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Top: The volunteers warm up their young audience before the puppet show begins.

Right: "Don’t miss it!" say the handwritten posters at the Youth Integration Centre in Mexico City.

Below: Rapt attention from the young audience. The message will not be lost on them: “No to drugs.”

Photos WHO/S. Farkas
Puppets versus drugs

Mexico’s Youth Integration Centres are tackling drug abuse within the community itself, in the conviction that only if the community is involved can it become responsible for its own health

by Edith Massün

Centros de Integración Juvenil (CIJ) is a health-sector institution that was started in Mexico city in 1970 specifically for the prevention of drug abuse and the treatment and rehabilitation of drug-dependent persons. It is one of the largest specialised centres in Latin America, with over 16 years of field experience. There are now 32 local Youth Integration Centres sited at strategic points around the country, generally in the most densely populated towns. They employ a regular staff of some 600 and several hundred volunteers.

CIJ’s somewhat unconventional organizational structure ensures that it is in constant touch with the needs of the community and, at the same time, gives its managerial and professional staff the necessary stability of tenure. Though officially recognised and subsidised from the federal budget, CIJ does not come directly under the government; it is a civil association, directed by a “National Board of Management” on which sit members of the community. This system also obviates one of the problems that beset many Latin American Institutions: the replacement of their managerial staffs with every change of government or administrative re-shuffle.

The structure of the CIJ reflects its approach to drug abuse. It defines drug abuse as a public health problem symptomatic of individual, familial and social stresses; and to resolve it will call for the active participation of the population. The mere fact of belonging to a social group or milieu in which drug abuse is a problem implies that each of its members shares some responsibility both for the genesis of the problem and for its solution. Only to the extent that society involves itself in tackling the problems that affect it will it be possible to solve them. Intersectoral coordination and community involvement are two essential guiding principles in the prevention and treatment of drug dependence, but few institutions manage to put them into practice.

I asked the Medical Director of CIJ, psychiatrist Raul Zapata, how he gets the community involved.

He told me: “It is a whole process that begins with informing and alerting opinion, continues with a guidance phase, and culminates at a more complex level of in-depth action which is the training phase. The most complex part of this process is training prevention officers, (who include heads of families) so that they can guide their children, and training health officers who are in touch with the community so that they can identify those at risk and help those who already have a problem.

“Few people ask what is the reason for drug abuse and what can be done to prevent it,” says Dr Raul Zapata, Medical Director of the Youth Integration Centres.

The idea is for them to be strategic elements of the community who are progressively sensitised to the drug abuse problem and in turn generate awareness by a ‘snowball’ effect. Parents who are conscious of the problem will influence not only their own child but others too; a teacher will influence a new group of pupils each year....

Our objective is to have people forming completely self-run groups that can design their own preventative programmes within their own communities.”

It often happens that certain people use the information they receive to launch out into alarmist or sensationalist anti-drug programmes, which can do more harm than good. Many people in Latin America want to combat “drug trafficking” without knowing how to distinguish between trafficker and consumer, delinquent and sick person. I asked how such misdirected initiatives and counter-productive activities could be avoided.

Dr Zapata replied: “It is true that people always prefer to involve themselves in ‘blitzkrieg’ campaigns (with slogans like ‘Let’s fight the drug traffickers!’) rather than committing themselves to serious, longer-term activities. It is also true that the drug scene fascinates the public. Everyone wants to know about their effects, but very few ask what is the reason for drug abuse and what can be done to prevent it.

“The information meetings or talks we start with serve as an initial ‘screening’ to show us who it is possible to work with. Mostly they are people already with a high level of awareness, concerned for the welfare of their group: community leaders, social workers and so forth. We know that a group is ripe for us
to ‘set it loose,’ and even to support it with our entire infrastructure, when its members really understand that drug abuse cannot be prevented by taking the easy path of ‘yellow’ journalism or trying to lay the blame upon others.

"In addition to the trained volunteers from the community, we make a point of including young assistant teachers (students of psychology, social sciences or social work) in the preventive activities. This not only saves staff resources, but it is also in keeping with the philosophy of our institution."

In a country as large and heterogeneous as Mexico, with 18 million people in the capital alone, how far can the Youth Integration Centres go in this "social mobilisation" against drug abuse?

"The problem of drug abuse is so complex that no single institution can take on the whole gamut of activities that are needed," said Dr Zapata. "We must see to it that all the other institutions do something, each in its sphere of competence. We constantly try to involve other agencies in our programmes, particularly the Ministries of Health, Education and Labour, but at the decision-making level so as to have all the necessary support."

A visit to one or two of the 32 local CIJ centres can only give an incomplete impression of a whole gamut of activities that are conducted daily on and off the institution’s premises. The CIJ’s work ranges from scientific research on drug abuse problems, through preventive programmes and treatment and rehabilitation of drug dependent persons, to continuous training of volunteers and of its own regular staff. Every local centre carries out all the phases of comprehensive care for those with drug dependence problems, from the patient’s admission, diagnosis and treatment by various techniques or therapeutic and rehabilitative approaches, to family guidance. And the staff also go out to meet the community: their regular activities include talks to inform and alert opinion, street theatre and puppet shows given in the schools.

A mother cries as she struggles to understand the pressures that have led her son to abuse drugs.

At the Southern Centre in Mexico City, the psychologist S. Cisneros was getting ready for one of the daily guidance sessions for the families of drug dependents. "Here we bring together the closest relatives of patients who are undergoing individual treatment at the centre," explained Mr Cisneros. "With family members, the primary objective is to lessen their anxiety and then to change their idea of what drug dependence is. Because generally they individualise it: to them the problem is the child who takes drugs. They don’t understand that it has to do with the social and above all the family environment. We have to analyse with them their own attitude towards the problem."

The mother of "Tonito" (aged 14) is a 46-year-old peasant woman who has brought up her 11 children alone. Obviously this is the first time in her life that she can talk about her problems and her doubts to someone who really listens. "My husband never had time to help me about the house... When Tonito had the accident as a little kid..."

The psychologist listens and asks questions only to set her thinking: "And how do you feel about it? Is there anything more you can do?"

After an hour and a half, Tonito’s mother begins to understand her son’s problem better and feels there is something she can do to help him. She agrees to come back next week and report on what she has been able to achieve.

The Netzahualcoyotl Centre is in an outer suburb where two million people live in deprived conditions. There I witnessed one of the most interesting outside activities conducted by a particularly dynamic team. The object of the exercise was to convey a preventive message to children at one of the local primary schools through the medium of puppet theatre. The play, entitled "The Champions" and written by the Medical Assistant Director of CIJ, is about abuse of pep pills and tranquillisers.

Four children are getting ready for a race. One takes some pills to overcome his fear, another to feel stronger and thus beat the others. The race begins—but one of them falls asleep before even starting to run, and another has a terrible headache and has to stop in the middle of the race. The winner is Gustavito, the only one who has
The CIJ team (including several volunteers) arrive at the school in the middle of the break. They start getting the theatre ready and putting on make-up in front of the children so as to attract their attention. The drawing power of the show for the children never fails! In a minute they are all around the team watching the preparations and asking questions. As the event has been publicised in the district by posters, some of the schoolchildren's neighbours and parents also arrive, with their smallest children in their arms.

During the performance the children are not just passive spectators; they are constantly invited to participate. The puppets address them, ask what they think about what is happening on the stage and make them take part in the action. Fascinated, the children readily forget what they are watching is only a play and take it for a real-life happening. When they are asked which of the four main characters they would most like to resemble, they all shout in unison: "I want to be like Gustavito, so as to win!"

