very influential in determining what health services continue to be delivered locally and by whom. This was the case in both Cambodia and Afghanistan.

Recovery and national unity are the main focus of a country's government in the postconflict period, especially in its immediate aftermath. In this period, the national government may seek to recentralize decision-making, arguing that centralization is essential for rebuilding and has to take place before decentralization can be considered again. At this time of still heightened tensions, administrative decentralization can easily become indistinguishable from political decentralization in the minds of decision-makers. Senior government officials often fear that handing greater administrative decision-making powers to the local level will maintain or further increase political fragmentation of the country.

Among the critical policy decisions that must be made early is the future role of a ministry of health. This decision is vitally important for human resources. The two options—MOH as a service provider or MOH as a steward of the health system—have very different implications for rebuilding the postconflict health workforce. The political interplay between the national government, other local stakeholders, and donors is likely to be considerable in making this decision. An initial policy decision to adopt a stewardship role, made at the start of reconstruction, may well change later. As Palmer et al. point out, "Delivering health services and controlling health workers are often seen as key government functions, and as a government becomes better established it may wish to resume control of these."[4]

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[3] Tessa Richards, and Ruth Little. "Afghanistan Needs Security to Rebuild Its Health Services." *British Medical Journal* 324 (2002): 318.

[4] Natasha Palmer, et al. "Contracting Out Health Services in Fragile States." *British Medical Journal* 332 (2006): 718–721.

Donors are important stakeholders in postconflict reconstruction. The current trend among them is to improve the integration of assistance efforts, using mechanisms such as joint missions to postconflict countries. Common approaches to redeveloping health services emerge from such joint missions. These approaches are based on current international methods, and include the use of contracting mechanisms and a stewardship role of the MOH. Donors support the proposed approaches by presenting examples and evidence from other postconflict countries. They give little attention, however, to explaining to national decision makers the evolution of these approaches during the period when the country was immersed in conflict. Neglecting to highlight the evolution is a missed opportunity. National leaders have invariably been cut off from the international trends in health services delivery. Political support to sustain the new approaches is lost if these leaders are not enabled to identify where they are in their own thinking and approaches, and why and to what extent these need to be adapted.

Donors are the main funders of reconstruction in the early postconflict period. The political tension for the government is between the available funding to develop new and more effective systems and the need for political stability. Civil service reconstruction provides an example of this tension. Donors promote a leaner, better paid and more efficient civil service. They argue that a smaller number of well-qualified personnel, who are paid a living wage, is more effective than an over-inflated and poorly paid workforce. In the health sector, such poorly paid health workers cannot afford to work more than a few hours and either concentrate on private practice or demand exorbitant, under the table payments that patients can ill afford to pay. Newly formed health authorities and elected governments, however, are under extreme political pressure to restore a large civil service in order to provide employment for as many people as possible.

In most countries, the public sector was the largest employer of health workers before the conflict. Much smaller numbers of staff worked for NGOs or as private providers. Decisions regarding planning, training, and managing health workers were largely centralized. Central government entities, such as ministries of health, education and finance, or the Civil Service Commission, were most influential in determining the size, composition, deployment, training, and compensation of the health workforce. In some countries, even many routine decisions on human resource management, such as staff discipline, were elevated to the center for final approval.

During the period of conflict, local decisions increasingly determine the type of health providers, where they are located, and how they are paid. The local level copes with the day-to-day challenges of maintaining health services, and the decisions respond to these challenges. Such decentralized decision-making is done without access to a larger national vision of how the health workforce should be developed and supported. Yet, they plant the seeds for the postconflict staffing system and structure.

Local training efforts emerge to meet the pressing needs of the sick and injured, because the conflict damages the national training infrastructure or makes training inaccessible to students from certain parts of the country. Such local training programs in conflict areas are generally conducted in an ad hoc fashion by NGOs or local health providers. They are funded by the political or armed faction in power locally, the NGO providing the training, or by health workers as a money-making activity. These programs commonly suffer from poor training standards and inadequate resources.

Political influences on health workforce reconstruction in the postconflict period come from the increased number of stakeholders, tenuous and fragmented decision-making and management systems, and vested interests. They are particularly prominent when addressing the major challenges of reintegrating health workers, balancing the composition of the workforce, and modernizing HRH management. The Afghanistan and Cambodia experiences have shown that professional hierarchies can have an important positive or negative influence in these decisions.

Reintegrating health workers. The political nature of addressing the impact of prolonged conflict on the quality and quantity of the health workforce is particularly notable, if reestablishing the national health workforce requires integrating factional, tribal, and ethnic groups. This frequently occurs in societies, where patronage systems exist, and where health workers are preoccupied with survival.

The categories of staff trained during the conflict, the content of their training, as well as the quality of teachers and teaching facilities vary widely. Consequently, a disparity invariably exists in the training of the various groups. Many workers were trained out of the country in refugee camps or within factional areas, often only to meet immediate needs. This was demonstrated by a survey of NGO training in Timor Leste.[5] It was also found in 1993 in Cam-

[5] Joyce Smith. *Health Workforce Development in Post-Conflict Environments*. Geneva: World Health Organization, 2005, p. 33.

bodia, where the disparate, ad hoc method of health service delivery resulted in 59 different categories of health workers, all trained by different NGOs and factions. The reintegration of factional health services in Cambodia, while highly political, was greatly facilitated by the role of WHO. WHO acted as honest broker and provided a neutral venue for all four political factions to meet to discuss health integration issues.

Due to disruption of schooling, many health workers have not received the 12 years of schooling that is, in many countries, a minimum pre-requisite for entry to registered level (3 year) health professional training, such as nursing and midwifery. In Afghanistan and Cambodia, the 12 years of schooling is also a government requirement for employment as a civil servant. The real value of obtaining 12 years of schooling in a degraded or destroyed schooling system is questionable. The missing years of schooling has, however, been used for political reasons to block reintegration of factional or NGO trained health workers into the government health system.

Balancing the health workforce. A protracted conflict alters a health workforce in profound ways. As Pavignani points out, its long-term impact on the stock of different categories of staff may be very uneven.[6] Certain types of health workers will be in very short supply after the conflict is over, while others will be oversupplied. In Cambodia, only 34 physicians remained after the Pol Pot regime, while the more than 20 years of war in Afghanistan resulted in many ad hoc medical schools in factional areas. In 2003, an estimated 11,000 Afghan doctors were in training, greatly exceeding the needs of the health service.[7] At the same time, the shortage of Afghan nurses and midwives was acute, with female health providers in particularly short supply. (The lack of female workers was due to low female literacy rates, compounded by females being banned from schooling under the Taliban regime.)

Emergency unplanned efforts to address workforce imbalances may have a detrimental long-term impact on staffing, as the experience in Cambodia shows. Replacing the decimated medical workforce was a major goal in that country when reconstruction began in 1979. The response was to train large numbers of doctors, using two different approaches. Initial fast track training was used to upgrade nurses and allied professionals to doctors. This was followed by medical training of secondary school leavers. The dual approach continued until in 1994, when a great oversupply of doctors and medical assistants was identified. Furthermore, the tactic of upgrading other health professionals to doctors robbed nursing, midwifery and allied health professions of their most able leaders and managers. This weakened the ability of these professional groups to take a strong role in redeveloping the health services and lobbying for more investment in professional development.[8]

The strategies to improve workforce balance by closing training programs or changing curricula have major political implications for an emerging health authority. This is particularly true, when the category in question is of higher level,

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[6] E. Pavignani. "The Impact of Complex Emergencies on the Health Workforce." *Health in Emergencies* no. 18 (Dec. 2003).

