Country Case Study

ETHIOPIA'S HUMAN RESOURCES FOR HEALTH PROGRAMME

GHWA Task Force on Scaling Up Education and Training for Health Workers

World Health Organization

global health workforce alliance

SUMMARY

Ethiopia suffers from an acute shortage of health workers at every level, and rural areas, in which 85% of the population live, have been particularly chronically under-served. In working out the best approach to tackle health workforce issues, the Ministry of Health calculated that 60-80% of the country's annual mortality rate is due to preventable communicable diseases such as malaria, pneumonia and TB. HIV and AIDS are also growing concerns. They therefore chose to begin by focussing on community level provision, initiating the Health Extension Programme in 2004. This is outlined in the current Health Sector Development Plan (2005-10), which focuses on both human resource development and the construction and rehabilitation of facilities.

The Health Extension Programme aims to train 30,000 new Health Extension Workers (HEWs) to work at local health posts and to provide a package of essential interventions to meet needs at this level. To train the HEWs, a training-of-trainers approach was used: 700 faculty members were trained in regional workshops by 85 master trainers, and they in turn are now delivering the one-year course. A national network of 37 existing vocational institutes is being used for this purpose. Five thousand additional health officers will be trained by 2009; they will supervise the HEWs and provide more specialist care for those needing referral. Twenty hospitals are currently involved in hands-on training programmes for the health officers.

Some improvement has been observed in health indicators over the last five years, for example, infant mortality in 2005 was 77 per 1000, down from 97 in 2000. However, this can not be attributed to the HEWs because the first graduates of the programme were only deployed in 2005. More time is needed before their impact can be fully evaluated.

Scale-up is now being widened to include the expansion of pre-service education and training capacity for doctors and nurses. By 2009, Ethiopia aims to increase its annual medical student intake from 250 to 1,000, and to train an additional 5,000 health officers. The new St. Paul's Millennium Medical School, and medical faculties at Bahir Dar and Haromaya Universities, were opened in 2007 to assist with this. They will use an accelerated curriculum focussing on training doctors to meet Ethiopia's health needs.

In planning and implementing this phased approach to scale up, strong political leadership from the Ministry of Health, cross-government cooperation, financial support and effective collaboration with development partners has been essential. Due to uncertainties regarding financing, three cost scenarios have been modelled: one to fully implement the Health Extension Programme, one to increase the coverage of health centres and one to reach the MDGs.

Scale-up efforts include plans to strengthen Ethiopia's health system monitoring and evaluation. Incentive packages, career ladders and training are being included in the Health Extension Programme budget. Early evaluations have analysed HEWs living conditions, resources and supervision – all factors that affect the retention of the health workforce and therefore the maximising of returns on investment in education and training. Complementary efforts are being made to improve the management of the health system. Through the Civil Service Reform Programme regional authorities are developing health workforce management plans, and a simultaneous expansion of primary health care infrastructure is taking place to ensure there are enough posts to allow newly trained staff to enter the labour force.

INTRODUCTION

Ethiopia is a federal government, comprising nine regional states, two city administrations, 624 districts and 15,000 villages. Federal Ministry of Health (FMoH) data from 2006 showed that 85% of the population, or 77.3 million persons, lived in rural areas. It is estimated that 60% to 80% of the country's health problems are due to largely preventable communicable diseases such as malaria, pneumonia and TB. HIV/AIDS is also a growing problem.

A key part of the 20-year national health strategy, which dates from 1993, is the Health Sector Development Programme, which began to be implemented in 1997 and was in its third phase (HSDP III) at the time this case study was developed. The programme is focused on achieving the health-related Millennium Development Goals (MDGs), and on providing comprehensive and integrated primary care services, mainly at community-based health facilities. One of the programme's eight components is to expand the supply and productivity of health personnel.