Clearly, the preventive message "came across" and reached those it was intended for much more surely—and probably to more lasting effect—than if they had merely been passive recipients of a lecture on the dangers of pills. When the play is over, another surprise awaits them: the puppeteers suddenly appear before the audience, each holding his or her marionette. They make them move and talk, inviting the children to come and visit them at their district CIJ centre, where they will teach them how to make puppets and act plays with them. This way of publicising the centres never fails, because it appeals to the children through an activity that really pleases and interests them.

The puppeteers are already packing up their gear and removing the white grease-paint from their faces, but the children are still clustered around them, hoping they won't go away just yet. Once their interest is aroused, questions and doubts pop out from their little heads like sparks and demand answers. The first step has been taken towards initiating genuine preventive education with these children.

Access to comprehensive information is a prerequisite for sensible action and policies about drug misuse. It was this basic principle that underlay the founding, in 1968, of the Institute for the Study of Drug Dependence (ISDD) in response to the United Kingdom's first wave of public concern about drug abuse in the 1960s. Over the years the Institute has provided valuable advice to WHO on a variety of technical issues in this field.

Apart from its publications, the resources of ISDD are not generally available outside the British Isles, but the Institute is carrying out a computerisation programme which will make its library accessible on a more international basis.

This library is now one of the largest and most comprehensive collections of scientific, academic and other documents on substance abuse in the world, numbering some 40,000 articles and books. The indexing system is unusually heterogeneous and multi-disciplinary. An end-product of this work is ISDD's "Thesaurus of Indexing Terms", already available in English and Spanish, with a Portuguese version in the pipeline and a prospect of a French version later. This indexing tool enables material to be retrieved from the library on any topic; when eventually the library database is transferred onto computers, it will be accessible to researchers and information-seekers outside the UK.

Besides the library's facilities, ISDD has an experienced professional information staff who deal with some 8,000 individual enquiries each year, ranging from school and university students for help with essays and theses to requests from policy-makers and researchers for material relevant to their current interests. The needs of the latter are also catered for by the monthly publication of selected abstracts of the library's latest acquisitions, selections from material published in the UK press, and a listing of all documents and books added to the library each month.

Wider dissemination of information on drug misuse is achieved through a comprehensive range of booklets and brochures aimed at particular audiences, such as social workers, schoolteachers, parents and family doctors, whose occupations bring them into contact with drug problems. The library ensures that these publications present an up-to-date and balanced account of the facts of drug misuse, while ISDD's journal Druglink is available internationally and serves to keep its readers abreast of developments in UK policy and practice on the misuse of drugs.

ISDD's Research and Development Unit aims to support the growth of knowledge and competence among those who work with drug problems. It concentrates on social research in the areas of prevention, evaluation of education and social work, and development of tested training and teaching methods and materials.

ISDD seeks to be a credible source of information and support to everyone concerned with drug misuse. It therefore takes great care to remain independent from government (though it does receive some of its finance from the UK government) and from any faction, and generally refrains from expressing opinions on issues of drug policy. The Institute, based at 1-4 Hatton Place, London EC1N 8ND, is of potential interest to other countries as a model institution to support their national response to the misuse of drugs.
The global AIDS situation
by Jonathan M. Mann

When the Acquired Immunodeficiency Syndrome (AIDS) was first recognised in 1981, it appeared that the disease was limited to a single country and to a single risk group. In fact, even in 1981 this was not true. Now, as a result of a series of national and international research efforts during the past several years, the global scope and magnitude of the epidemic of human immunodeficiency virus (HIV) is much clearer. We now see that the HIV epidemic is an international health problem of extraordinary scope and unprecedented urgency. We also recognise that due to the particular features of HIV infection, the entire range of health sector activities must be aware of and must respond to HIV-related questions and problems.

As of December 1982, only 711 AIDS cases had been reported from 16 countries. However, by 26 February 1987, 41,919 cases were reported to WHO from 91 countries, representing all continents. Reticence in reporting of cases from some areas, combined with under-recognition of AIDS and under-reporting to national authorities, has meant that the number of reported cases represents only a fraction of the total cases to date. WHO considers the number of countries officially reporting cases to be more indicative of the geographical extent and more relevant to an assessment of the scope of the HIV pandemic than the number of reported cases.

The Americas: Of the total of 34,195 reported cases, 90 per cent (30,632) were from the United States, where the "classic" epidemiology of the disease was first described. In this "Western" epidemiological picture, homosexual and bisexual men and intravenous drug users are primarily affected, along with smaller numbers of blood transfusion recipients, haemophiliacs, children of infected mothers, and heterosexual partners of infected persons. In the United States, an estimated 1.5 million persons are infected with HIV. The US Public Health Service has predicted that some 270,000 AIDS cases will have occurred in the United States by 1991, most of these new cases emerging from the large group of already infected persons.

Other countries reporting substantial numbers of AIDS cases in the Americas include: Canada (873), Brazil (1,012), Haiti (785), Mexico (249) and Trinidad and Tobago (108). A further 27 countries have reported from 1 to 69 cases.

Europe: Europe has reported 4,590 cases from 26 countries. The largest numbers of AIDS cases were reported from France (1,253), the Federal Republic of Germany (875), the United Kingdom (686) and Italy (460). Other countries reporting 100 or more cases included: Belgium (207), Denmark (131), the Netherlands (218), Spain (242) and Switzerland (192). Twenty cases have been reported from Eastern Europe; Bulgaria is the only country reporting no AIDS cases. As of 30 September 1986, 71 per cent of adult cases of European origin were homosexual or bisexual men, 13 per cent were heterosexual intravenous drug users and three per cent were homosexual men who were also intravenous drug users.

Most countries in Europe are now experiencing an epidemic of HIV infection. Current estimates of the total number of HIV-infected per-
sons in Europe range from 500,000 to one million or more. Based on current trends, an estimated 25,000 to 30,000 AIDS cases are expected in Europe (cumulative) by the end of 1988. The European Economic Community recently estimated that 100,000 cases may have occurred in Europe by 1990.

Asia: HIV has only started to appear in Asia. A small number of AIDS cases have been reported from Japan (25), Thailand (6), Hong Kong (3), India (5), China (1) and Taiwan (1). These cases have either been related to imported blood and blood products, or to sexual transmission among persons with high risk behaviours (female or male prostitutes). Sero-surveys have so far demonstrated little or no evidence of HIV infection in general Asian populations, but infections have occurred among members of particular risk groups. The current extent of HIV penetration into Asia is unknown; the opportunity for protection of Asia against widespread dissemination of HIV is evident and may be vital to the future of that continent.

Oceania: The cases so far reported from Oceania are all from Australia (382) and New Zealand (22) and are typical of “Western” epidemiological patterns.

Africa: No area of the world appears to be more affected by HIV than Africa, in terms of the proportion of the healthy population already infected and probable numbers of AIDS cases. Central, Eastern and parts of Southern Africa are experiencing epidemic HIV infection and there is increasing evidence of a Western African focus of additional human retroviral infections. In Africa, the epidemic of clinically recognisable AIDS appears to have started recently, between 1975 and 1980. The geographical scope and intensity of HIV infection in Africa is difficult to assess, due to limited infectious disease surveillance and laboratory sero-diagnostic capabilities, and the lack of a widely accepted clinical case definition for AIDS.

The proportion of healthy adults with serological evidence of HIV infection in the countries from AIDS-epidemic regions of Africa ranges from four to over 30 per cent, although many of the studies have involved rather small and selected (often urban) populations. The annual incidence of clinical AIDS in some Central African cities is at least 500 to 1,000 per million population.