[7] G. King. "Report of Short-Term Consultancy in Human Resources, 10–18 March 2003."UK Department for International Development: DFID Health Systems Research Centre.

[8] K. Sileap, and Joyce Smith. *The Redevelopment of the Nursing Care Concept in Cambodian Health Care Delivery.* Paper presented at the 2nd International Nursing Conference, Brunei Darussalam, Nov. 1996.

such as the medical profession. The potential high income of a doctor in a postconflict setting is a means of survival for the doctor's extended family, making any changes doubly threatening to the profession. Ministries of education, which are commonly in charge of medical education, may be quite unwilling to adapt training content and output to the needs of a reformed health service. Factional and/or tribal pressures are also exerted to maintain medical schools in areas dominated by influential factions and/or tribes.

When tension emerges between the ministries of health and education, the result is further isolation of medical school professors. They are cut off both from the changes taking place in the nation's health service and from updated approaches to public health and delivery of clinical services. A lack of trained teachers, who understand health service needs, and even the most basic teaching facilities—including totally inadequate clinical teaching—produces poor quality medical practitioners. An oversupply of such physicians trained in degraded institutions is a critical and politically sensitive issue for reconstructing a health service.

Modernizing HRH management. The memory of human resource management systems that remains within a postconflict ministry of health generally dates back to the era before the commencement of the conflict. The 1970s' "Personnel and Training Model"[9] is thus predominant. Within this model, the ministry's personnel and training units functioned, by and large, independently. All other important human resource functions—policy, planning and financing—were scattered throughout the ministry without any clear coordination. With such outdated concepts, it is hardly surprising that any effort to coordinate human resource functions through a single focal unit is frequently fiercely resisted. Such a change is essential, but often regarded by key stakeholders as a challenge to their territorial rights.

Modernizing HRH management is subject to political pressures from outside, as well as inside, a health ministry. The transition from an interim authority to an elected government is a particularly important period of political activity. It can threaten newly instituted HRH management approaches, which directly impact on traditional and factional patronage systems. Former factional or tribal leaders, who compete for election to the new government, are expected and pressured to provide favors for members of their particular group. Maintaining the continuance of HRH strategies and systems during the transition can thus present a considerable challenge.

Involving professional hierarchies. Professional hierarchies, especially the medical profession, exert many pressures to resist change. Traditional medical hierarchies are often out of touch with modern trends but continue to wield a strong influence to resist change. Due to their respected role in society and high connections, they have a disproportionate influence on policies and plans, including the redevelopment of health service organizational structures. A tension emerges between the efforts to develop new structures and fitting people to them, and pressures to build structures that suit the existing medical personages and their previous level of seniority. This tension currently continues in Afghanistan.

The formation of professional associations in the postconflict period can threaten health workforce reconstruction. This comes about if the newly formed associations are perceived as functioning as unions, rather than as profes-

[9] Joyce Smith. *Guide to Health Workforce Development in Post-Conflict Environments*. Geneva: World Health Organization, 2005: pp. 12–16.

sional associations. Such associations can be particularly detrimental if they focus on narrow professional self-interests and fail to adopt a participatory approach to health service redevelopment.

In both Cambodia and Afghanistan, midwives were the first professional group to form professional associations. Initially, the female midwifery profession had a low professional status and was seriously depleted in numbers. They saw the opportunity to work with the ministries of health and support the health sector reforms as a means of raising the status of the profession. They helped develop standards for professional training and practice, and supported national initiatives to reduce extremely high maternal mortality rates. It was also an opportunity to tackle a major issue of women's health. As a result, they were quite successful in attracting donor support.

Medical associations were also formed early on, but their behavior was in stark contrast to the midwifery associations. In both countries, the medical associations concentrated on professional self-interest, and did not engage with or support health service development in the same way as the midwives. The primarily male medical profession, with a large surplus of doctors in relation to the health system requirements, concentrated on professional autonomy. They did not realistically engage in the health sector reforms, and were thus perceived as a threat. Consequently, the ministries of health came to regard them as a union. In Afghanistan, the tensions between the Ministry of Public Health (MOPH) and the medical association have recently escalated to the stage of being brought to the attention of the national parliament.

SECTION III: Priority HRH Actions in Postconflict Settings

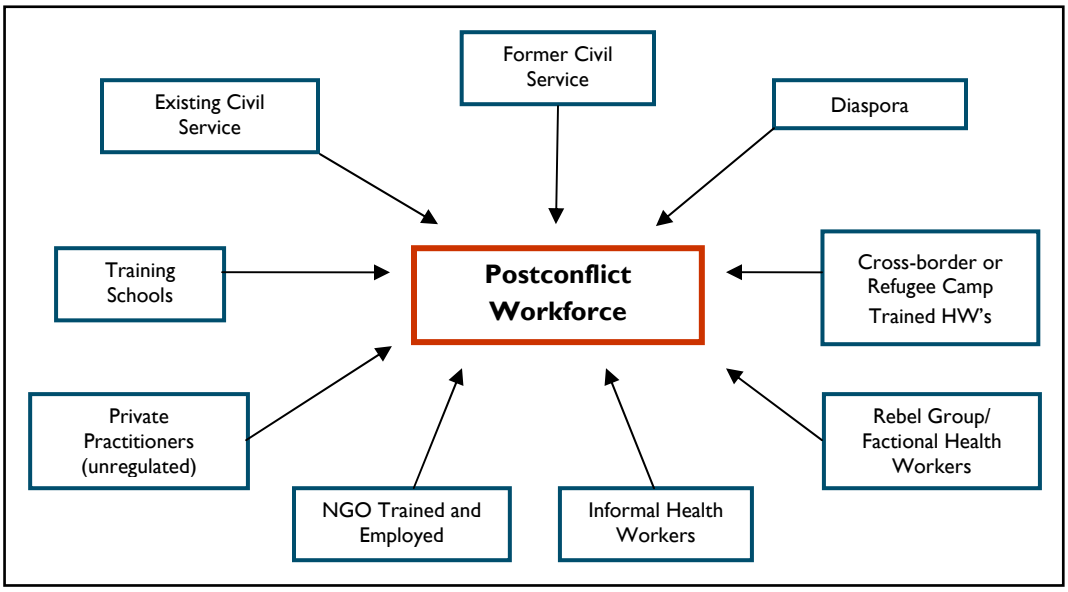
The newly formed health authorities are under pressure to make important decisions about forming and deploying the health workforce in order to achieve their health service targets. Each country's unique circumstances before, during, and after the conflict influence the range of HRH actions that must be taken in order to rebuild the workforce. The most essential decisions in each country, however, concern actions that support defining and implementing effective human resource systems. The necessary short- and long-term actions must be identified, while ensuring that both contribute to the ultimate long-term goals of the health service.

Many political considerations govern health authorities' ability to undertake actions in the short term, but the fluidity of the postconflict environment also creates unique opportunities. The experience of Cambodia and Afghanistan has shown that specific HRH actions are particularly important in the immediate postconflict period. These include:

- identifying available HRH stock;
- establishing a focal unit;
- building capacity of the HRH focal unit staff;
- clarifying HRH roles and responsibilities;
- establishing health worker equivalencies;
- investing in updating and upgrading clinical skills;
- contributing to civil service reconstruction;
- disseminating HRH information widely.

Identify available HRH stock. Getting as clear a picture of the workforce as possible is an essential and critically important basis for reconstruction, even though it is not easy in the chaos of the initial postconflict period. The effort should focus on identifying the sources of health workers and, where possible, their numbers. The eventual approach to integration depends on the sources of these workers. Figure 1 illustrates the main possible sources.

