www.aidsmap.com

HATiP

HIV & AIDS Treatment in Practice

Issue 117 | 09 September 2008

In this issue:

NAM publishes a wide range of publications on treatment for HIV. For details contact:

NAM, 77a Tradescant Road, London, SW8 1XJ, UK

tel +44 20 3242 0820 **fax** +44 20 3242 0839 **email** info@nam.org.uk **web** www.aidsmap.com

aidsmap

Improving human resources for health while scaling up ARV access in Ethiopia and Malawi

In the space of just a few years, close to 300,000 people with HIV have been put onto ART in Ethiopia and Malawi — two of the countries most severely affected by the human resources for health crisis. But while some might suggest that such a rapid scale-up could only have come at the expense of other general health services, Ethiopia and Malawi performed this remarkable feat using HIV/AIDS funding and technical support to launch ambitious and comprehensive human resource plans to strengthen their health sectors overall.

"We had to develop a programme without undermining other health services," said Dr Kelita Kamoto, head of the HIV/AIDS unit of Malawi's Ministry of Health during a symposium on human resources at AIDS 2008. "So in the design of that programme, we also had to address the human resources for health crisis."

Addressing another symposium on the same topic, Ethiopia's Minister of Health, Dr Tedros Adhanom Ghebreysus told the audience that, "Disease-specific programme needs can only be addressed by using the health system... and one cannot exist without the other... so the money we are getting from PEPFAR, the Global Fund, the World Bank, we are using it to build our health centres."

Several presentations at the 2008 HIV Implementers' Meeting and AIDS 2008 described how Malawi and Ethiopia have designed and implemented their human resource strategies. While their plans employ task shifting, they have put equal emphasis on improving working conditions to recruit and retain more staff and upon developing new human resource capacity at all levels. Their vanguard programmes could serve as models for other countries that want to provide universal access to HIV prevention, care and treatment but at the same time strengthen their health systems' capacity to provide other essential health services.

The staffing crises in Ethiopia and Malawi

A couple of years ago, few countries had a worse HRH crisis than Ethiopia or Malawi, according to WHO figures. In Ethiopia, there was only one doctor for every 33,000 people, and one nurse for every 5,000 people. In Malawi, there was only one doctor per 50,000 people, but slightly more nurses, about one for every 1,700 people. As in many countries, rural areas of the country are harder to staff than others, with no doctor at all in four out of Malawi's 27 health districts, no doctors in 10 district hospitals, and less than one nurse per facility in several districts. But what made the problem all the more disturbing was that Malawi had up to 800 qualified nurses living in the country who simply chose not to work in the health sector.

And yet, both countries have scaled up their HIV programmes in a much shorter period of time than many better-resourced countries.

Key to the success of the ART scale up in both Malawi and Ethiopia was a careful and honest appraisal of their health system, including the causes of local health worker attrition — which helped them come up with effective solutions.

"The root cause of this problem is that there has been underinvestment in training or in producing our workforce,"said Dr Adhanom.

Dr Kamoto added that there had been a failure to consider human resources for health during health reforms in the 1980s and 1990s and that structural adjustment policies (severe limits on public sector spending in order to service international debts) were partly to blame. She also noted that "HIV/AIDS was robbing away our health workers." In fact, death was the single largest cause of attrition in Malawi.

Countries with a human resource for health crisis commonly face other barriers to delivery of essential health services as well, according to Mr Meskele Lencha, the Deputy Director General of the HIV/AIDS Prevention and Control Office in Ethiopia, who spoke at a plenary on human capacity development at the HIV Implementers' Meeting. "An inadequate professional mix at various levels, competency gaps in professionals, poor motivation and a weak working environment - those are the major challenges."

Dr Kamoto provided a little more detail on the factors associated with poor retention of workers in the health sector. "There is the 'push factor' such as low wages, high workload, weak supervision, inadequate housing, shortage of supplies, weak and unresponsive human resource management. Then there's also other 'pull factors': international migration and domestic dynamics, growth in research jobs, NGO jobs — especially HIV and AIDS —and also in private hospitals," she said.

Because of staffing realities on the ground, doctor-centred programmes would not be possible in either Ethiopia or Malawi. "If we had to wait until we had enough doctors, we wouldn't have put 165,000 people on treatment by now. We would have been still waiting. Waiting and waiting." said Dr. Kamoto.

Quite likely, many of the people on ART today, wouldn't have been waiting — they would have been dead.