While the basic modes of HIV transmission in Africa are identical to those in Europe and the Americas (sexual, blood contact, perinatal), several important regional variations exist. The dominant mode of HIV transmission in Africa is sexual, involving heterosexual transmission (infected man to woman; infected woman to man) of the virus. Not surprisingly, the male to female ratio among AIDS cases or among HIV-infected persons is approximately 1:1, and HIV sero-prevalence rates among African women prostitutes are quite high, generally ranging from 25 to 90 per cent. Once HIV is introduced into a heterosexually active population, rates of HIV infection may rise dramatically. Thus, in 1980-81, four per cent of female prostitutes tested in one African city had antibodies to HIV; by 1985-86, 59 per cent were seropositive.

The importance of blood transfusions for HIV transmission in Africa is suggested by the high proportion of infected (although healthy) blood donors, which reaches 5 to 18 per cent in some areas. While practices for collecting and transfusing blood vary widely throughout Africa, screening of donors for HIV infection is not usually performed and storage and processing facilities may be insufficient.

While intravenous drug use is virtually absent in most of Africa, the problem of HIV transmission through contaminated needles may exist in other ways. Any needle or other skin-piercing instrument that
becomes contaminated with the blood of one person and is then used, without proper sterilisation, to pierce the skin of another person can become a vehicle for HIV transmission. The problem in Africa particularly involves injections given for medical purposes, such as for treatment of malaria, fevers, diarrhoea or other common problems. Fortunately, current evidence suggests that HIV is not being spread through childhood vaccination programmes, in large part due to the longstanding and agressive efforts to ensure use of sterile needles and syringes in these vital public health programmes.

Since HIV is heterosexually transmitted, pregnant women are among those in Africa who are likely to be HIV infected, with resulting transmission of the virus to their children, either before, during, or shortly after birth. While the efficiency of mother-to-child spread is at present unknown, in areas of Africa where 10 per cent or more of pregnant women are HIV sero-positive, as many as five per cent of all newborn babies may be HIV-infected. There is no epidemiological evidence to support casual contact transmission or transmission through mosquitoes or other insects.

Worldwide: WHO estimates that there have been at least 100,000 AIDS cases worldwide since the beginning of the epidemic and that between 5 and 10 million persons are infected with HIV.

The personal, social and economic costs of the HIV epidemic are enormous. Family structure and function are threatened both by infection and the loss of mothers and fathers. The social and economic fabric is dramatically affected by the epidemic of illness and death among productive 20 to 40 year olds, which is typical of AIDS epidemiology in industrialised and developing countries. The direct economic costs of AIDS are also enormous. For example, in the United States, the total cost of direct medical care for AIDS patients in 1991 is estimated to reach 16,000 million dollars. The combined impact of the HIV pandemic, of AIDS, AIDS-related diseases and neurological disease upon health care, insurance and legal systems, economic and social development and indeed entire cultures and populations is already extraordinary and will become increasingly onerous.

Throughout the world, personal and public reaction to AIDS has been considerable. Fears of AIDS and stigmatisation of different groups (homosexual men, haemophiliacs, Africans, Westerners, female prostitutes) have become common phenomena. However, this remarkable global response has been generated by only 30,000 AIDS cases in the United States, 4,500 cases in Europe, and a relatively few reported cases in many other countries. Individual, family, group and social tragedies are occurring regularly as a result of fears, most often unjustified, of HIV infection and its spread. Throughout the world, tremendous social pressures and tension are being generated by AIDS and AIDS-related concerns. So it must be anticipated that social stresses resulting from the occurrence of 270,000 AIDS cases in the United States by 1991, 25,000 to 30,000 European AIDS cases by late 1988, and increasing worldwide infections may be correspondingly great. Proposed restrictions on HIV-infected workers and international travellers and the unfortunate tendency to blame “others” for HIV suggests some additional international aspects associated with the HIV pandemic.

In May 1986, citing “intensive international interest and concern” about AIDS, the 39th World Health Assembly formally approved the creation of an AIDS programme within WHO. In November 1986, the Director-General of WHO announced that, in the same spirit and with the same dedication which characterised WHO’s global smallpox eradication programme, WHO was now committed to the more urgent, difficult and complex challenge of global AIDS prevention and control. WHO’s Special Programme on AIDS will support the development of strong national AIDS prevention and control programmes, provide international leadership and help ensure global coordination and cooperation.
Health, ethics and human values

A CIOMS initiative has triggered an international dialogue on WHO's drive for Health for all by the year 2000, and on the interaction between health policy and ethical and human values by Zbigniew Bankowski and Frank Gutteridge.

Not so long ago—indeed within living memory—there was little that medicine could do for the seriously ill, except to offer consolation and some relief from pain. As Dr Norman Howard-Jones, former Director of WHO's Division of Editorial and Reference Service, pointed out in an essay on the historical and ethical perspectives of medical experimentation, the practice of medicine up to the end of the 18th century had hardly advanced since the time of Hippocrates. In other words, it had remained static over a period spanning almost two and a half millenia.

In the 19th century, the means of improving public health were developed, both empirically and scientifically. But the great advances, as well as a more profound understanding of the origins and treatment of disease, came only in the present century. Indeed only in recent years has attention begun to be focused on the issues that attend these advances and, ironically, it is these very advances that have created new moral and ethical dilemmas in medicine and public health.

There are many examples of these. Is it right that a disproportionate share of resources should be concentrated on the care of the elderly suffering from terminal disease? Should provision be made for costly high technology facilities at public expense, such as heart transplants, when a better cost/benefit ratio could be obtained by diverting the expenditure to improving personal lifestyles?

Issues such as these were debated some months ago at a Round Table Conference held in Athens, Greece, convened by the Council for International Organizations of Medical Sciences (CIOMS). CIOMS, a non-governmental organization in relation with WHO and UNESCO, arranges these conferences in order to create international and interdisciplinary forums where the scientific and lay communities can express their views on topics of immediate concern, unhampered by administrative, political or other considerations. The meetings are designed not only to express the scientific and technical basis of new developments in biology and medicine, but also to explore their social, ethical, moral, administrative, economic and legal implications.

The main objectives of the Athens conference were:
- to identify and compare the ethical content of selected health policy issues from the perspectives of different national, cultural and religious settings;
- to examine the interaction of ethical factors and other determinants of health policy in the policymaking process in those different settings;
- to explore activities and arrangements that could assist interested countries in enhancing their capacities for dealing with the interaction of ethics and health policymaking;
- to consider the usefulness of this kind of dialogue in promoting better international understanding across cultural, economic and political lines.

The participants—whether health policy-makers, physicians, scientists, nurses, philosophers or ethicists—were under no illusions as to the difficulties facing them. Before them were fundamental problems that have long baffled philosophers: How do you define human values and ethics? Is a policy to be applauded because the consequences appear to be "virtuous" or the actions to be taken are seemingly "right"? How can one distinguish ethics in public policy from other considerations—political, economic, cultural, religious and organizational? Health policymakers may well not be physicians, so they will not necessarily view from the same standpoint as the
Malaria patient in India. Any doctor-patient relationship requires decisions to be taken that will have consequences for both patient and physician.

WHO's principal theme for this and the next decade, the goal of Health for all by the year 2000, was identified as a central issue in considering health policy, ethics and human values. Some participants apparently misunderstood the import of this goal by equating “Health for all” with “Health services for all,” an identification also erroneously made by certain observers in the human rights field in relation to the WHO definition of health. The conference thus provided a valuable forum for explaining and discussing the objectives of Health for all and the need to fully understand its important and profound meanings. These include responsibility for individual health through the adoption of healthy lifestyles, the lessening of dependency on health personnel and the promotion of self-reliance through community participation, and a fuller understanding of factors outside medical care or prevention that contribute to human dignity and the quality of life.