Figure 1. Potential Sources of Health Workers in a Postconflict Environment



(Source: Joyce Smith. *Guide to Health Workforce Development in Post-Conflict Environments.* Geneva: World Health Organization, 2005.)

Engaging all relevant actors in undertaking a comprehensive survey of the workforce, as early as possible in the postconflict period, is highly recommended. The potential sources, as indicated in Figure 1, assist in identifying all the key actors in training and employing health workers both inside and outside the country. Establishing contact with these actors can be a valuable source to gaining access to health worker information. It will also support the future registration and establishment of these health workers.

In Cambodia in 1993, information was collected on age, sex, training, and place of work of existing ministry of health employees.[10] These data were obtained from the payroll of each province, as well as the central ministry. It was possible to access data on factional health workers through dialogue with the different political factions, who were involved in the Health Equivalencies Working Group. The United Nations Border and Relief Operations (UNBRO) assistance made available transcripts of health workers trained in the refugee camps, together with the results of their testing and certification. Southern Sudan also recently undertook a detailed survey of its existing workforce, their categories, and training.[11] Such surveys provide the basis for more detailed formulation of HR policies and strategies.

Afghanistan did not utilize this approach in the immediate postconflict period of 2002. Many difficulties and challenges were generated as the result. The first HRH policy development process in 2003 was based on very limited data, and consequently, was quite general. No clear information was available on how many health workers required testing and certification, what their professional categories were or where they were located. In 2004, the failure to undertake any form of registration of health workers or to gather

[10] Ministry of Health, Government of Cambodia, *Development of Human Resources for the Health Services in the Kingdom of Cambodia.* Phnom Penh, Human Resources Department, Ministry of Health, 1993.

[11] Ministry of Health, Government of Southern Sudan. *A Human Resources Assessment of the Health Sector in Southern Sudan.* 2006.

such detailed information made it more difficult for the Ministry of Public Health to commence developing systems for health personnel registration and establishing their equivalencies.

Establish an HRH focal unit. Newly established health authorities frequently find it difficult to decide where to place the human resources focal unit. HRH spans the two main areas in a ministry of health that are generally delineated as "administrative" and "technical/professional." The 1970s HRH management model[12] [13] separates these two areas. Reluctant to move beyond the 1970s model, health authorities often follow it, needing to decide only whether to place HRH in the ministry under Administration or under Policy and Planning. While this may seem to be the easiest option, it negatively impacts the ministry's ability to adequately address the major human resource issues. This, in turn, affects the nation's ability to deliver needed health services.

Decisions on placement and level of an HRH focal unit within the ministry's organizational structure must be based purely on the functions of the focal unit and their importance, not on fitting it into an existing, outdated structure. Placing such a unit at a sufficiently senior level in the ministry of health greatly facilitates the unit's ability to take a development approach to health workforce reconstruction by addressing strategically the impact of prolonged conflict on the health workforce. Strong backing at the highest political level is needed to establish the unit at such a senior ministry level.

Afghanistan's experience illustrates the importance of a senior level HRH unit. Following the fall of the Taliban in 2002, the Afghan MOPH had both a personnel department and a training office. All other human resource functions were scattered throughout the ministry. A Directorate of Human Resources was established in 2004 under the Deputy Minister (Administrative). It had strong support from the Deputy Minister and technical advisors but, as a Directorate, insufficient authority to effectively coordinate all the HRH functions, including those carried out by the more senior General Directorates.

In 2005, the Directorate of HRH was upgraded to General Directorate level. This gave it the necessary status and authority to coordinate more effectively all HRH functions—both administrative and technical. An area where this was particularly successful was in putting pressure on the vertical technical programs, such as malaria and TB, which were still working independently. The decisions these programs made on staffing levels to implement their own programs were inconsistent with the staffing levels that were defined in the Afghan Basic Package of Health Services. Since they were not linked to the provincial health management structures, they were not sustainable in the long term.

The placement of the HRH focal unit at the General Directorate level allowed the unit to work more collaboratively with other General Directorates and units within the ministry. It also permitted developing mechanisms to ensure close functional linkages with provincial health management teams. This greatly strengthened the functioning of the HRH focal unit. The enhanced status of the HRH focal unit allowed it to work more effectively with the Ministry of Higher Education and the Civil Service Commission. As a result, the Civil Service Commission and donors came to see the General Directorate

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[12] Gilles Dussault, and Carl-Ardy Dubois. "Human Resources for Health Policies: A Critical Component in Health Policies." *Human Resources for Health* vol. 1, no. 1 2003. (http://www.human-resources-health.com/content /1/1/1)

[13] Dominique Egger, and Orvill Adams. "Imbalances in Human Resources for Health: Can Policy Formulation and Planning Make a Difference?" *Human Resources Development Journal* vol. 3, no. 1, Jan.–Apr. 1999.

for HRH as a model for other Afghan government ministries.[14]

It is interesting to note that the newly formed Ministry of Health in Southern Sudan has emulated the Afghan model. It also placed HRH at the highest possible level in the ministry so that it can coordinate a comprehensive HRH approach.

After an HRH focal unit has been established in a ministry of health, it is important to define how this unit works with the other units that previously covered HRH functions. Figure 2 presents a "linkages model" that was applied in Afghanistan. It shows how the General Directorate of HRH worked with all relevant ministry departments, as well as with other ministries, the civil service authorities, donors, and NGO grantees, who are contracted to deliver primary health care services through the Grants and Contracts Management Unit of the MOPH.

In Afghanistan, the linkages model was recognized as applicable to all MOPH departments, and useful for identifying required capacity development. It helped to determine what staff from which combination of ministry departments could be drawn together to train them on addressing common problems facing the ministry. It also set a precedent for demonstrating how departments could work more effectively together to achieve goals outside the training context. This specifically included the linkages with the provinces.

In addition, the linkages model illustrates how the functions are closely linked with external agencies, such the Civil Service Commission, professional associations and unions, ministries of education and finance, and universities. It clearly shows the need to establish mechanisms to ensure that these HR functions can be carried out and/or supported in regions or provinces. The model also highlights the importance of developing clear mechanisms that ensure effective horizontal and vertical linkages. Implementing the linkages model with other ministry departments can, however, be a challenge, because they may view it as an encroachment of their territory.

The linkages model makes evident the importance of a high level HR focal unit that has a strong coordination role with all actors. This coordination takes place while all the priority issues relating to the current and future workforce are addressed within the context of a newly defined health service delivery model.