So both programmes had to determine how best to apportion the tasks required for HIV/AID prevention, care and treatment along with other basic health services to cadres with less training — and how to monitor the quality of care being provided. At the same time however, both programmes sought to invest in the recruitment and development of new healthcare workers, and improving working conditions to retain staff.

But when funding first began to become available for HIV treatment and care, it was difficult to apply it to address the HRH crisis.

"The Global Fund refused to give us money [for human resources development] in the Round 1 grants but then the government declared the crisis in human resources, with the Secretary for Health announcing that the health sector had collapsed," said Dr Kamoto.

This changed in 2004, after Dr Peter Piot of UNAID and Sir Suma Chakrabarti, Permanent Secretary of the UK Department for International Development (DFID) paid a joint visit to the country and reported that the health sector human capacity crisis in Malawi was an emergency that required exceptional measures. This ultimately led successful applications to the Global Fund and DFID to fund health system strengthening in the country.

Malawi's model

"The successful scale-up of the ART programme in Malawi was the result of careful planning based on realities in the health sector using a public health approach with task shifting, combined with an emergency human resources programme," said Dr Kamoto.

The public sector approach

When the ART programme started, it was clear that a clinical model of HIV care — with doctors prescribing more than one ART regimen, frequent laboratory monitoring, etc — would be impossible in Malawi. So Malawi adopted a simple, standardised public health approach to ART throughout the country.

The initial emphasis of the programme was on one standardised ART regimen given to patients who qualified, based on clinical rather than CD4 cell criteria, with a simple kit system for supplying the medication. Everything to do with the programme was standardised from case finding, training, guidelines, reporting, supervision and monitoring — and since all care providers (the public system, faith-based providers, NGO, private sector) within the country were engaged in the development of the approach, they all bought into the single national system.

Task shifting

Since there were no doctors, the task of initiating ART was shifted to non-MD clinicians (clinical officers and medical assistants) and nurses. Lay people and health surveillance assistants (HSAs), a paid cadre of community-based health staff with three months of training, perform HIV testing and counselling.

There is ongoing research to establish the extent to which tasks can be safely shifted to other non-health workers. For example, the Lighthouse Clinic in Lilongwe is evaluating whether HSAs can take care of stable patients on ART, and in a study presented at AIDS 2008, researchers from the Lighthouse clinic reported that screening for ART eligibility was not a task that could be easily shifted to HIV testing counsellors (Tweya).

Supervision

A programme that is so heavily based on task shifting needs a strong supervision and monitoring system to maintain high quality care. So Malawi has developed a system of quarterly supervisory and monitoring visits with feedback on quality of service provided.

"We give certificates of excellence to those doing well," said Dr Kamoto, "and those needing improvement, we give them feedback which we follow with a letter."

The Emergency Human Resources Programme

"HIV/AIDS in Malawi has been a wedge for human resources and health systems improvements," said Dr. Kamoto. Malawi established an Emergency Human Resources Programme, not only to make certain that staffing scale-up could keep pace with the HIV programme, but also to be able to provide the population with an Essential Health Package (which covers essential vaccination, TB and malaria prevention and treatment, management of sexually transmitted diseases, reproductive health and so on.)

But the programme set a rather modest goal for itself, to strengthen the health system to the level of a neighbouring country (Tanzania) rather than to WHO recommended levels (Palmer). But since few countries had ever attempted to set up such a programme, Malawi adopted a sector wide approach (SWAp) to draw upon the expertise and consolidate support from all potential stakeholders. The Emergency Human Resources Programme had five key components:

- Expanding training capacity in the health sector by over 50% overall, including doubling the number of nurses and tripling the number of doctors in training (Palmer).
- Improving incentives for recruitment, retention and re-engagement of staff through salary top-ups for 11 key cadres (both public and mission-related medical staff), a bonding initiative (a period of compulsory public health service for nurses who were trained at public expense), incentives to encourage workers to stay in rural locations, improved staff housing.
- Using around 50 volunteer doctors and nurses from international partners as a stop-gap measure for critical posts (mostly teaching).
- Obtaining external technical assistance for the Ministry of Health for human resources management.
- Establishing robust monitoring and evaluation (M&E) linked to the already existing SWAp health management information systems framework

According to last year's Treat, Train and Retain Report, over 5,400 doctors, nurses and other key staff were receiving 'topped-up' salaries and staff retention in the public sector has improved. About 900 government posts were either filled or in the process of being filled, and there are plans to expand infrastructure and teaching staff that should dramatically increase local production of healthcare workers

Ethiopia's approach

Likewise, Ethiopia has adopted a standardised approach to HIV care based on task shifting, but at the same time has ramped up the production of healthcare workers, along with improvements in the health systems to boost retention and monitor the quality of care being delivered.