The participants then reviewed five case studies, chosen as being of interest to both developed and developing countries, which addressed questions of policy and ethics of immediate concern in many countries and on the horizon of concern in others. These were: the allocation of resources for primary health care; public policy and hereditary disease; care of low-birth-weight infants; health care of the elderly; and organ substitution therapy.

The discussion highlighted some of the paradoxes in present-day approaches to the problems. On the one hand, as one speaker pointed out, the advances of medical sciences have resulted in no fewer and possibly even more problems arising than have actually been solved; as a Chinese saying has it: “The Demon goes up ten feet as Tao (the Right Way) rises one foot.” On the other hand, biomedical sciences and public health measures have removed some vexing dilemmas of a moral and ethical nature, such as compulsory vaccination for smallpox.

In the course of the conference, individual participants found it difficult to suspend their own values in order to understand the values of others. The sharpest conflict arose in a discussion of the origins of human values, opposing divine enlightenment against secular humanism. Nevertheless, there evolved during the discussions a greater understanding and insight into the wide variety of values and social systems represented. This understanding led the conference to discuss the broader issues facing humanity, and to endorse the state-
ment that the participants found it ethically unacceptable "that country of birth should be a determining factor in access to health care and in achieving or not achieving the limits of individual capacity."

It was agreed that there should be continued collaborative follow-up of the issues discussed and that, at the least, a mechanism should be established that would support regional groupings in a continued inquiry into issues of regional interest. CIOMS will serve as the organizing focal point and has initiated "an international dialogue on interactions of health policy, ethics and human values." This dialogue will develop a network of interested individuals, institutions and countries from a variety of cultural, religious and ideological backgrounds to share ideas and concern about the issues involved.

Specifically its objectives are to strengthen national capacities for addressing and making decisions on the ethical and human value issues involved in health policy; to contribute to improved understanding of the concepts inherent in WHO's goal of Health for all, particularly in terms of its value content; to develop transcultural and transdisciplinary approaches and methods for working in this field; and to use improved understanding of the approaches of various societies to the ethical and human values aspects of health policy as a means to pursue deeper human understanding of those values across cultural and political lines.

The thematic framework will be WHO's goal of Health for all which raises many questions bearing on equity and social justice. Whereas WHO and other interested parties are experienced in dealing with technical, political, economic and managerial problems associated with Health for all, the issues related to human values are addressed less often and less well. Indeed, value conflicts are often expressed as technical, political, economic and managerial obstacles, and are not recognised as value conflicts. Commitment to the Health for all goal has also to be understood in terms of understanding the values involved, since its basic precepts—particularly that there be universal coverage with effective health services, with communities playing prominent roles in determining the nature of those services—are relevant to all nations and cultures.

An international dialogue on health policy, ethics and human values will be assured a dynamic and stimulating milieu, and will surely generate its own momentum, particularly in view of the profound underlying importance of international dialogue in these times of global tension and instability.

In fact such a dialogue has already begun. The CIOMS first sponsored an international regional conference in March 1986 in New Delhi on the Indian perspective in relation to health policy, ethics and human values, and the second was convened for this month in Noordwijk aan Zee, Netherlands, on "Interactions of health policy, ethics and human values: a European and North American perspective". A similar conference is being planned for countries with predominant Islamic culture, and others will be arranged in the contexts of Africa, South America and South Asia. Within the framework of this dialogue, a conference will take place in Bangkok next year on "Ethics and human values in family planning".

As the Athens keynote speaker Dr Pellegrino said: "Once framed, a health policy unerringly reveals the values that drive a society; and these cannot escape examination retrospectively." It is to be hoped that this unusual initiative will open new avenues of international cooperation for the benefit of all nations and societies.

It is to be hoped that international dialogue will open up new avenues of cooperation for the benefit of all nations and societies.

Photo WHO/UN/J. Isaac
Modern medical technology is ingenious, alluring and expensive. Do we embrace the new too quickly and uncritically? Are we too slow to give up the old? The consensus conference allows all interested parties to air their views on highly complex issues.

by Seymour Perry

Who should decide that a medical innovation is safe, beneficial and ready for use in medical practice? Exactly ten years ago, the National Institutes of Health (NIH), a major US biomedical research agency, launched an idea that has had important implications in health care at home and abroad.

This was the NIH’s “consensus development programme”. The basic idea is to invite a wide range of people concerned with a new invention—be it a device, a procedure or a drug—to judge whether and how it should be used. At a “consensus conference”, the group make joint recommendations that are then widely publicised. The consensus conference can also be used to draw attention to older technologies which ought to be abandoned.

What prompted the NIH to act was concern in the US Congress about the alarming increase in national health care expenditure. At least part of this increase was due, thought Congress, to applying expensive medical technologies too soon, before they were properly evaluated for safety, efficacy and cost.

Why was this happening? Before they decide on a diagnostic test or a therapy for a patient, doctors look back, consciously or otherwise, at their own experience and at accumulated knowledge in the medical literature or elsewhere. Their usual sources of information are textbooks, journal articles and the opinions of experts. Yet, these sources usually reflect the views of only one or at most a few people, and so may be biased.

Until 1977, there was no forum in the USA or elsewhere where experts or other concerned parties could assess the evidence and make recommendations about using a medical innovation. Doctors applied technology, therefore, on the basis of its presumed efficacy, risk in relation to the seriousness of the illness, cost, and other very complex factors. As the years went by, a technology might persist as its value became clearly established, or might gradually fall from favour as collective experience demonstrated its uselessness or harmful effects.

These traditional methods of arriving at a consensus were slow and tedious. There was, and still is, a general impression that many technologies are being wrongly used, either because they were adopted too soon, or because they are becoming outdated. This was why a 1977 white paper recommended that the NIH should convene meetings of scientists, physicians and others—including the public—to seek a “technical consensus” on the clinical benefit of a new or existing technology; to decide whether there was adequate evidence of safety and efficacy and, if not, what more needed to be done; and to see whether there were cost, ethical or social issues that should be pointed out when making recommendations.

“Consensus” in this context is defined as a “general agreement” among most of those concerned on the validity and soundness of the conclusions. It does not mean unanimity, although there is sometimes total agreement.

Of various formats considered, the NIH decided that conferences would be the best, that they should be open to the public, and that people from all sectors with an interest in the topic under review should be invited.

The consensus conference emphasises openness and makes sure that all viewpoints are expressed. This is particularly important, because the majority does not always turn out to be correct: for example, Semmelweis correctly advocated antisepsis in the delivery room in the mid-19th century, but was ostracised by fellow physicians. The organizers of the consensus development programme agreed that significant minority views must be stated and should accompany the final document.
also be a “balancing of biases”, whenever possible. Participants should agree not only on the information available, but on the gaps in knowledge.

Finally, consensus development was not to be used by the government or any other body to dictate medical practice. The objective was to provide information reflecting the best opinion of those in the best position to know, and to evaluate the most up-to-date information.

Planning for a consensus conference starts many months before it actually takes place. A carefully chosen committee of outside experts outlines the key issues and questions, and selects speakers to make formal presentations at the conference. Eight to sixteen people, among them members of the public, are chosen to assess the evidence presented and to prepare the final report, including answers to the key questions. This panel is a crucial aspect of consensus development. Having a diversified group makes the final consensus statement more credible: people are less likely to think that the conclusions are merely those of the proponents or opponents of a particular technology.

At the final session, the consensus statement is presented to the audience for comment and endorsement. Shortly afterwards, the statement is published and distributed widely to the health care system, policy-makers, medical scientists, medical journals, the public, newspapers and television stations.