Ethiopia is one of 57 countries in the world with a critical shortage of health workers. Federal Ministry of Health (FMoH) statistics for selected categories of health workers are given below:

The total number of available human resources for health and availability during HSDP II and 2nd year of HSDP III

Human Resources	HSDP II (2002/03-04/05)		2nd year of HSDP III (2006/07)	
	Total number	Ratio to population	Total number	Ratio to population
All physicians	2,453	1:29,777	1,806	1:42,706
Specialists	1,067	1:68,457	974	1:79,055
GPs	1,386	1:52,70	832	1:92,548
HOs	776	1:94,128	792	1:97,222
Nurses BSc, and Diploma	17,300	1:4,222	18,146	1:4,250
Midwifes (seniors)	1,509	1:48,405	1,012	1:76,086
Pharmacists	191	1:382,427	178	1:432,584
Pharmacy tech.	1,428	1:51,151	1,023	1:75,286
Environmental health workers	1,312	1:55,673	1,109	1:69,546
Lab technicians and technologists	2,837	1:25,747	1,816	1:42,400
Health extension workers (HEWs)			24,571*	1:3,134

Source: FMoH, HSDP III (2005) and Health and Health Related Indicators (2006/07)

* The HEWs figure is cumulative; at this stage 82% of the planned targets of training have been successfully attained.

THE HEALTH EXTENSION PROGRAMME

The Health Extension Programme is a government priority; it was developed and is being implemented by the Federal Ministry of Health in collaboration with the Ministry of Education. Implementation began in 2004 as part of the national health plan and is ongoing. It was initiated as a totally government-financed programme, demonstrating the commitment of the state.

The Health Extension Programme aims to improve primary health services in rural areas through an innovative community-based approach that focuses on prevention, healthy living and basic curative care. It, therefore, introduced a new cadre of health worker, Health Extension Workers (HEWs), and defined a package of essential interventions for them to deliver from village health posts. But HEWs are not the only focus of scale-up plans: the programme is also expanding the number of health officers (this cadre was stopped in the late 1990s) to provide clinical service in health centres and to play a leadership role at woreda, zonal and regional level, and at district hospitals, to meet demands in the community for higher care. The number of doctors is also being increased in recognition of the escalated demand for specialised care that will be created with improved access to primary health care services. More generally, the intention is to increase the number of all cadres across the board, including nurses, midwives and support workers such as lab technicians, pharmacy assistants and other paramedical staff.

Its specific goals are to:

- educate and deploy 30,000 HEWs by 2009 to achieve a ration of 1 HEW per 2,500 population
- educate and deploy an additional 5,000 health officers by 2009 (by mid 2008 4,068 were under training)
- increase the annual enrolment of medical students from 250 to 1,000 (some will be trained in a new accelerated course, and a target would be set for each category of medical student in the new national Human Resources for Health strategy).
- increase the ratio of midwives per population of women of reproductive age from 1:13,388 to 1:6,759
- expand physical health service infrastructure at the primary health care level by constructing or upgrading 15,000 health posts and 3,200 health centres by 2010.

Resources for the Health Sector Development Plan are being mobilized from a number of different sources, which have included the GAVI Alliance's Health System Strengthening window, the Global Fund to Fight AIDS, Tuberculosis and Malaria, The Carter Foundation, and other bi-lateral and multi-lateral donors.

EXPANSION OF EDUCATION AND TRAINING CAPACITY

Health Extension Workers (HEWs)

The first step was to expand the numbers of tutors, teachers and trainers and develop relevant and appropriate education materials, focused on Ethiopia's priority health problems. To find enough space for HEW training, better use was made of existing facilities, for example, using Technical and Vocational Education and Training Centres.

Female high school graduates are recruited and trained for one year (candidates must have completed grade 10 in school, need to be from the local community, and speak the local language). They are trained to deliver a package of 16 preventive and basic curative services that fall under four main components: hygiene and environmental sanitation; family health services; disease prevention and control; and health education and communication.

Graduates of the programme are deployed to health posts, and employed at the government scale for HEWs. The HEWs are accountable to and supervised by environmental health professionals and public health nurses

Health officers

Health officers provide clinical service at health centres and manage both the health centre and woreda health offices. An accelerated program of health officer training (generic and upgrading) began in 2005. Five universities and 20 hospitals are involved in the training program. By mid 2008 more than 900 had graduated, and 3,168 were under training.