"We tried to identify the human resources we needed based on the programmes we have, based on the priorities we have and we tried to train enough of that," said Dr Adhanom.

An emphasis on primary care provided by health service extension officers

He stressed that most of the care that needs to be given to people in Ethiopia, including people with HIV, is preventive primary care — which can be addressed by professional healthcare workers with less training "who are not affected by brain drain."

To fill this need, Ethiopia has created a cadre of health service extension officers (HSEOs), whose role is to bridge the gap between health facilities and where people live in the community. According to Mr Lencha's presentation, the HSEOs focus on four key areas, by delivering:

- A prevention and control package for the major communicable diseases: HIV/AIDS, malaria and TB
- A family healthcare package
- A hygiene & environmental health package
- Health education (providing essential health information and behaviour change communication)

The government worked closely with regional and local partners to develop curriculum and training materials and to pilot the project.

The communities take part in selecting the trainees, who have to have completed school grade 10, and who, for the most part, are women (except in pastoral areas). Mr Lencha said this was for a couple of reasons including their traditional roles in Ethiopia as family caregivers and because it is more culturally acceptable for a woman to go into homes and to talk frankly about health matters,

NAM publishes a wide range of publications on treatment for HIV. For details contact:

NAM, 77a Tradescant Road, London, SW8 1XJ, UK
tel +44 20 3242 0820 **fax** +44 20 3242 0839 **email** info@nam.org.uk **web** www.aidsmap.com

especially with another woman. “For a man, it would be difficult,” he said.

Training lasts for a year, a quarter of which is theoretical, while the rest of the year is practical, based in the community and households. The HSEOs are then deployed to their own community, paid by the government and theoretically at least, are supposed to deliver service house-to-house. In fact, the goal is to provide universal access to home and community-based care by 2009. So far, 80% of the kebeles (Ethiopia’s smallest administrative unit) are covered.

“We have targeted to train 30,000 and we have trained and deployed 24,000 and the remaining 6,000 will be trained by December 2008," said Dr Adhanom. “So this cadre will work on prevention, not only for HIV, for other programmes as well. We use the HIV money, the money from PEPFAR and Global Fund, to use this cadre of professionals, and they are actually serving [all of] their communities.”

Ethiopia expects a lot out of these workers, whose role is to “create a social transformation,” Mr Lencha said. But they also fill a potential gap in services as more technical tasks are shifted to nurses.

Note, the HSAs in Malawi are supposed to fulfil a similar function, providing the essential health packages in villages, and the country has set a target of engaging 1 HSA per 1,000 people.

Accelerated training of health officers and doctors

Tasks such as ART and most curative services have been assigned to health officers (clinical officers in Ethiopia) and to a lesser extent nurses.

“More than 90% of our patients just need the attention of health officers and nurses. They do not need more highly skilled professionals,” said Dr Adhanom.

So the Ministry of Health has launched a training programme to produce 5,000 health officers by 2010. Training takes place in five universities and at 21 training hospitals, involving one year at university and two years in practical training at the hospitals, leading to a bachelors of medicine. By June this year, the programme had graduated 1000 health officers, with another 4200 currently enrolled. 5000 are to be deployed by 2010 to enable health centres through-out the country to provide universal access.

But Ethiopia has also dramatically increased the number of doctors being produced as well.

“Before 2008, the average annual intake of medical officers was only 200 and now we have increased this to 1,000,” said Mr Lencha. By 2009, this is supposed to increase to 1,800. Annual enrolment is planned to increase to 8,000 by September 2009 at 21 universities and 40 hospitals so that Ethiopia can increase its number of hospitals from 143 currently to 800 by 2013 (to service a population of around 80 million).

Maintaining high quality with mentorship via the health network model

As tasks are being shifted from more highly trained staff to health workers with less training, Ethiopia is setting up a formal system of clinical mentoring using the health network model. In other words, larger facilities support smaller ones, and doctors should be providing support to the clinical officers, the clinical officers to the nurses and so on. The cadres of case managers, community-based workers providing HIV testing and counselling, and adherence support counsellors also require supervision. There is a goal of setting up routine meetings and seminars within each catchment area.

But already, there have been reports that more mentorship and supervision may be necessary, at least at the HSEO level. Preliminary research showed that communities were generally pleased by the services the workers were offering, but home visits were less frequent than had been planned, and the communities’ basic health knowledge was still quite poor (Negusse). “The reasons for this clearly need to be ascertained, but anecdotal accounts suggested a lack of administrative support and monitoring may be partly responsible,” the authors wrote.