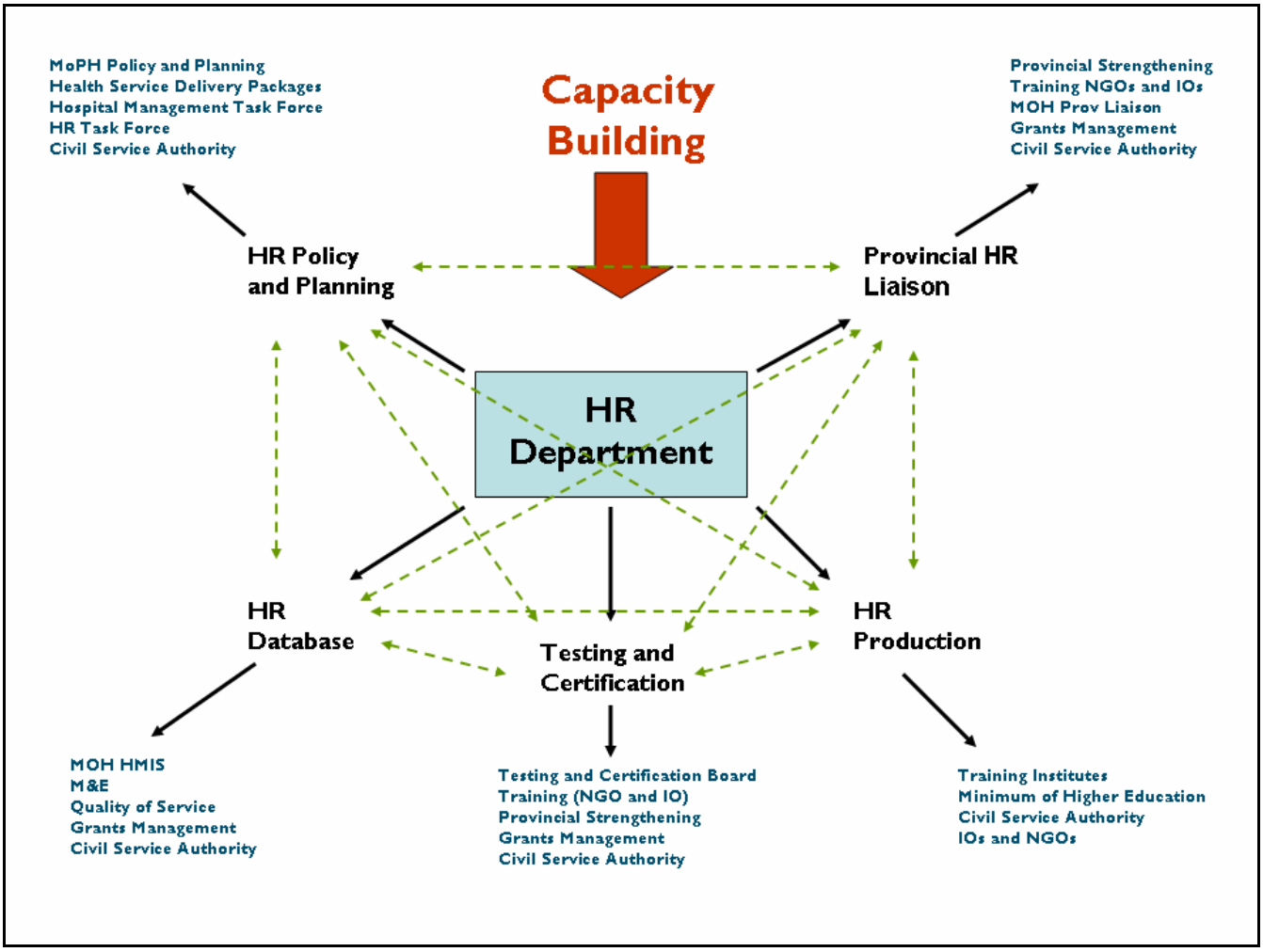
Build capacity of the HRH focal unit staff. A "paper shuffling" administrative approach to HRH only maintains the status quo and does not support development of new innovations. A well-trained and functioning HRH unit has the capacity to implement a strategic development approach to HRH. Without sufficient HRH management capacity, however, the incoming head of an HRH focal unit cannot comfortably face the technical and political challenges of the post.

It is unlikely that the person who is appointed to head the HRH focal unit will bring sufficient relevant HRH experience. Even where an experienced head of the HRH focal unit is available, it will be difficult to find sufficient personnel with HRH experience to staff the whole HRH focal unit effectively. Changes in appointments for the head for the HRH focal unit are very likely to occur, and having such trained staff in the unit greatly facilitates the continuance of HRH systems when this takes place.

Intensive training for the HRH unit staff is thus necessary in order to function effectively. Because the civil service is being reconstructed at

[14] Joyce Smith. "Issues in Post-Conflict HRD." Seminar Presentation. Geneva: World Health Organization, Sept. 12, 2005.

Figure 2. HRH Linkages Model, Afghanistan 2006



the same time, the HRH focal unit staff are likely to start working before being officially appointed to their civil service posts. Inevitably, decisions must be made about whether to invest in training the existing staff or wait until staff have been appointed to the civil service. This is a particularly difficult decision, because the existing personnel are frequently at a junior clerical level and thus unlikely to be recruited to the civil service.

Consistent technical support to the HRH focal unit is very important for the unit's ability to establish and undertake its new role and functions in a complex environment. Providing such consistent technical support for prolonged periods results in establishing the necessary HRH systems and promoting these approaches to both senior government level and donors. It facilitates sharing lessons and experiences from other post-conflict countries and thus avoids repetition of costly mistakes.

Clarify HRH roles and responsibilities. Multiple actors come to influence how the future health system and its staffing are developed in the postconflict period. The power they wield, their varying agendas and interrelationships, and the depth and breadth of their understanding regarding critical human resource concerns determine the long-term success in rebuilding the health workforce. The "power of the purse" of the donor community makes it an increasingly important player in the decisions regarding the future health system, including its staffing. As

the previous discussion makes clear, other actors influencing (or making) health workforce decisions include:

- civil service authorities or those rebuilding the civil service;
- representatives of influential health worker categories;
- senior faculty of important training institutions;
- local-level health management entities (e.g., provincial health offices);
- local governments;
- other local power-holders (e.g., warlords);
- coordinating bodies (e.g., district health councils);
- large NGOs.

Most of these categories are not unique to a post-conflict situation, but the conflict has changed the power relationships among them. The local level, NGOs and donors now have a much greater degree of influence in decision-making. In contrast, the national government has lost a considerable amount of its previous authority. A new balance must be established between the national health authority and other institutions, based on clear and mutually acceptable roles. Confusion of HRH roles, however, is the norm, not the exception, in the reconstruction period. It results from the multiplicity of players at the central and local levels, breakdown of management linkages during the conflict, and the urgency of reconstruction.

In each country, clarification of roles requires:

- identifying the key actors with influence over the diverse facets of human resource development;
- agreeing on the most important human resource functions;
- uncovering how the key actors perceive their own roles and the roles of others;
- developing and implementing appropriate management responses to address conflicting perceptions or misconceptions of roles and responsibilities.

A suggested list of the most important HRH functions for rebuilding the health workforce, maintaining its skills, and managing and supporting it is presented in Box 1.

Box 1. Most Important Human Resource Functions for Rebuilding and Supporting a Health Workforce

- Formulating and implementing national HRH policies
- Planning the national health workforce
  - Ascertaining current health workforce size and composition
  - Defining desired future health workforce size and composition (given health needs and the financial envelope)
  - Defining health worker roles, competencies, and minimum educational standards
  - Developing and implementing HRH strategies to shift toward the desired future state
  - Assessing financial feasibility of the strategies
  - Monitoring and evaluating the implementation of the strategies
- Developing, implementing, and evaluating HRH standards
  - Minimum staffing standards for health facilities
  - Training standards
  - Clinical standards
- Developing and/or supporting the development of training capacity for key health worker cadres
- Developing and implementing a registration/certification system for health workers
- Developing and implementing a system for accrediting health training institutions
- Managing the health workforce
  - Hiring, firing, and transferring health workers
  - Defining and modifying compensation and incentive packages
  - Negotiating with labor unions over salaries and incentives
  - Paying salaries and incentives
  - Defining and applying disciplinary measures
  - Providing legal support in cases of alleged malpractice
  - Administering routine personnel matters
  - Evaluating health worker performance
  - Developing health personnel (career development and training)
  - Managing health worker motivation

Role clarification must be based on a clear understanding of how the key stakeholders perceive their own and others' HRH roles. The RAMP is one management tool that can assist in this process. It captures and compares perceptions of key actors, quantifies the extent of consensus, and presents the findings graphically.[15] The RAMP

[15] The RAMP includes the critical management functions within nine functional areas, including Personnel (i.e., HRH). The other eight areas are: Health Service Delivery; Public Health Surveillance and Response; Financial Resources; Drugs, Vaccines, and Supplies; Equipment and Transport; Capital Construction and Maintenance; Health and Management Information; and Health Communication. The RAMP was developed and field-tested by Management Sciences for Health with funding from the USAID. For more information, see http://erc.msh.org/mainpage.cfm?file=6.10.htm&module=toolkit&language=English.

uses probing questions in the format of "Who is responsible for…?" or "Who has authority to…?" and can be easily modified to suit a particular country, its situation, and local language. In 2005, it was applied to examine how key Afghan HRH actors perceived their roles. Box 2 describes the way it was used in Afghanistan and gives examples of the analyses.

