Communicable diseases, health systems and humanitarian aid in Africa

by Antoine Degrémont

What is the present situation, what are the lessons to be learned and what strategies should be adopted in the field of communicable diseases? These are the issues now facing us, some 15 years past two milestones in the evolution of health care: the Alma Ata Declaration on primary health care and the discovery of the last case of smallpox worldwide. The present article will attempt to address these issues, on the basis of the experience of the Swiss Tropical Institute in Africa.

The current situation and its main determinants

There has been no recurrence of smallpox, so it may be considered to have been definitively eradicated. Onchocerciasis and sleeping sickness have ceased to be major public health hazards. There have been no large-scale yellow fever epidemics, and a simple and cheap treatment (oral rehydration solutes) for infectious diarrhoea has been developed and brought into use. That is practically all that can be said on the "asset" side, bearing in mind the resources available in the health sector in Africa.

Conversely, on the "liability" side the list grows ever longer, giving little reason for optimism. In the first place, AIDS has made its appearance and has spread at an astonishing pace, first in Central and East Africa, where it has wiped out whole sectors of the active population, leaving countless children orphaned. The disease has progressed more slowly in West Africa but has proved equally devastating. The ineffectiveness of control programmes, together with social and cultural constraints, has hampered and continue to hamper prevention efforts. At present it is impossible to predict when the spread of AIDS will be halted in Africa,

or even to foresee its socio-economic and cultural repercussions by the year 2000, except to say that they will be calamitous.

Malaria continues to be just as prevalent and as lethal as in the past, if not more so, since resistance to antimalarials has appeared and spread very rapidly. It is only owing to the semi-immunity that develops after repeated bouts of malaria — at a high cost in terms of infant mortality — that chloroquine has retained some degree of effectiveness and is therefore still the treatment of choice. Other antimalarials are too costly for large-scale use, and new medicines or vaccines are unlikely to reach the market within the next ten years. The only reliable means of mass prevention in areas where malaria is endemic, and especially where transmission is seasonal, therefore remains the use of mosquito nets impregnated with insecticide.

Apart from schistosomiasis, and to a lesser extent intestinal worms, the other so-called "tropical" diseases are not priority health problems. For several years a campaign has been under way to eradicate dracunculiasis, or guinea-worm disease, which is disabling and in theory easy to prevent. The campaign was recently revived, but has maintained the "vertical" approach*, as the disease in question is one of the few that are easy to eradicate if one is prepared to pay the price.

Cholera, meningitis and even measles are still causing deadly epidemics. Poliomyelitis remains endemic and incapacitating in Africa, although it has been all but eradicated from the American continent. Tetanus is still frequent, particularly among newborns. Methods of preventing these infectious diseases (early rehydration or vaccination) are admittedly not always fully effective, and as we shall see later much of their effectiveness is lost at the application stage.

Tuberculosis is a major health problem in Africa. With the AIDS pandemic, which contributes to the spread of tuberculosis, and resistance to drugs, it is again on the increase and there is no prospect of a reversal. Alongside malaria and diarrhoeal diseases, infections of the respiratory tract are one of the leading causes of death and incapacity, a fact that is often overlooked.

For a variety of reasons, the public health services of several countries have also deteriorated over this 15-year period. The global primary health care strategy relying on community health workers has not come up to expectations, because it is ill-adapted to socio-economic realities and, to

* The term "vertical" denotes approaches and programmes that focus on one specific disease and are poorly integrated in the activities of peripheral health services.

a large extent, because its implementation and supervision call for more time and resources than envisaged at the outset. Very rapidly an alternative, selective strategy was adopted by the international organizations during the 1980s, entailing the launching of many "vertical" programmes (immunization, maternal and child care, control of priority diseases, etc.). These were often in competition with each other and were never properly integrated into peripheral health structures. In contrast to other continents, Africa, for instance, had by 1990 not only failed to attain the targets of the WHO/UNICEF Expanded Programme on Immunization launched during the previous decade, but is now seeing immunization coverage fall to alarmingly low levels in many countries. Courses of action that worked on other continents have proved unsuited to Africa, and the relevant lessons should be learned from this experience.