The Office of Medical Applications of Research (OMAR) at the NIH, which translates the results of biomedical research into knowledge that can be effectively used, monitors the effectiveness and progress of the consensus development programme. According to several studies, the recommendations of the conferences have largely reached their intended audiences. However, their actual impact on medical practice has been difficult to measure, partly because so many other factors may be involved.

Nevertheless, consensus development has affected doctors' behaviour, as in the case of treatment of breast cancer, for example. Women used to undergo a biopsy for a suspicious lump in the breast, and while the woman was still in the operating theatre under anaesthesia, the surgeon could decide immediately whether to remove the breast. At the consensus conference, a panelist - not a doctor - who had had a breast removed played a key role in the panel's recommendation that there be two stages to this process: a biopsy, after which the patient would be allowed to wake up, and then an opportunity for her to make her own decision about the surgery.

Another conference which had an important effect on policy dealt with liver transplants. The positive recommendations from this meeting undoubtedly spurred the US government to provide funding for the procedure. On the other hand, the recommendations of a 1980 conference that Caesarean deliveries should be rarely performed, and then only for certain indications, has had no effect on the number of deliveries done this way in the USA.

Consensus development has been reasonably well accepted in the United States, despite some criticism and concern from members of the medical profession who charge that it can lead to “dictation” of medical practice, particularly by the government. Some have claimed that the publicity limits the traditional freedom of physicians to act in the best interests of the individual patient. Still others are concerned at legal implications which could be used by dissatisfied patients to sue their physicians. Happily, after ten years and more than 60 conferences, none of these fears has been realised.

Within three years of the first consensus conference in the USA, a leading medical journal in the United Kingdom used a similar format to examine relations between the medical professions and the media. Then, in 1982, Sweden convened a consensus conference on the subject of hip replacement surgery. Three years later, four other countries - Denmark, Finland, the Netherlands and the United Kingdom - had organized conferences on a variety of topics, including early detection of breast cancer, ear infections, blood and blood components for transfusion, and coronary artery bypass surgery.

While there may be valid criticisms of specific conferences, the fact is that the issues raised by many modern medical technologies are extraordinarily complex and society is best served by an airing of all views and open discussion, not only by the experts, but by other interested parties who may also have something important to contribute.
Basic minimum needs

Thailand's awareness of the key role to be played by intersectoral cooperation in improving community health has resulted in the formulation of eight Basic Minimum Needs—those components that are essential if each individual is to achieve fulfillment in society.

by Amorn Nondasuta and Prapont Piyaratn

In spite of remarkable economic growth during the past two decades, an estimated one-fifth or 10 million of Thailand's population are still living under the poverty line and still suffering from poor productivity, poor education and ill-health. Fully aware of these shortcomings, the government has taken bold and imaginative steps to correct the situation.

As an initial step, it set up a major programme entitled Rural Poverty Eradication Programme (RPEP) in the Fifth-Year National Development Plan covering the period 1982 to 1986. Its aim is to improve the well-being of people living in impoverished villages through an integrated approach involving the four major ministries—agriculture and cooperatives, education, public health, and the interior. This intersectoral effort should encourage the poor people to participate actively in the social and economic development of their own community, so as to satisfy at least an acceptable level of their basic human needs.

A committee comprising officers from the four sectors operates at each level of administration from the national down to the tambon (sub-district) level, and in turn supports committees of elected people at the tambon and village levels. The idea is to promote development planning by the people, starting from the village level—the so-called "bottom-up approach". The critical linkage between government and people is ensured by an intersectoral advisory committee, the Tambon Council Supporting Committee (TCSC).

The expected practice for development planning is for the tambon committee to be primarily responsible for analysing and synthesising priority needs and problems prevailing in villages. Then, with the advice of the TCSC, they will draft the annual tambon development plan to be submitted to the government district committee. The projects needed to solve the villagers' problems are customarily formulated each year, well in advance, by each of the four ministries, and the tambon committee selects which ones will be built into its annual plan.

Early experience showed that intersectoral coordination at all levels has not always materialised as expected. Each of the officers from the four sectors in TCSC tended to push hard to have his or her own ministerial projects accepted by the people, regardless of their divergent needs.

Fortunately, parallel to planning the Fifth Five-Year National Development Plan, a Social Development Project funded by WHO was initiated for long-term social development, including health. The project, under the auspices of the National Economic and Social Development Board, is trying to alter the character of planning and delivery of public services in the country, at the same time providing for intersectoral cooperation among various government sectors, agencies, inter-

A picture of good health. Thailand has drawn up eight major components that are essential if every individual is to achieve fulfillment in society.

Photo WHO/D. Taylor
The social development process has adopted the "desirable characteristics of the Thai society and people" as the standard goal to be achieved by the year 2000. Emphasis is put on developing the quality of life as an important national resource, so that each individual in society would contribute in terms of knowledge, skills and responsibility to social progress. The net result would then be a parallel growth of people and society.

From this project sprang the Basic Minimum Needs (BMN) which are defined as those levels of need essential for each individual to achieve fulfillment in society. Trial and error led to the formulation of eight major components intended for nation-wide application. They are that:

- Every family should have adequate meals of nutritional and hygienic quality;
- every family should have appropriate shelter and live in a proper environment;
- people shall have the right to receive necessary basic social services;
- people should have security of life and property;
- every family should have access to knowledge and means of production for its livelihood;
- families should be able to control intervals between pregnancies and number of children;
- people should be able to participate in community development and determine their own mode of life;
- people should have proper spiritual development.

Simple survey forms for collecting data and analysing the 32 indicators formulated for evaluating the BMN were developed, and these are to be filled in by the villagers with assistance from the TCSC.

The villagers take care of the activities that they are able to do by themselves. Activities that need support from the ministerial projects are referred to the tambon committee for processing and support. The villagers are already able to carry out problem identification, planning, specifying the types of activity and support needed and evaluating the BMN status of each village. In this way they become much more aware of the problems of their village and the level of their achievements. At the same time, the provincial administration as well as the intersectoral committees at all levels can respond more effectively to the villagers' needs.

In addition to training the villagers in how to apply the BMN concept, the government workers of the four ministries in each province are trained together to become familiar with the process. This further facilitates the intersectoral coordination between government officers of different ministries as well as between themselves and the villagers. So the BMN contribute to the people's self-reliance for village development, and at the same time make the government workers aware of their supportive role in community development. The Five-Year National Development Plan covering the period 1987-1991 has adopted the quality of life as measured by BMN as one of the development targets to be attained by all Thai citizens. Elsewhere in the world, a majority of countries have recognised the importance of intersectoral measures in the quest for Health for all by the year 2000 but that recognition has not yet found expression in action. Perhaps the example of Thailand can stimulate a greater response.
The German Hygiene
by Brigitte Golde and Ingeborg Köper

For the German Hygiene Museum in the German Democratic Republic, 7 April this year was not just marked as World Health Day. By coincidence, this day also commemorated the 75th anniversary of the founding of what is now the oldest and largest establishment of its kind in the world.

The idea of founding a health museum in Dresden, already voiced in 1883 by the Society of Medicine and Natural History, was taken up by factory owner Karl August Lingner (1861-1916). With the backing of other industrialists and a great many notable scientists, he staged an international hygiene exhibition in 1911 which was quite rightly described as grandiose. This referred not only to the content and range of the health-related themes dealt with, and the holding of numerous scientific conferences and sporting functions, but also the technical and logistic level of the exhibition, held in specially erected buildings on a site which covered 320,000 square meters.