Box 2. Using the Responsibility and Authority Mapping Process (RAMP) in Afghanistan to Assist in Clarifying Roles

The Afghan version of the RAMP included 32 human resource questions and was applied to 110 individuals. Thus, the total number of answers was 3,520. The respondents included senior Ministry of Public Health decision-makers and members of the Provincial Health Coordinating Councils (PHCC) in 13 provinces. The PHCCs are made up of Provincial Public Health Directors, provincial health staff, and NGO and donor (or donor project) representatives.

All respondents were asked who, in their opinion, currently had responsibility and authority for HRH functions. In addition, the PHCC members were asked who should have these roles in the future. The respondents could choose among the following options in specifying who they thought had the responsibility or authority:

- Ministry of Public Health (MOPH)
- Provincial Health Office (PHO)
- NGO
- Donor (or donor funded project)
- Any combination of the above

The perceptions of the various groups were contrasted. In addition, the different PHCCs were compared with each other to probe possible geographic differences in perceptions.

Figures 3–5 give examples of the data analysis and presentation. Figure 3 shows the extent of consensus among the Ministry of Public Health senior decision-makers, Provincial Public Health Directors, provincial health staff and NGO staff regarding the *current* allocation of responsibility and authority for HRH functions. High consensus was defined as 8—9 of 10 respondents giving the same answer. Considerable differences in the views of these stakeholder groups were uncovered. The Ministry leaders and PPHDs showed a high consensus (34% and 28% of the questions, respectively) in contrast to provincial health and NGO staff (only 6% and 3%, respectively).

Figure 4 analyzes the degree of agreement in the chosen answers. "MOPH" and "NGO" were the most common answers, with 23% and 22% of the total number of answers. "MOPH and PHO" (implying a joint responsibility or authority) formed 11% of the answers. Only 7% of the total was "PHO" alone.

Figure 3. Consensus within a respondent group regarding current allocation of HRH functions, Afghanistan health sector, 2005

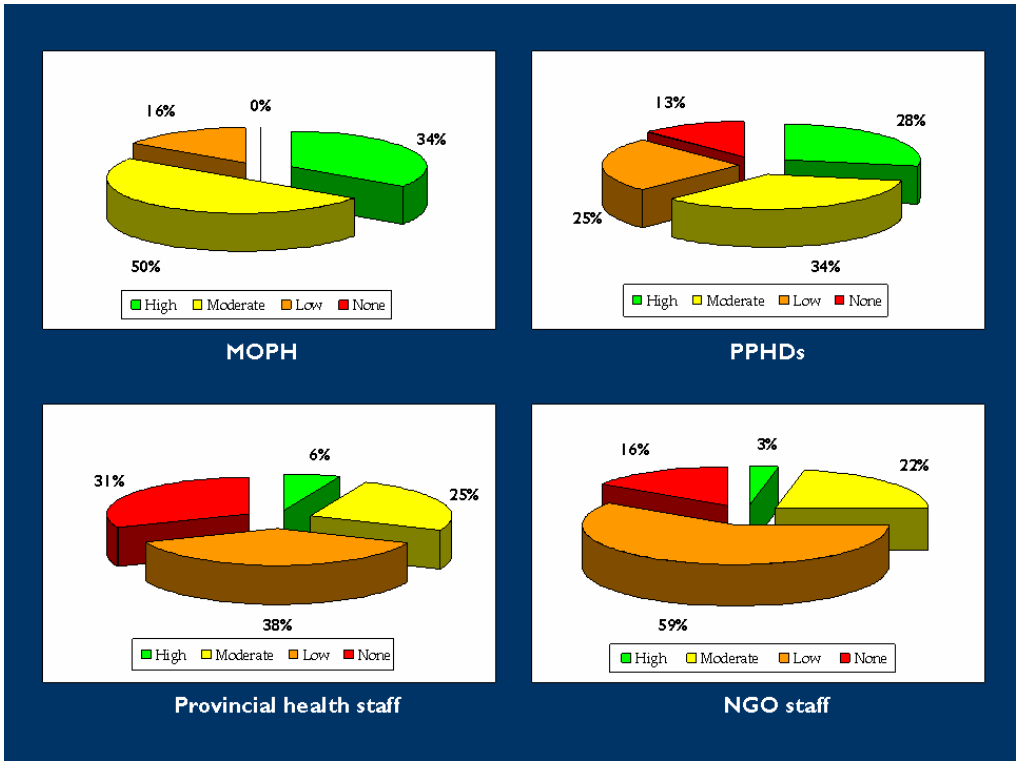
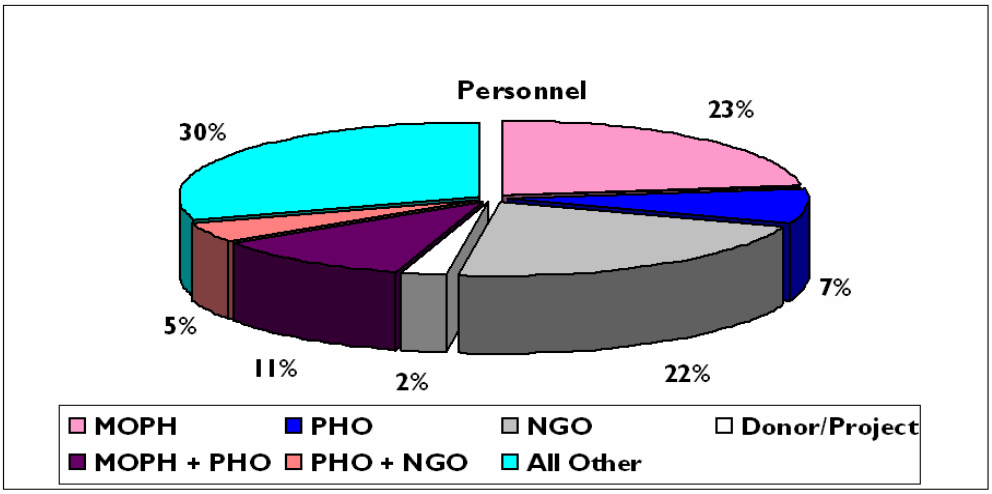


Figure 4. Agreement among stakeholder groups on who has responsibility or authority, Afghanistan health sector, 2005