Maintaining a consistently high quality of service will doubtless be a moving target, but it may be possible to improve supervision as more highly trained health workers come online.

Monitoring and evaluation (M&E) and information management systems

To recognise such problems sooner and improve the health systems performance with strategic information, Ethiopia is also scaling up the production of M&E officers and health management and information services (HMIS) technicians (8,000 this year) to eventually be appointed at each level of administration throughout the health service (hospitals, health centres, districts, and regions).

Improving retention and motivation within the health service

“We also have to have mechanisms to retain and motivate the workers,” said Mr Lencha. So the Ministry of Health has designed a career development structure, which includes bonding — tying opportunities for training or promotions to a minimum number of years of service in the health service. In addition, the country is working on hospital reform to improve the work environment and there are efforts to provide housing at remote rural hospitals and improve remuneration.

Ongoing challenges

Mr Lencha and Dr Kamoto stressed that many challenges remain. One common issue is that a shortage of teaching staff and training facility capacity limits the number of new workers that each country can produce.

High attrition rates have not been eliminated yet. One cause is that the health of the staff remains an issue — though Dr Kamoto pointed out that scale-up of the ART programme could at least address deaths from HIV/AIDS.

“In June of 2006, we did research that found that by putting the health workers onto ART, we are bringing them back to work and we have extra staff days in the health sector,” she said. “We need 916 health worker days per week to run an ART clinic, but treatment saved 257 health care workers’ lives, giving us an extra 1126 staff days per week in the health sector.”

While the speed of the ART scale-up in Malawi and Ethiopia is a clear indicator of success of the package of human resource interventions in these two countries, it is not yet clear that each intervention is working or that the formula of services is quite right. Thus it is crucial that programmes make every effort to monitor their success and recognise their failures quickly.

However, both countries deserve credit for eschewing the `business as usual` mindset. Even though there was only limited expertise to guide policy, they pulled together all the key partners, agreed on a common plan, and wasted little time putting it in motion.

What does it all cost?

Neither Mr Lencha nor Dr Adhanom mentioned the cost of the various HRH programmes in Ethiopia, and HATIP was unable to track down a current figure before going to press (costing for the Health Sector Strategic Plan for 2005-2010 is available on the Ministry of Health website). However, PEPFAR, a major supporter of these efforts, allotted over US$354.5 million to Ethiopia this year, and funding can be expected to increase in the $48 billion PEPFAR II programme.

The programme in Malawi is supported by the Global Fund to Fight AIDS, Tuberculosis and Malaria, the United Kingdom Department for International Development, the Government of Malawi itself and other donors and is costed at about US$278 million to be spent over a six year period, with up to US$98 million going to increased salaries, $35 million to improved staff housing, and US$64 million to expand training capacity.

But how much would it cost to scale up similar interventions in order to strengthen health systems and provide universal access to HIV/AIDS prevention, care and treatment in other countries?

"Well, that depends on the country conditions," said Dr. Kate Tulenko, coordinator of the Africa Health Workforce Program at the World Bank, who gave a presentation at AIDS 2008 on the costs of task shifting and related workforce expansion. Of course, it would depend on the mix of interventions a country chooses to implement, but it also depends on the HIV prevalence and stage of disease mix, the cadre number, mix and wages, team design, and local training capacity, costs and other factors.

"If you already have a team approach, task shifting will be much easier and much more cost-effective, and if a country already has a great deal of training capacity and is using modern and effective teaching techniques, task shifting will be much more affordable," she said. "We recommend that since everything is so based on country context, individual costing and analysis should be done on a country level before major steps are taken."

Dr Tulenko stressed this is especially true of wages.

"If you get incentives wrong or if you get salaries wrong, it's very difficult to reverse that. And it can affect other sectors as well, particularly other civil service sectors such as transport, public safety or education. So we really want the task shifting teams and incentives to be evidence-based," she said.

It can also be problematic to increase compensation for one cadre or group of health workers and not another. In Burundi, boosting salaries to improve retention of HIV clinic staff caused problems with other hospital staff, according to one conference report (Caihol). This led to significant consequences, with threats of strike, bad will between HIV clinic and hospital staff, stigmatisation of the clinic staff, and even poorer care for people with HIV, whose tests were not ordered and prescriptions not filled.