When it closed after six months, over 5.5 million people had grasped the opportunity of broadening their knowledge in the domain of health. So many of them expressed the hope that the valuable exhibits should be preserved and the exhibition made permanent that Mr Lingner resolved to turn his plan to create a hygiene museum in Dresden into a reality. His "Memorandum on the founding of a National Hygiene Museum in Dresden" in March 1912 contained a detailed description of this project.

But the First World War and its consequences delayed the construction, so that the impressive structure built for the second International Hygiene Exhibition in Dresden was not opened until 1930. The central attraction, as in 1911, was the Human Being exhibition hall, where for the first time a "glass man"—manufactured in the museum's own workshops—was presented to the public.

Almost totally destroyed in the air raids on Dresden in February 1945, the German Hygiene Museum was reconstructed in the following years and rapidly became an internationally respected institution. Today it is the country's leading centre for medical research, information and health education, as well as being a notable manufacturer and exporter of teaching and exhibition materials in human biology.

Housed in 15 halls spread over 5,000 square metres, the permanent exhibitions give visitors an insight into the construction and workings of the human body, and into all important aspects of a healthy lifestyle, based on the latest scientific knowledge. Modern museum technology and the use of newly developed models and aesthetically pleasing designs ensure the attractiveness and information value of the exhibitions and they are constantly brought up to date. Visitors have many opportunities to play an active role, for example through the visitor-operated electronic knowledge and behavioural test equipment. Besides special exhibitions, the museum arranges various activities for the Dresden public such as discussions led by medical scientists and dieticians, and regular courses of aerobic exercise. What visitors may be less aware of is the fact that the museum owns several special workshops which manufacture plastic models—the famous glass figures (man, woman, cow, horse)—as well as slide series and health exhibition materials for national use and for export.

Many international commitments result from the museum's membership of the International Union of Health Education (IUHE) and the International Teaching Aids Association (WORLDIDAC), as well as from its designation as a WHO collaborating centre for health education.
The German Hygiene Museum is famous for its glass models—of the human skeleton (above), of a pregnant woman (below)—which are exported all over the world.

The museum’s long tradition in health education is perpetuated in its many publications, its cooperation with the media, and its production of popular-science films.

But in general terms the German Hygiene Museum’s main concern is encouraging people to preserve, improve and restore their own health, fitness, well-being and zest for life.

“...The Hygiene Museum should be a place of instruction for the whole population, where everyone can learn by example how to lead a sensible and healthy lifestyle.”

Karl August LINGNER, in his Memorandum on the founding of a National Hygiene Museum in Dresden, March 1912.
Mankind and the mosquito

Farsighted research projects are helping the National Malaria Eradication Programme of India to involve whole communities in disease control, with the employment of minimum technology

by R. Mansell Prothero

In the 1950s there were high hopes that malaria could be eradicated from the planet but bitter experience showed that this goal was impossible, and even today it cannot be achieved in present circumstances. In tropical Africa it has been impossible to eradicate the disease anywhere on a substantial scale, and major resurgences have occurred in other continents where eradication had been far advanced.

These failures are attributed to a complex variety of factors—organizational, operational, technical, financial and political as well as social and environmental. People affected by anti-malaria measures have unfortunately, and "without malice aforesight", contributed to the lack of success. Insufficient attention was given to these ordinary people going about their various activities. Only recently have we learnt that, with knowledge and understanding, it is possible to design malaria control programmes in which people and their activities can be related as fully as possible to the technology being employed. And with the people's collaboration, the need for expensive technology can actually be reduced.

An increasing number of small-scale examples illustrate how workers in the biomedical sciences are recognising the part people play in creating health problems and the part they may play in finding solutions to those problems. India, for instance, faced a major resurgence of malaria in the 1970s after an effective eradication programme in the 1950s and the early 1960s. A review issued by India's National Malaria Eradication Programme (NMEP) refers to the roles played by human factors—both long-stand-
the coast near Pondicherry demonstrates how community involvement in anti-malaria measures can lead to significant improvement with minimal inputs of insecticides and drugs. The community project reduced malaria infection and also helped the people to advance and diversify their economy. It was designed to demonstrate the economic benefits that would follow from controlling mosquitoes, in the hope that villagers would then maintain this control over a longer period. The first step was to gain their confidence by providing better water supplies and primary health care. A large lagoon behind a sandbar, a major breeding site of the mosquito A. subpictus, was cleared of seaweed (which is used for paper manufacture) and instead pools were made for the culture of prawns. Species of fish which would eat the mosquito larvae were introduced into wells and other pools, and domestic water containers were treated with chemicals. As the mosquitoes stopped breeding, the transmission of malaria fell to zero. While these results cannot be replicated in the same detail elsewhere,

Feeling the spleen of a patient will also help the doctor arrive at a diagnosis.

Photo WHO/P. N. Sharma

where problems and conditions are different, the project has been extended to involve 21 villages with a population of 15,000 within one primary health centre.

In 1982, the MRC began similar integrated malaria control work in villages near Nadiad in Kheda District, Gujerat State, which would be cost-effective and would provide a model which might be applied elsewhere. This project is based on reducing the numerous breeding places of malaria vectors, particularly of A. culicifacies, the main vector, which is resistant to DDT and other insecticides. There are minor drainage works and other environmental improvements in which the community is involved. Biological control and drugs are measures of secondary importance. The progress made so far has yet to be fully evaluated.

Among the many human factors that affect malaria, movements of people are particularly significant in most malarious areas of the world. They contribute to transmission of the disease and inhibit programmes for control. Within the last decade in south-east Asia and in parts of the Indian sub-continent, large-scale population movements must have contributed to the diffusion of falciparum malaria which is resistant to chloroquine, the most effective and widely-used anti-malaria drug. More detailed investigations are needed to determine the precise significance of such movements for malaria transmission and control.

The VCRC has studied the role played by population movements in the persistence of malaria on Rameswaram Island, lying in the narrow strait between the south of India and Sri Lanka. Fishermen move seasonally between the north and south shores of the island and between the island and the mainland, and Rameswaram is a “stepping-stone” for travellers by land and sea between India and Sri Lanka. It is also an important religious centre and attracts pilgrims from all parts of India and from Nepal. Increasingly it is being visited by tourists. The patterns of mobility are thus complex, but the net result is to expose more people to the risk of infection. Falciparum malaria on Rameswaram Island has so far been successfully treated with chloroquine but there is the risk of drug-resistant malaria being imported, particularly by pilgrims from the north-eastern states of India where resistance has occurred.

The VCRC and MRC projects point to the need for India's national malaria programme to be flexible enough to deal with local needs, and with periodic emergencies when epidemic outbreaks occur. Certainly the projects emphasise the importance of people in disease control and the need for their involvement, with the employment of minimum technology and with prospects of social and economic improvement. But such successes as have been achieved are highly contingent on intensive inputs of human skill and very considerable dedication by those involved in the conception, organisation and execution of work at all levels. It remains to be demonstrated whether similar success can be expected on a vastly greater scale. As with agricultural improvements or with family planning in India, it is difficult to develop and spread activities on a scale sufficiently large to effect major reductions in a disease like malaria which is so widespread and affects very large numbers of people. The formidable tasks faced by the NMEP are being assisted by the experimental work which has been outlined here.
Thanks to a three-level health network in county, town and village, a relatively complete medical and health delivery system now covers the whole of China's vast rural areas

by Deng Yuzhen

Among more than 1,000 million people who live in China, 800 million live in the countryside, away from the big cities. The Chinese government has always attached great importance to medical and health services in rural areas, and considers this development as an area of high priority. The result has been to put an end once and for all to the lack of both doctors and drugs, and to curb the spread of diseases.