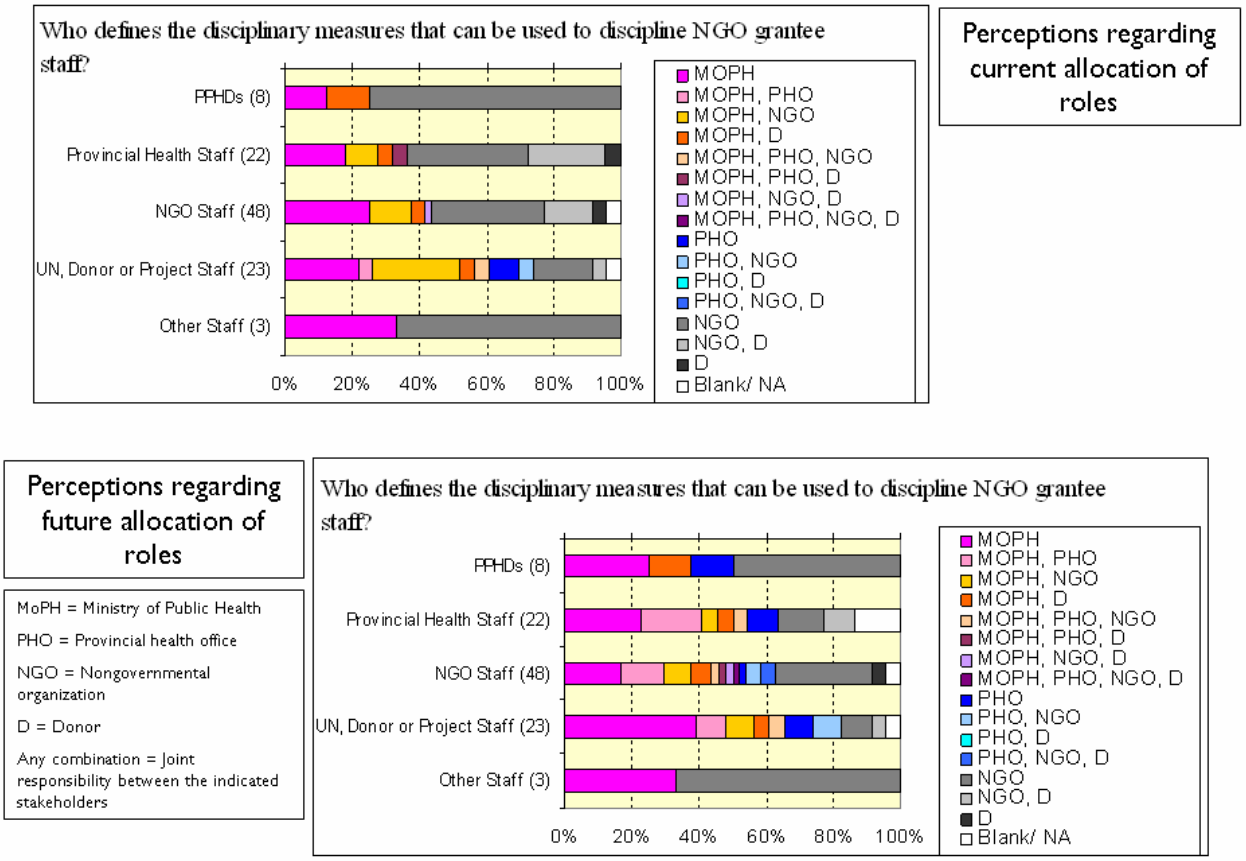


Afghanistan, 2005

Explanation: "MOPH" was 23% of the total number of answers, when stakeholders were asked who currently has responsibility or authority over Personnel (i.e. HR) functions; "PHO" was 7%, and so on.

Figure 5 compares the spread of opinions regarding a single human resource question within one stakeholder group with the spread in the views of other groups. The RAMP automatically produces such graphs for each question asked. Perceptions regarding *current* allocation of roles are shown next to the respondents' views of how they would like to have these roles allocated in the *future*.

Figure 5. Perceptions of current and future allocations of roles regarding discipline of NGO grantee staff, Afghanistan health sector, 2005



The Afghanistan findings revealed considerable confusion and lack of agreement regarding HRH roles and responsibilities at all levels. The General Director of HR considered these findings a crucial help to strengthening overall organizational development, and insisted that they be widely shared with senior MOPH staff, MOPH departments (which previously covered individual HRH areas), various HR task forces and working groups, and relevant multilateral agencies. The RAMP findings provided fruitful input to discussions among senior government officials and their partners. It is, however, too early to assess their long term impact, due to recent changes in senior MOPH managers, including the General Director of HR.

Establish health worker equivalencies. The health workforce of a postconflict country is a mixture of those who remained during the conflict and the returning refugees, as Figure 1 shows. Reintegrating these two groups and

equipping them to deliver the defined priority health services is a major task of reconstruction. The conflict compromised competence of both groups. The skills and knowledge of health workers, who were trained in the pre-conflict period and who remained in post, are likely to be very outdated. If training did take place during the crisis, its quality is likely to have been inadequate. The skills of the health staff who remained through the postconflict period may be insufficient or inappropriate to address current priority health concerns. For example, key staff may be skilled in trauma, but may not have much experience in maternal health care. The returning refugees, in turn, were trained in a variety of settings. This training may, or may not, have prepared them to practice competently in their home country.

Ensuring that service providers possess the minimum qualifications for safe practice is a major challenge for the HRH focal unit. Decisions must be made on how to assess the staff competence, what criteria to use, and what to do with those who don't meet the standards. In Cambodia, identifying health worker equivalencies of the numerous health worker categories was one of the most difficult issues in 1992. It was successfully addressed by establishing a working group with representation from all the factions. To set equivalencies, the working group primarily compared job descriptions and training curricula. In addition, UNBRO set up a standard testing and certification system, which established and certified the competence level of health workers trained in the border camps in Thailand. This was done in Thailand prior to the refugees' return to Cambodia. These strategies greatly facilitated the sensitive reintegration of factional health workers, and served to override later objections regarding those who had not completed 12 years of schooling.

In contrast, when Afghan refugees began to return home in 2002, no international efforts had taken place to coordinate and standardize training of those health workers, who had been trained either outside the country or by NGOs within the country. The situation regarding health worker training outside Afghanistan was very unclear. Efforts to access training curricula from those NGOs and agencies in Pakistan that had trained Afghan health workers yielded nothing useful for establishing equivalencies.[16] In addition, it was general knowledge that many "factories" that produced false certificates operated in Peshawar.

It took until 2004 before the issue of equivalencies could be addressed strategically. A semi-autonomous Testing and Certification Board was established and supported by a HR Taskforce. The membership of the Board consisted of relevant multilateral and bilateral agencies, NGOs and national and international academic institutions. The Director of HR chaired the Board, which was supported technically by an expatriate HR advisor. The Board replaced the former system under which individuals brought their certificates to an official in the former MOPH training office. This official then made a subjective decision as to whether these persons should be certified as a particular category of health worker or not.

The objectives of the Afghan testing and certification process were to:

- determine whether health workers who were trained outside the government health system had achieved a level equivalent to the MOPH requirement for safe practice;

[16] Joyce Smith. "Human Resources and Capacity Building for Health Reconstruction/Rehabilitation in Afghanistan." Mission Report. Jan. 15–May 14, 2002. Geneva: World Health Organization.

- identify the training required to bring those who failed up to the required level.

Testing and certification was based upon written examination only. There was neither the funding nor the personnel to undertake clinical skills assessment. Efforts were made to ensure, as far as possible, that the examination questions were problem-based and related to common situations the health workers would face in their work setting. Efforts were also made to explore with donors the possibility of locating appropriately trained overseas Afghans, who could be used to support the implementation of the Testing and Certification program, including clinical assessment. Such individuals could be funded through programs, such as the International Organization for Migration (IOM) Return of Qualified Afghans program.