To effectively and efficiently tackle the health and health-related problems of individuals, families and communities, health officers are expected to have the following knowledge and skills:

- assess community health needs
- plan, implement and evaluate activities and resources of the primary health care unit
- collect, organize and analyze health and health-related data from health institutions, communities and other relevant areas and utilize and disseminate the information to the community and other concerned bodies
- conduct and provide continuing education on the- job- training to the staff of the primary health care unit and community health workers
- provide a comprehensive outpatient care and in-patient services
- perform minor operative procedures
- refer difficult cases to the next higher level and follow up on their return to ensure continuity of care
- mobilize individuals, families and communities for health action
- promote and be engaged in inter-sectoral activities
- undertake essential and operational health research
- document and report all primary health care unit activities

Doctors

St. Paul's Hospital's Millennium Medical School opened in 2008 in Addis Ababa, and will train doctors using an accelerated programme focussing on local needs. At least 30% of intake will be from the poorest areas of Ethiopia, and at least 30% will be women. A new integrated curriculum to produce doctors fit for purpose in Ethiopia has been developed.

All schools with capacity for educating health workers are being encouraged to increase their intake of students wishing to pursue a career in the health services,

MONITORING AND EVALUATION

The Health Extension Programme has had some early 'quick wins':

- in 2003, 85 master trainers trained more than 700 faculty in regional workshops
- training texts (modules) for 65 diseases and health challenges and more than 100 lecture booklets have been developed
- the first group of 2,880 started training to become HEWs in January 2004
- thirty-seven existing vocational institutes in seven regions are training HEWs
- as of June 2007, more than 17,000 HEWs have been deployed and more than 8,850 Health Posts have been constructed.

While some improvement has been observed in health indicators since 2000, it is important to be cautious in interpreting and attributing improvements to HEWs, of which the first graduates were only deployed in the beginning of 2005. According to 2005 statistics, infant mortality was 77 per 1000 (down from 97 in 2000); under five mortality was 123 per 1000 (down from 160 in 2000); and DPT 3 coverage rose from 38% in 2000 to 80%.

Early results from areas where HEWs are deployed are encouraging: immunization, contraceptive use, and personal and environmental hygiene all appear to be improving.

Studies are in place to evaluate what motivates workers to accept and remain in hardship postings. A review of the first cohort of HEWs, deployed in 2005, illuminated some of the issues. Their income was considered reasonable by rural standards, but housing was not available to all HEWs. It was concluded that housing needs to be provided on or near the health post compound for all HEWs. The possibility of providing a small credit for acquiring essential commodities such as safe water and a toilet is being explored. Poor transport and communication were highlighted as problems, and possible solutions are being investigated. A lack of guidelines for structuring time use, transfers, annual leave and career progression was also noted, and these are being developed. The aim is to keep a responsive organisational structure with participatory planning throughout.

LESSONS LEARNT AND POLICY RECOMMENDATIONS

The Health Extension Programme is still in a relatively early stage and further research and evaluation is needed, but some early observations are:

- Strong leadership from the Minister of Health and the active support of the Prime Minister is a key success factor.
- The first visible result of the Health Extension Programme was the speedy deployment of a massive number of HEWs, but educating and training the entire range of cadres has been the intention of HEP from the beginning.
- There are no clear guidelines on their relationship with other health workers at the community level, or on career structures, transfers, leaves of absence, etc.
- Reporting and health management information systems in general are weak; work is being done to strengthen them.
- Early success in the speedy scaling up of HEWs has made it easier to gain donor support for more costly plans to scale up doctors, nurses and midwives.

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Launched in 2006, the **Global Health Workforce Alliance** is a partnership dedicated to identifying and implementing solutions to the health workforce crisis. It brings together a variety of actors, including national governments, civil society, finance institutions, workers, international agencies, academic institutions and professional associations. The Alliance is hosted and administered by the World Health Organization.

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