Since rural economic reform began, there has been remarkable success in controlling acute and chronic infectious diseases as well as parasitic diseases. According to statistics available in November 1985, the incidence of 24 infectious diseases had been reduced by 16 per cent as compared with the corresponding period of 1984. Schistosomiasis, to give one example, was eradicated from 247 counties in 1984, and was reported to have been eradicated from another 34 counties in 1985.

China's experience over the past 30 years or so has shown that the development of medical networks for disease treatment and prevention at three levels - the county, the township and the village - can succeed in solving both the lack of medical doctors and of drugs in the countryside.

Today, at the county level there are county hospitals, hospitals for traditional Chinese medicine, health and anti-epidemic stations, maternity and child care centres, health schools, drug control institutes and other specialised institutions for disease prevention and treatment. These establishments provide guidance for medical and health services in the county as a whole, and serve as centres for disease prevention and treatment as well as for training grass-root medical and health personnel who will work in the grass-roots sector.

At the township level, there are health centres which offer both preventive and curative care. Their responsibilities are to carry out medical care, prevention, health education and information, maternity and child care, family planning and other technical services. The centres also have responsibility for giving technical advice to health establishments in the villages.

At the village level, health facilities are now available at clinics in 87 per cent of these communities. A good example of this well-established three-level health network is Jiading County in Shanghai Municipality, which was designated as a WHO collaborating centre on primary health care in 1980. Since then there have been 11 health institutions established at county level including a central hospital, a health and anti-epidemic station and a maternity and child care centre. In addition, 19 township health centres and 266 village clinics have been started.

In order to keep abreast of the new situation arising from the development of rural economic reform, in 1985 the health authorities throughout the country took the initiative of strengthening the management of health infrastructure in
the countryside by encouraging all concerned to develop multiple health services through various channels and in different forms. In a number of counties, the need was for specialised hospitals. For example, in Shanxi Province there were 329 small specialised hospitals, 80 percent of which were at township or town level. Again to keep pace with the new situation, Conghua County in Guangdong Province has since 1984 focused its efforts on reorganising the village clinics by putting them under the dual supervision of the township administration and township health centre. There is one health clinic for each village, which is run collectively, based on a system of independent accounting, whereby the villagers assume sole responsibility for the profits and losses of their own accumulated fund.

Methods such as these have succeeded in strengthening health facilities at the grass roots. Since the reorganization, the health infrastructure in China’s rural areas is taking various patterns. Today 52.92 percent of village health clinics are run by the collectivity or by rural doctors on a contract basis; 10.08 percent are run by rural doctors working jointly; 31.5 percent are run by individuals; 3.39 percent are run by health centres which extend their services to villages, and 2.11 percent are run in other ways. In the country as a whole, 40 percent of rural medical workers have won the title of rural doctor after passing qualification examinations. In addition, 1,680,000 part-time rural midwives and medical assistants have completed training courses. All these rural doctors, midwives and medical assistants are working actively in the countryside and represent reliable manpower for primary health care.

Thanks to the establishment and development of the three-level medical networks, a relatively complete medical and health delivery system now covers the countryside and plays an active and effective role in developing primary health care. Generally speaking, most diseases can be prevented, treated and controlled in the peripheral health facilities, while more difficult problems can usually be tackled by the medical and health institutions at county level.

Zimbabwe: from supermarket to cafeteria

After independence, Zimbabwe embarked on a new health programme with energy and pragmatism. When one approach to primary health care proved inefficient, a better method quickly replaced it

by H. Anenden

In many African countries, the post-independence era has seen the emergence of a new consciousness about the importance of health in the development of the nation. Although the basic infrastructure such as hospitals and pharmacies had been provided by the former colonial authorities, these were usually concentrated in the big towns, whereas the countryside was summarily left to its own devices. Health development in post-colonial Africa therefore had to tackle simultaneously not only the training of more medical practitioners, an increase in the number of hospitals, dispensaries and health clinics, and the manufacture of pharmaceutical products, but also the decentralisation of health services and the devising of new approaches to meet new circumstances.

Zimbabwe is one of the late-comers in the confraternity of independent nations. In the wake of the numerous political and economic problems, the country had also to face a restructuring of the health system so as to reach the more remote and indigent areas.

A national survey carried out in 1984 by the Ministry of Health among 5,000 children (aged one to five) in eight provinces showed that nearly one third suffered from malnutrition, and another third had borderline status. Even in the capital, Harare, a large proportion of children showed evidence of undernutrition and dietary deficiency of micro-nutrients.

Communicable diseases are also widespread among the adult black population, with a high incidence of tuberculosis among blacks as well as malaria cases, and intestinal and urinary parasitic infestations. Many communicable diseases are due to the unhygienic conditions in which people live.
It is obvious that Zimbabwe's main health problems stem from its peculiar colonial history. Whereas in most former colonies the basic health infrastructures served (in part) the people of that country as well as the colonial rulers, in the Southern African countries, the existing regime set up an infrastructure that served to widen and deepen the already unbridgeable gap between the black majority and the white minority. Cities with a predominant white concentration grew up, whose spectacular appearance was in stark contrast with the state of poverty of blacks in the countryside. Every aspect of development was orientated towards the needs of the white minority. Cities with a predominant white concentration grew up, whose spectacular appearance was in stark contrast with the state of poverty of blacks in the countryside. Every aspect of development was orientated towards the needs of the white minority. Cities with a predominant white concentration grew up, whose spectacular appearance was in stark contrast with the state of poverty of blacks in the countryside. Every aspect of development was orientated towards the needs of the white minority. Cities with a predominant white concentration grew up, whose spectacular appearance was in stark contrast with the state of poverty of blacks in the countryside. Every aspect of development was orientated towards the needs of the white minority. Cities with a predominant white concentration grew up, whose spectacular appearance was in stark contrast with the state of poverty of blacks in the countryside. Every aspect of development was orientated towards the needs of the white minority. Cities with a predominant white concentration grew up, whose spectacular appearance was in stark contrast with the state of poverty of blacks in the countryside. Every aspect of development was orientated towards the needs of the white minority. Cities with a predominant white concentration grew up, whose spectacular appearance was in stark contrast with the state of poverty of blacks in the countryside. Every aspect of development was orientated towards the needs of the white minority. Cities with a predominant white concentration grew up, whose spectacular appearance was in stark contrast with the state of poverty of blacks in the countryside. Every aspect of development was orientated towards the needs of the white minority.

Within the health system itself, the difference between "whites only" and "blacks only" hospitals was almost inconceivable. The latter were crude, with small beds, overcrowded wards and primitive sanitary facilities. Expenditure on food was far higher in the white hospitals than in the black ones. In rural areas, health facilities were almost non-existent.

The uneven distribution of medical practitioners over the country, with a ratio in Harare of one doctor per 4,000 people, in smaller towns of one per 30,000 and in the remote countryside of one per 62,000 people, has incited the government to adopt primary health care (PHC) in a big way, as the only practically and financially viable solution to the major problems it faces. The average cost of running one central hospital bed is over half that of a rural health centre serving some 10,000 people. The sophisticated hospitals thus provide health care at a much greater cost than is necessary and far above whatever rural people will ever be able to afford to pay. The present policy is to give priority to developing the lower levels of care in rural areas.

The PHC programme was launched in the first half of 1982. Its main approach was to meet the urgent health needs of the masses, so that the higher levels of the health system could be developed as a function of their support to the priority work at the base of the system. At the outset, the programme concerned itself with training Village Health Workers (VHW) who were to become the key link between the organised village community and the local health service.