All health workers were given three opportunities over a five-year period to achieve the appropriate competency level. This would allow the MOPH to ensure that the minimum established standards of competence for each category could be met. The results of testing and certification contributed to the work of a Capacity Building Working Group, which was developing plans for both national management and clinical capacity building. The Board decided that those employed health workers who failed should not be prevented from continuing work. Instead, their employers, mainly NGOs, were informed and encouraged to provide the failed candidates with support to study and upgrade their knowledge and skills.

Nurses, midwives, and allied health workers were the priority categories to be tested and certified. These cadres were in short supply (particularly female health workers) and their training fell under the jurisdiction of the MOPH. The Ministry of Higher Education was responsible for certifying doctors, dentists, and pharmacists. Regrettably, efforts to include representation from this ministry on the Testing and Certification Board failed.

It was decided to initially target the health workers trained outside the government system. A high proportion of them did not have the requisite 12 years of schooling to be directly employed by the MOPH. They could, however, be employed by the NGOs that were contracted to provide a basic package of health services at the health center level. Health workers were required to present their certificates to the General Directorate of HR in order to register for the testing and certification examinations. Focusing on workers trained outside the government system also helped to identify those with false certificates.

The training of nurses and midwives, the two major categories of health workers trained in Afghan government training institutions, had undergone major revision and upgrading. Consequently, the revised competencies set the level against which individuals in these two categories who had trained outside the government system were assessed. As the training of other categories of health workers was upgraded in the government system, the new level of training set the standard that health workers, trained outside government institutions, were required to achieve.

Testing and certification examinations commenced in December 2004, and covered nine categories of health workers. For the first time, concrete evidence became available of the crucial need for intensive clinical capacity building. The overall failure rates were quite high. (See Box 3.) Furthermore, the staff of the General Directorate of HR estimated that almost 50% of health workers applying to take the examinations held false certificates.

Box 3. Summary Results of Testing and Certification, Afghanistan, December 2004—December 2005

A total of 2,394 health workers in nine categories (of which 469 were female) took the examinations. Questions were based on the level of the revised MOPH training courses. Candidates achieving 65% or higher were regarded as having achieved the required level. They were classified as "registered level" (3-year trained). Those achieving between 50–64% were classified as having achieved "assistant level." Those scoring below 50% were deemed to having failed to achieve the minimum acceptable level. They were thus in need of retraining.

	Registered		*Assistant*		*Failed*	
Nursing	82	(8%)	328	(34%)	567	(58%)
Midwifery	14	(6%)	67	(28%)	155	(66%)
Laboratory Technician	25	(7%)	109	(29%)	244	(64%)
Pharmacy	2	(1%)	51	(22%)	179	(77%)
Anesthetic Technician	4	(10%)	15	(37%)	22	(53%)
Dentistry	2	(6%)	4	(11%)	30	(83%)
X-ray Technician	7	(24%)	3	(10%)	19	(66%)
Physiotherapy	3	(23%)	0		10	(77%)
Vaccinators	277	(61%)	0		175	(39%)

Currently, the testing and certification targets health workers trained outside government training institutions. In the future, the Testing and Certification Board plans to apply it also to those health workers who trained in government institutes during the conflict period. This will allow the ministry to identify future training and continuing education requirements for these health workers.

Invest in updating and upgrading clinical skills. Updating and upgrading clinical skills is crucial to ensure that health workers have the competence to deliver the required health services. Addressing the strengthening of clinical skills of those trained during the conflict is important, but only one aspect of overall clinical capacity building. Investment in continuing education without parallel investment in preservice education will result in the continued production of low quality graduates. They will then require further expensive continuing education to fill the gaps in their preservice education. Thus, strengthening the capacity of teaching staff in the training institutes, as well as at the clinical training sites, is essential.

All training institutions, both governmental and nongovernmental, need support. These institutes have degraded over long periods of conflict, or were established in emergency conditions. In such situations, the knowledge and skills of the teachers have similarly degraded. This results in teachers teaching what they can remember, rather than what the students need to do their work. Designation of clinical teaching sites with inadequate clinical caseloads, excessive student numbers, and lack of trained clinical teachers and supervisors results in inadequate clinical skills.

The experience of Cambodia and Afghanistan illustrate the challenges. In Cambodia, a multidisciplinary group of 22 teachers from all the training institutions, faculties, and specialist technical institutes entered a one-year Diploma course in Health Personnel Education. At entry, they had no experience in clinical teaching, and required intensive concentration on developing their skills in this area.[17] Furthermore, these teachers believed that teachers should teach what they knew, and did not consider it important to teach what the student needed for the job.

In Afghanistan, the poor results of testing and certification highlighted the need for a significant investment in training. The training schools were not in a position to address the issue of the large numbers who required retraining, even though there was ongoing investment in preservice education. With large numbers failing to achieve even the assistant level, and no initial funding and strategies for upgrading or retraining those who failed, it is hardly surprising that the testing and certification system was criticized and pressure was exerted to overturn the results.

Implementing the testing process was essential to gain the evidence of the severity of the problem. Without such evidence, the Testing and Certification Board could not approach donors with a request to invest in clinical capacity building. Donor support came in 2006 from the United States Agency for International Development (USAID) and the Japan International Cooperation Agency (JICA) in the form of nursing and midwifery text books and study guides. Defining both nursing and midwifery curricula and developing appropriate translations of these texts took more than two years, but the MOPH is finally able to provide copies of these materials to those who either failed the exams or are planning to take them. This reduced the pressures on the MOPH, which is now seen as providing some support to those who failed so they can study and upgrade their knowledge.

The development of an Afghan Midwifery Education Policy and the establishment of a Midwifery Accreditation Board, education standards, and an accreditation process in 2006 further enhanced the prospects for increasing clinical competence of Afghan midwives. A similar process is being developed for nursing education.

In Afghanistan, NGOs have presented special opportunities and challenges for ensuring staff competence. In the postconflict period, NGOs were still continuing short, 6- or 12-month emergency nursing and midwifery training courses. After the testing and certification process had been established, the General Director of HR requested that the NGOs stop these short courses. He asked them instead to focus on upgrading the skills of those already trained so that the NGO health workers could achieve the minimum level of competence required by the Ministry of Public Health. It took several years to persuade local NGOs to change from basic training to providing upgrading courses. The creation of the Midwifery Education Policy and the Midwifery Accreditation Board reinforced the imperative of ceasing the short basic training courses.

Another approach to addressing the high failure rates in testing and certification was to encourage NGO employers to support their health workers and advise them to be careful about using their only three opportunities to take the testing and certification examination. Publicity on this was important to prevent health workers from wasting their three chances. NGOs were asked to have their workers undertake

[17] Personal communication from WHO Training Consultant who implemented the course.

self-study or revision before taking the first examination. Utilizing the results of the first attempt as a measure of where they were, the workers could then allow an appropriate time period to study. It would also allow them to undertake in-service training courses prior to retaking the examinations, when such courses were available.

Engaging the NGO employers became easier as the testing and certification process progressed. Within a year, many NGOs were organizing the registration of their own employees to take the examinations. They were checking the results and beginning to address how to support the upgrading of their staff. The NGOs were equally concerned as the government to identify those staff members who held false certificates.

Contribute to civil service reconstruction. Recreating the civil service involves developing civil service laws and regulations, establishing transparent civil service recruitment processes, and setting salary policies and scales. The individuals responsible for these activities in a postconflict country are learning on the job. The pressures to establish a leaner and more efficient civil service weigh heavily on them and the salary scales they set must be based on the financial envelope that the donors make available.

