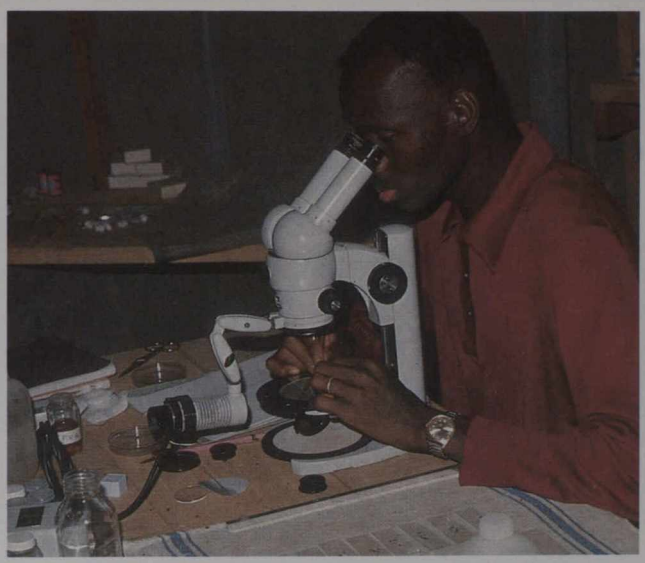
Home Grown

There are 2.5 million medical doctors in the world — one for every 1,250 people — but they are not spread around evenly. In Israel and the Soviet Union there is a doctor for every 400 people; in many other places there is less than one for every 100,000. In the last 20 years, while the number of doctors in the world has grown, the contrast has become greater. In Africa there is, statistically, a doctor for every 7,000 people; but most are in cities, and vast rural areas have none.

Disparities in services match disparities in health. Average life expectancies vary from 30 to 75 years, and the death rates of children in the poorest countries are a hundred times as great as those in developed countries.

The problems are formidable. Doctors cannot be trained fast enough to match population growth and to bring the ratios in Africa, Asia and South America up to the North American or European levels. Highly educated doctors are seldom willing to serve in deserts, rain forests and isolated villages.



The IDRC supports health and research programs conceived and pursued by scientists in Third World countries. In this picture an Ivory Coast researcher works on black fly control. The fly carries onchocerciasis, which causes blindness.

There is, however, a practical solution. In an IDRC booklet called *Doctors and Healers*, Alexander Dorozynski suggests we often assume that the western medical system is the only effective one. Most deaths of children in underdeveloped countries, he notes, are caused by respiratory infections — pneumonia, bronchitis, bronchiolitis, otitis media, croup, tonsilitis and the common cold — or by diarrhoea and these diseases can be recognized and treated by locally trained medical auxiliaries. Such auxiliary systems were once widespread but have now declined.

India's old system of auxiliary schools offered four years of medical training to high school graduates. The system appeared to value the lives of the colonial elite (who were treated by properly certified physicians) more than the lives of the ordinary natives. It fell into disrepute when independence came.

The auxiliary schools were replaced by fully accredited medical schools, and the number of certified physicians rose while the number of auxiliaries declined. There was, however, no corresponding improvement in general health. Most of the new doctors were unwilling to practice in small, poor, isolated, ill-equipped villages; and many could not find appropriate practices in the cities. A great many Indian doctors emigrated to the already well-cared-for western nations. As Margaret Mead pointed out, "the introduction of medicine has meant a loss of faith in the known, and when the new medicine proved too expensive, people found themselves without any medicine."

The IDRC is now encouraging auxiliary projects around the world. Community people — the mayor, the traditional medicine man, any person of good sense who commands respect — are trained to recognize and treat pneumonia with simple means — sulfonamides and antibiotics. The most dangerous consequence of diarrhoea, dehydration, is easily recognized and can be coped with, even within the family. In Papua, New Guinea, medical auxiliaries, by treating dehydration, have reduced mortality from diarrhoea to the rate of about one per cent — matching the average in many hospitals.

Auxiliary systems, each adapting the traditions, opportunities and skills of the particular place, are in use in Iran, Sudan, Afghanistan, Algeria and many other countries. In Brazil women who cannot read or write give injections and perfusions at "rehydration centres." Using simple equipment — a needle mounted on a tube connected to the infusion set and a razor blade to shave the scalp when necessary — they have reduced deaths from dehydration in isolated villages to two per cent.

On the high plateau of Chimaltenango, above Guatemala City, health promoter Pedro Chacach, 35, treats patients for 25 cents each. His office is part of his home, a stone and mud house with an earth floor. He speaks, reads and writes the native dialect, his own, and Spanish. In three months of instruction he learned to recognize and treat the common diseases. There are 50 health promoters among the 200,000 plateau Indians. The system is linked to ten separate health care delivery systems that have been started in Guatemala. One program gives two years of training to "rural health technicians," who are then assigned as middle men between the health promoters and medical doctors.

The most spectacularly successful auxiliary system has developed in China without any direct aid from the West; although an unusual Canadian doctor played a pioneering role when he taught Chinese teenagers battlefield surgery in the late 1930s. The broad medical care auxiliary program was developed in the 1950s, when the teaching and