Dr Tulenko also reviewed the costs projected by the Treat Train and Retain (TTR) plan, put out by WHO two years ago, to expand the health workforce to reach universal access for HIV services and care globally. TTR included a global costing for scale-up in 61 countries that have 94% of all people living with HIV/AIDS. It used two scenarios: one was a rapid scenario that had 80% coverage of people needing ART on treatment by 2010; and the other scenario, phased up to 80% coverage by 2015.

The estimates only included the cost of the human resources (training and wages) and ART— and so do not include the costs of increased usage of other medications, increased laboratory usage or facility costs, nor do they fully include the costs of VCT and PMTCT services. Also, the TTR programme envisioned new staff as not just providing AIDS care but as being multi-purpose (spending 50-75% of their time seeing non-AIDS patients), and the model didn't factor in attrition due to death or migration. Dr Tulenko said that any estimates or any costs need to be multiplied by two or three to get the full budget impact on health sectors.

The model calls for 140,000 to 240,000 new workers to provide universal access. Since the number of new workers would have to be at least doubled that means 280,000 to 480,000 new healthcare workers.

"When you look at the number of healthcare workers in Africa right now, this represents an increase of 20% to 40% of healthcare workers in the space of about ten years," said Dr Tulenko.

And it would cost US$7.2 billion between 2006-2015 to scale up for universal access by 2015, and $17 billion to scale up by 2010.

"The average yearly cost is three to seven dollars per capita, and just to put that number in context, Ethiopia was spending $3 per capita total on health and Nigeria currently spends $30. And so once more when we multiply these numbers by two or three, we are looking at possibly doubling health budgets," she said.

"Where's the money going to come from? That's a good question but if you look at the amount of money that PEPFAR alone is providing, that's more than enough money to do the training and to hire these new workers," she said — though she added that doubling a public sector in a country could cause rapid inflation at the country level.

"We've seen that a bit in Ethiopia right now, where the government has invested vastly in health. But that investment combined with the global oil, the global food crisis has caused some inflation. And that inflation, of course, affects the poor the most, so it is something to be concerned about, something that needs to be managed," she concluded.

The impact of AIDS funding

What is clear is that AIDS funding can alter the shape and direction of health programmes in resource-constrained countries — though in the case of Malawi and Ethiopia, so far it seems to be for the better. However, directing some of the HIV/AIDS funding towards health system strengthening still may not entirely offset the impact that HIV/AIDS has had on the health sector.

"I must admit," said Dr Adhanom, "it is not the fault of the funding — it is the fault of the disease. We only establish disease-specific programmess to show that there are priorities because they are the major killers, because they are the majority contributors to morbidity and mortality. We cannot work without priorities, we cannot work without focus, and that is why we have disease programmes."

Time will tell what the legacy of these HIV/AIDS programmes will be, but history may show that it took the emergency of HIV/AIDS to drive through health sector reforms for everyone's benefit, reforms that wouldn't have happened otherwise.

References

Caihol J et al. HIV-care integration attempt into a public hospital in Burundi. AIDS 2008, Mexico City, abstract

Kamoto K. Overcoming HRH bottlenecks for ART scale up in Malawi. AIDS 2008, Mexico City, abstract .

Lencha M. Increasing human resources for health: the Ethiopian experience. 2008 HIV/AIDS Implementors' Meeting, Kampala, Uganda.

Negusse H et al. Initial community perspectives on the Health Service Extension Programme in Welkait, Ethiopia. Human Resources for Health 5 (21), 2007.
Palmer D. Tackling Malawi's human resources crisis. Reproductive Health Matters 14(27), 27-39, 2006.
Tulenko K. Task shifting: how much does it cost? Is it cost-effective? AIDS 2008, Mexico City, abstract MOSY0906.

Further information

Further information on human resources for health initiatives is available from The Capacity Project, a USAID-funded project to build and sustain health workforces.

Other resources

Public Sector Unions Fighting against AIDS (PSUFASA) hosts a resource map on HIV/AIDS responses in the public sector in Southern Africa on its website. A comprehensive report on Malawi's Public Health Sector can be found on the PSUFASA website.

about HATiP

A regular electronic newsletter for health care workers and community-based organisations on HIV treatment in resource-limited settings.

The newsletter is edited by Theo Smart (Cape Town) and Keith Alcorn, NAM's Senior Editor (London).

For further information please visit the HATIP section of aidsmap.com

NAM publishes a wide range of publications on treatment for HIV. For details contact:

NAM, 77a Tradescant Road, London, SW8 1XJ, UK
tel +44 20 3242 0820 **fax** +44 20 3242 0839 **email** info@nam.org.uk **web** www.aidsmap.com