Re-establishing a ministry of health is inextricably linked to re-establishing a civil service authority. The decisions related to health service delivery approach impact on the numbers and levels of civil servants employed within the ministry. When the ministry of health decides to change its role from direct care provision to a stewardship role and to use contracting mechanisms for service delivery, inevitable adjustments must be made before personnel can be recruited. The managers within the central ministry and at regional and/or provincial levels are essential for taking on the stewardship role. Thus, they are the first ones to be recruited to the civil service. They must then set the minimum standards for those health workers who actually provide the health services as contractees, rather than as direct employees.

The ministry of health is mandated to work with the civil service authorities to ensure that standardized, transparent recruitment processes are applied appropriately to the recruitment of all managerial and technical staff. Having an effectively functioning HR focal unit to carry out this work is therefore essential.

The civil service authorities and donors view recruiting and training the HRH unit staff as the essential first step to implementing civil service recruitment. Ministries, however, come under strong political pressure to start with civil service recruitment of technical staff. This was the case in Afghanistan, where priority was given to technical recruitment. As a result, donors had to fund local HRH consultants for more than eighteen months in order to implement the civil service recruitment process. Despite these constraints, the Afghan Civil Service Commission and donors regarded the General Directorate of HR in the Ministry of Public Health as the most effective among all the ministries and a model for the government overall.

Disseminate HRH information widely. Regardless of what decisions are made regarding HRH approaches, the rationale for the approaches chosen must be widely disseminated to every level of national society. Without a shared understanding among all the levels, much time is wasted at the senior political and management levels in dealing with questions or complaints. It also places unnecessary obstacles to the implementation of logical and rational HRH development strategies. While communicating the rationale behind HRH decisions is important in any society, it is particularly cru-

cial in tribal societies, where the most junior level has the right to petition up to the highest level.

Many problems that restrain the implementation of HRH systems occur because of inadequate dissemination of information and a lack of clarity. It is thus vital to widely share clear information regarding the reality of the national HRH situation, the rationale of the adopted HRH approaches, and most importantly, the overall objective of guaranteeing safe practice. Good communication between the central and provincial governments is especially important. Provinces often function almost autonomously during many years of war. Accustomed to acting independently, they can very effectively block implementation of the new HRH systems, if the central government fails to involve and inform them fully.

Dissemination of information requires skillful and effective public information systems. In many countries, public information is only cosmetic, touching only on what is politically expedient and the "flavor of the month." Informing the public about the dangers of employing or utilizing an inadequately trained health worker, who may not be safe to practice, can be viewed by government authorities as sensitive and thus to be avoided. Engaging the leadership of a ministry of health in dialogue about the major HRH issues that require detailed and skillful public relations handling is necessary. Such dialogue allows the head of the HR focal unit and the head of Public Information to work together to prioritize the issues and to develop a planned approach to disseminating the information. It also ensures that the political leaders and senior management are fully briefed on the HRH issues and agreed-upon strategies.

Ministries frequently lack support and capacity in the area of public information. Technical support is generally given to developing health messages about particular health problems, such as HIV/AIDS, diarrhea prevention, etc. Little attention is given to best ways of presenting information on technical and professional issues. Where possible, ministries should seek technical support to train the person or persons responsible for public information. They need skills in handling the dissemination of information on priority HRH areas and the agreed approaches and strategies, especially those that are potentially politically sensitive.

Clear communication can overcome potentially serious HRH obstacles. In 2004, several Afghan provinces commenced the civil service recruitment of health workers. The competitive, completely transparent recruitment process was unfamiliar to health workers, who expected permanent employment after their training. In one province, large numbers of these health workers complained to the provincial governor, who became angry and threatened to expel the civil service recruitment interview team from the province. Upon hearing this, the interview team went to meet with the governor. The team explained that the purpose of the interview and recruitment process was to ensure the appointment of the best health workers, who were appropriately trained and qualified to deliver safe health services. After hearing this, the governor gave his full support to the recruitment process.

Conclusion

Long-term conflict erodes health service delivery, degrades educational services and health professional training, and causes large scale population movements. As countries emerge from conflict, newly established health authorities are faced with the daunting task of re-establishing health services. As they commence this task, they must confront the effects of prolonged conflict on the health workforce. Building a solid human resource system and developing appropriate strategies that address the effects of the conflict are essential for redeveloping a competent workforce.

The time of crisis and its aftermath dramatically change the order of priority of human resource concerns that need to be addressed, who is involved in making decisions about them, the power these decision makers have, and the management and communication linkages among the decision makers. The precise nature of these changes depends on a number of factors, such as the structure and capacity of the preconflict health and education systems, the character and duration of the conflict, and the extent of destruction and displacement. Each postconflict stage from the immediate aftermath of the crisis to later reconstruction requires a different set of decisions. The demarcation line between these phases is not clear-cut, and the progression from one stage to another is not smooth. Regardless, each set of decisions has both short-term and long-term implications for the workforce.

The health workforce assessment and redevelopment in a postconflict country take place in an intensely political environment. The newly established authorities struggle to preserve a balance between maintaining stability through political expediency and donor pressure to utilize the opportunity of postconflict reconstruction to implement new approaches and strategies. The *de facto* decentralization of decision making, a legacy of the prolonged conflict, creates further tension between central and local level actors. The majority of health workers, whose careers and lives have been severely impacted by the conflict, are preoccupied with survival, and may come to view proposed HRH strategies as a further threat to improving their lives.

While the environment in which redevelopment of the health workforce takes place is complex and unique to each country, the experience of Cambodia and Afghanistan shows that major similarities exist in the effects of prolonged conflict on the health workforce, even when the political context differs. Such effects include increased imbalance in the composition of the workforce, deteriorating skills and training capacity, and the emergence of different cadres of staff, who are trained in a variety of settings and whose competence for safe practice is not easily demonstrable.

A well-planned development approach to confronting postconflict HRH challenges in a realistic manner includes the following core elements. Where possible, the HRH strategies selected for implementation should reduce the political implications without compromising the standards of safe health care.

- The first essential step is to acknowledge the potentially severe effects of conflict on the health workforce.
- The required HRH approaches and the systems to implement these approaches must then be prioritized, with the

prioritization process being based on the most detailed available evidence.

- The registration of health workers and the establishment of equivalencies should commence as early as possible.
- The senior political level must be completely oriented to the rationale behind the HRH approaches, as well as their implications both for the evolving health service and politically.
- The rationale for the HRH approaches and how they will be implemented must also be clearly communicated to very level of national society.

Countries emerging from conflict can benefit greatly from sharing information on different approaches and experiences in establishing effective HR systems, the context within which the systems are developed and the factors that influenced the decisions in each country. Sharing information on what works and, more importantly, what does not work and why, is invaluable for ascertaining whether the already tried approaches could and should be adapted or applied in other countries and political environments. Unfortunately, there is a serious dearth of literature on HR experiences of postconflict countries. By sharing the HRH successes and challenges of Cambodia and Afghanistan, this paper seeks to inform HRH decision-makers in other postconflict countries so that they may be better equipped to select appropriate interventions and avoid costly, ineffective approaches.

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The authors welcome feedback on this paper. If you have worked in postconflict areas, particularly in reconstructing and developing the health system and workforce and would like to share your experience, we would appreciate hearing from you. Please direct your comments to Mary O'Neil (c/o bookstore@msh.org). Thank you in advance.

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