One-quarter of Ethiopian children die before they reach the age of five, most of them from infectious diseases. Their deaths can be easily prevented with adequate medical supplies and treatment. But these are scarce in a country afflicted by poverty, drought, and civil unrest.

Only one-third of the population has access to any health services and in the rural areas, health spending amounts to only 30 cents US per person a year. Ethiopian authorities, however, have been working with Canadian physicians to improve the country’s health care system. The project is helping the Ethiopian government to implement a strategy of primary health care by building a core group of people trained in district health management.

The initiative is a joint effort of several Ethiopian institutions — the Ministry of Health, Addis Ababa University, the Jimma Institute of Health Sciences, and the Gondar College of Health Sciences — and McGill University in Montreal, Canada. The World Health Organization (WHO) and UNICEF are also participating in the project. IDRC and the Canadian International Development Agency have provided funding since 1987.

The Ethiopian government has recognized that the development of effective primary health care depends on a decentralized system of health management and community-oriented medical research. Through the establishment of post-graduate degrees in public health, an accelerated six-month program for district health managers, and overseas fellowships, the project is training health professionals to work in Ethiopia’s 359 awrajas (districts). "You can’t promote self-help care if you are physically and culturally far from the people," says Dr Miriam Were, WHO representative and Chief of Mission in Addis Ababa, “especially in a country with so many climates, races, and traditions. The district managers will be the ones to link the system to the people, stimulate community involvement, and draw the pieces of the puzzle together."

WORKING GRADUATES

Physicians with two years of experience working in rural areas are eligible for enrolment in the training programs. Already, 38 students have received their masters degrees and 131 have graduated from the six-month program. Most of the graduates are working as district health managers. One of the first students, Dr Mentesinot Yohannes, wrote his thesis on byssinosis, a respiratory illness associated with the inhalation of cotton dust. His research resulted in measures to reduce respiratory diseases among textile mill workers.

District health centres now serve about 40% of the country. Each district...
A health worker is ready to depart on a mobile immunization program.

manager is responsible, with his or her team, for implementing primary health care strategies and co-ordinating health resources in the district. Rural clinics are rudimentary and minister to the most basic of needs. Often, a manager's first priority is to convince local leaders to build latrines or to join aid workers in protecting sources of drinking water from becoming contaminated.

Dr Mesfin, one of the students, is health manager for the Suluta district, a fertile, wheat-growing plateau north of Addis Ababa. His domain comprises a daunting 1,164 sq km with 129,000 inhabitants. The health care infrastructure — consisting of a health centre with about 12 support staff, three stations run by health assistants (high school graduates with 18 months of training), and eight health posts staffed by community assistants with three months of basic training in first aid and hygiene — supports only a quarter of the villages in the district.

Once a week, Dr Mesfin works on his thesis — a field trial of three kinds of oral rehydration therapy. He is comparing two pre-packaged solutions and a homemade remedy to find out which is the most effective in treating diarrhea. The homemade treatment of cereal and salt has so far given the best results. His research involves distributing questionnaires (and often grain, milk, and kerosene owing to the scarcity of transportation) in 12 villages. There, he has set up oral rehydration therapy corners and provides training to explain how the therapy works. Education is a large component of a health manager's work. Many people believe that diarrhea is caught from the evil eye and can only be cured by pulling teeth.

VISIT STUDENTS

Once a month, if they are able, project physicians based at Addis Ababa University visit the field to supervise students' research and to discuss management problems. Dr Joyce Pickering of McGill University, the project director, is in Hara, 19 dusty kilometres east of Addis Ababa, to see her student Dr Filimona. He is studying the sexual behaviour and attitudes of local high school students. The number of illegal abortions has doubled among this group in three years. This rate makes abortions the second most common cause of hospital admissions in the area. He hopes his study will make the community more sensitive to the seriousness of the problem.

Dr Pickering gets Dr Filimona to ask the staff many questions about what they are prescribing, how they are compiling data, and whether they know how to plot graphs. "This follow-up is essential," she explains, "but it must be instigated by the students. I try to make them more systematic and realistic, and to give them back the initiative they seem to lose under totalitarian regimes. The impetus must come from them."

Dr Pickering says that the Canadian doctors are teaching systems, such as those for managing patient flow and for the collection and interpretation of data. There are no records in rural Ethiopia, not even of births and deaths. Appropriate education and the effective distribution of medicine depends on the availability of basic data on health habits and common diseases.

To this end, the project brought over a medical librarian to help her Ethiopian counterparts learn how to
organize their books and circulate them more efficiently. Students had hoarded books because of the scarcity of texts. Now, computers and CD-ROMS have given them access not only to abstracts but to entire medical texts. The students are able to plug into a global network of information that will help end their isolation.

STANDARDS IMPROVE

The project doctors are starting to see a difference in health standards between those districts with health managers and those without. The students' work during the meningitis epidemic of 1989 also demonstrated the program's success. When the epidemic broke out, about 18 students who were nearing the end of their training were sent out to the field, along with graduates of the program. They set up treatment sites and distributed vaccines. Over a two-month period, about six million children were vaccinated under difficult conditions. "An early test of the program's effectiveness was the rapid response of the nearly finished masters students and their ability to adapt quickly to the crisis and set up a response to it," says Dr Charles Larson, of McGill University, who was then the director of the project. The epidemic also underscored the urgent need to bring health care closer to the people.

The steady work of project members throughout the upheaval of the May 1991 coup earned them the respect of the current regime. When the government of Mengistu Haile Mariam fell to rebel forces, everything stopped — technical support was withdrawn, aid was frozen, even emergency supplies were not getting through because of looting and fighting on the roads. But when the airport opened six weeks after the coup, the team of McGill physicians was back. Dr Pickering says she and her family would not have left at all if the Canadian Embassy had not insisted on their departure. "I couldn't imagine deserting my students at such a crucial time," she says.

There has been some opening up of the country since the new government assumed power. People are no longer afraid to talk freely about politics and educated Ethiopians are coming home. The project's first overseas fellowship students have completed course work at McGill and are back in Ethiopia doing their thesis research. But the health system won't be entirely self-sufficient until the economy is revived so that drugs, books, and computers can be bought and staff can be maintained.

In the interim, what is needed is both practical and moral continuity. "The gift of the Canadians has been their personal support," says WHO's Dr Miriam Were. "Material and financial support is important but in times of instability, it's just very nice to have a hand you can hold."

Wendy Penfield in Ethiopia

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