While national referral hospitals have been able to maintain standards to a certain extent by consuming a large portion of health resources, district hospitals have become dilapidated and are often unable to fulfil their role as places of first referral. Hospitals run by non-governmental organizations have frequently been incorporated into national health networks, but they too often remain oversized and/or fail to mesh properly with the peripheral services.

In addition, there is the growing tide of migration, mainly to the towns which, because their infrastructure has been neglected over the past 30 years, can no longer provide adequate health services, and where sanitation levels are often deplorable.

Fortunately, the new trends that emerged at the beginning of the current decade give grounds for some optimism, as they focus on decentralization of responsibilities and of decision-making, as we shall see later.

The Swiss Tropical Institute (STI) and health development

During its first 40 years of existence, that is, up to 1983, the STI built up its expertise in research and training in the domain of tropical diseases. As the same time it constantly endeavoured to ensure that the fruits of its work were "re-exported" to developing countries, chiefly by training Swiss health personnel assigned to work in those countries and by training Tanzanian nationals at the Ifakara Centre.

The Ifakara Centre has been of capital importance to the STI, not only because it enabled the Institute to acquire experience, as we just saw, but also because it offered STI staff an opportunity to gain first-hand knowledge of a new setting, a new culture and the problems of development. In the early 1980s the Centre was still the STI's "field laboratory" and

local staff had taken over teaching responsibilities. The STI then turned its attention to applied research — on a long-term basis this time, rather than maintaining the ad hoc approach followed up to then — determined by local needs. In addition to studies on schistosomiasis and malaria control, new areas of research were introduced, such as the aetiology and treatment of diarrhoea and anaemia, how to deal with malnutrition in children, community diagnosis, etc. Despite additional technical and financial support provided to the local health authority, the transfer of the results of this research to the health services was at times less than satisfactory. This led the STI to opt for less costly methods of diagnosis and evaluation on the one hand (1)**, and, on the other, to undertake studies on the functioning of the health services, with special reference to their cost and quality (2).

At the same time, steps were taken for the phased integration of the Ifakara field laboratory (strengthening of local capabilities, decentralization of management, diversification of funding). In 1990 this laboratory became known as the "Ifakara Centre" and is now a branch of the Tanzanian National Institute of Medical Research (3). Its areas of research range widely, from field testing of a potential malaria vaccine to studying the interface between health services and users in terms of the perception of health problems and of the quality of services provided. The Centre is becoming increasingly autonomous, while maintaining close ties with STI.

It was from the late 1980s that the STI really became involved in health development cooperation, no longer in the spheres of research and teaching alone, but as an implementing agency for projects of the Swiss Development Cooperation agency. The first project was launched in Chad, where the STI is providing support to strengthen and develop health services in two socio-medical districts, including the one in which the capital N'Djamena is located, and the second in Tanzania, where since 1990 the Institute has been implementing a similar programme in the Dar-es-Salaam region. Lastly, since 1994 the STI has been involved in health-related environmental management. It is running two new programmes launched by the Swiss National Fund for Scientific Research, one in Burkina Faso, concerned with the impact on health of market gardening in urban areas, and the other in Chad, on community responsibility for dealing with environmental problems.

With its wealth of experience and mindful of its responsibilities both in the Third World and in Switzerland, the STI has in recent years developed a certain philosophy of health development and of its own

** Figures in brackets are to the references at the end of the article.

development. It has consequently become more geared towards international health programmes and partnership arrangements for the following reasons:

— Health development concepts and strategies are not universal and should therefore be adapted to the cultural, political, socio-economic and even biological specifics of individual countries. They may stand up well or prove a complete failure when tested in one or another system, and the pertinent conclusions should be drawn, even in the case of industrialized countries.

— The origins of and solution to health problems are to be found within the different complex and closely interlocking systems and subsystems. A methodical approach is therefore called for that pays particular attention to the interface between systems; this will entail not only multidisciplinary, but above all inter-disciplinary teamwork.

— Changes to any health system must come from the local communities themselves if they are to be sustainable, and must not be imposed by foreign systems. Development cooperation must therefore be strictly limited to the provision of services or support to projects run by local communities, organizations or institutions. This will imply structural and attitudinal changes on the part of financial backers and their implementing agencies. Foreign technical assistance must also take the form of equitable partnership. This philosophy and these new approaches are gradually being implemented in Basel, as well as in Chad and Tanzania (4).

What role and strategies for the humanitarian organizations?

For a variety of reasons, our concern centres on prevention of emergencies and ensuring better community response should they occur. The example of the wolf sparing his vanquished fellow should prompt us to reflect beyond what the remarkable International Red Cross and Red Crescent Museum shows us. Would the wolf act in the same way in the absence of a social structure, outside that structure, or if it had been destroyed?

Three considerations should be central to our thinking in this connection:

— Adequate means do exist for reducing the morbidity caused by priority communicable diseases. The problem is first and foremost one of implementation, especially among the most needy population groups.

There is no shortage of documents and handbooks on these approaches and techniques, especially at the World Health Organization, but they are not circulated widely enough and are therefore under-utilized.

— The new health development strategies give priority to cost-effective investment, improving the quality of health care through healthy competition between public and private sectors, decentralization to the medical district or region, and involvement of local communities in covering the cost of their own health care (5). These strategies should in principle reduce inequalities and facilitate health projects, but they may very well fall short of expectations, especially in terms of appropriateness to local conditions.

— To have a lasting effect, communicable disease control measures must be integrated harmoniously into peripheral health activities — not only services but also families, communities and their internal structures, both traditional and modern. Non-governmental organizations (NGOs) and local associations have played and will continue to play a pivotal role in this process. Their diversity and often their lack of professional management skills are drawbacks, but these may be regarded as assets when it comes to innovation and effectiveness.

For the purposes of its development and in reviewing its priorities, each institution should take stock of its own comparative advantages so as to optimize its effectiveness and complementarity. In this connection, National Red Cross and Red Crescent Societies are often among the oldest, best known and most highly organized of the local non-denominational NGOs. We believe that by departing from the beaten track, taking account of local circumstances, adopting clear-cut objectives and placing their experience and resources at the service of local associations, these Societies have an enormous potential contribution to make to health development.

To enhance motivation and to ensure that their initiatives have a lasting impact, they should have a wider "mission" as well as local objectives. The mission is obvious enough — caring for displaced persons and for those in greatest need in material, physical and spiritual terms. Naturally, the objectives have to be set locally on the basis of a consensus and must take the country's socio-economic and cultural particularities into account. The International Federation of Red Cross and Red Crescent Societies should play a guiding role and serve as a clearing house for ideas and experiences.

Accordingly, we offer only some unstructured ideas, all of which we feel would slowly but surely help mitigate the impact of communicable diseases:

— identify people excluded from and/or overlooked by the health services, arrange for them to receive health care and monitor their cases;

— study migration to urban areas and promote the social integration of migrants and their inclusion in health care systems; facilitate the resettlement in rural areas of those wishing to return;

— support local associations working to improve health and the environment, for instance by assisting them in management and fund-raising, providing them with moral support if necessary, or helping to organize them into a federation if that would strengthen their activities;

— promote the dissemination and adequate use of health education material among families and communities, evaluate its impact and help to improve it;

— by the same token, ensure the regular circulation to the peripheral health services of key technical documents that often never go further than the central services;

— put across "messages" concerning the health and the problems of the most needy groups both to the periphery and to the centre and/or take initiatives to make the more privileged groups aware of inequalities in the domain of health.

These aims, which are mainly promotional in character, call for new capabilities, new motivation and a change of attitude. Indeed, it is more a matter of stimulating action than doing things for others, of encouraging others to associate among themselves rather than associating on their behalf, of prompting others to mobilize rather than mobilizing in their stead. Hence, for example, in the event of an epidemic or a major disaster, the yardstick of efficiency would no longer be the number of volunteers or mobile Red Cross or Red Crescent teams engaged in combating its effects, but rather the extent to which local communities and associations effectively participate in the operation with the support of the National Society.

Volunteer work should continue to exist, albeit alongside a core of true professionals with experience of social and medical programmes. The socio-economic aspect, including the sociology of organizations, would seem to be most crucial as it is still a frequent weak point of health systems. An approach of this kind would call simultaneously for a permanent process of internal evaluation and for research activities. The latter should of course focus exclusively on operations and action and should give preference to participatory methods of research conducted both with communities ("popular research") and with universities. National Societies could thus serve as a link between health systems and the poorest population groups on the one hand, and between university scientists and "popular" researchers on the other.

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