VHWs are selected by their own communities at mass meetings, the main criteria being basic literacy and political commitment to serve the village. The role of VHWs is fundamentally promotive, educative and preventive, mobilising the community and individuals on such issues as environmental and personal hygiene, nutrition, immunisation, mother and child health. They are also responsible for treating simple conditions and explaining the treatment of diarrhoea through oral rehydration therapy.
The aim in the first stage is to train one VHW for every 50 to 200 families.

Government policy is to set up a rural health centre not further than eight kilometres from every person. So far 163 health centres have been built, and the existing 450 primary care clinics are being modified to function as health centres. These centres provide basic but comprehensive health care, concentrating on mother and child care, delivery of uncomplicated births, family planning, immunization services, environmental sanitation, control of communicable diseases and general curative care. The RHCs are staffed by three trained workers, two providing specific care for outpatients and one dealing with mother and child care. About one woman out of every five of childbearing age in Zimbabwe is receiving family planning protection. Between 1982 and 1983, child spacing programme adherents have increased by 65 per cent.

An expanded programme of immunization was launched at the end of 1982, aimed at halting the high mortality and morbidity arising from the six major childhood diseases, measles, tuberculosis, polio, whooping cough, diphtheria and tetanus. The number of fully immunized children has risen from 25 per cent in 1982 to 42 per cent in 1984 and is steadily increasing. One indication of the high success rate is that the infant mortality rate has been reduced by almost 50 per cent in the past four years, bringing it down to about 60 per 1,000 live births. At the time of independence in 1980, the rate stood at 120 per 1,000 caused by such factors as low birth weight, diarrhoea, pneumonia, malnutrition, measles and tuberculosis.

The water and sanitation programme encourages the protection of water supplies and the use of appropriate technology pumps (Blair pumps) in the rural areas. There is also a dynamic movement to promote rural sanitation by building pit latrines with vents. This involves training health workers in appropriate technology methods and they in turn educate the villagers in the use of such techniques. The programme of health education goes hand in hand with the water and sanitation programme, and steady progress is being achieved through a sustained strategy of information and dissemination at all levels.

A recent reappraisal of the function of rural health centres has led to some pragmatic changes. In the past, villagers who needed a particular type of health care, whether immunization, family planning advice, drugs or antenatal care, had to go from one health worker to the other, since each was responsible for his or her particular unit. However, several evaluation studies showed that this “supermarket” type of health service (that is, going from one “goods stall” to another) involved a larger number of health workers than should be necessary in each health centre. Sometimes people did not know exactly where to go for the help they needed.

It was recognised that, with a little further training, covering a wider range of services, one health worker could provide all the basic health care specified in the PHC programme. The extra cost and time spent on this enlarged training would be balanced by the reduction in the number of trainees and by a re-deployment of the health workers over a larger area. Where, before, three to four people would be working in one health centre, under the revised system they would each be in charge of a health centre, thus reaching a larger number of people. This new system has been called the “cafe-system”, since the person in need of health care only has to “order the menu” from the server. There may be a longer queue outside the health agent’s door, but at least there is no indecision as where to go. The same person will vaccinate a child, conduct a general check-up of its health, and advise the mother about the type of food it should be given. Everything “comes on a tray”.

Notwithstanding the special problem that the Zimbabwean government had to face on its independence, it has launched its health programme with a special dynamism and a sense of pragmatism. Funds may not be available for immediate modernisation of the hospitals and buying modern equipment, but by shifting emphasis to the countryside and the concept of PHC, the groundwork has been laid for an in-depth change in people’s mentality and basic attitudes towards health. The most positive aspect of PHC is that it is designed for the people but also by the people. By accepting the possibilities of change and adaptation, such as the switch from a “supermarket” to a “cafe-system”, the system is able to evolve and test itself on the ground, thus growing with the people rather than being imposed upon them.
CAMAS: born amid turmoil

Leadership of a primary health care team demands the skills of a manager, a teacher and a supervisor as well as a clinician. Most medical schools do not impart such skills to their students

by Ope Adekunle

CAMAS, the Confederation of African Medical Associations and Societies, is one of Africa's youngest regional medical groupings. Inaugurated in 1982 at Ibadan, Nigeria, the organization has 30 national medical associations as members, spread throughout the continent. Structurally, it has an executive board of 20 members, which includes officers and regional representatives, and an assembly which is a representative meeting of all member associations.

The objectives of the Confederation include: acting as a forum for exchanges of professional ideas and experiences among medical and dental practitioners in Africa; fostering and promoting throughout the continent the provision of facilities for educating and training undergraduates in all relevant fields of medicine and dentistry; and encouraging active cooperation with governments, international health agencies, institutions, associations and societies—in Africa in particular and the world in general—in order to ensure a fair and equitable distribution of health care facilities irrespective of race, colour or creed.

Since its inception in 1982, CAMAS has worked closely with WHO in such a way that, on the one hand, WHO's views can permeate through the whole of Africa's growing medical and dental professions and, on the other, gives CAMAS members an opportunity to make independent contributions to the work of WHO.

The thrust of CAMAS activities has so far been in primary health care and medical education. Prior to 1982, the average African doctor had shown a lukewarm attitude to primary health care (PHC). Having been trained in a hospital setting and with well-entrenched urban prejudices, it is not surprising that members of the medical profession failed to appreciate the immense potential of a health system based on PHC. Probably the fault is not entirely that of doctors. The slogan of Health for all by the year 2000 had its strongest disciples in the ministries of health even while its link with primary health care was not fully appreciated. In most African countries, there is a wide gulf between the ministries of health and their professional associations, which happily is now being bridged by CAMAS.

Adverse climate

It was in this climate of a misunderstanding of PHC and the role expected of medical and dental practitioners that CAMAS held its first congress in Nairobi, Kenya, in September 1983. The congress was opened by the President of Kenya, Dr Daniel Arap Moi, and had as its theme “Primary health care in developing countries, with special emphasis on Africa”.

This Nairobi meeting set the ball rolling by identifying the need for organizational and individual orientation towards the PHC concept. It recommended that national medical associations should assume leading roles and coordinate the activities of health professionals as well as those of auxiliary staff and others working at the “grass-roots” level. This could be done by organizing conferences to bring awareness to technocrats and to their own individual members; having close liaison with and supplementing the efforts of the health ministries; orienting medical teaching and medical teachers towards PHC; providing continuing medical education to their members as well as other allied staff; and participating in data collection and evaluating PHC programmes. The congress also appealed to African governments to give priority to PHC by allocating appropriate human and financial resources.

In collaboration with WHO, CAMAS instituted a study on the role of health centres in PHC, which was carried out by Dr S. Kanani of Kenya. Based on the wide-ranging recommendations of the study, who and CAMAS jointly arranged a workshop in Alexandria, Egypt, in September 1984. Participants from national medical associations and ministries of health of 12 African countries considered innovative ways of adapting the health centre, so that it would fulfil the following health care management functions within the concepts of primary health care. It should serve as a service delivery point; as a referral point supporting the community-based component of PHC; as a training institution for PHC; as a research or study institution for the management of PHC activities; and as a unit for planning
A lesson in the use of oral rehydration salts to treat diarrhoea. Doctors and health personnel of all categories are becoming more community-minded.

Photo WHO/Liba Taylor

and evaluating health care programmes.

At the same time, there was growing concern in medical circles in Africa that the medical profession was losing its leadership role in health care, because of the increased emphasis of governments on PHC with its concepts of community-based and intersectoral action. The view was gaining ground that leadership in health should not necessarily be the exclusive preserve of the doctor. It must be admitted that leadership of a primary health care team demands—apart from being a clinician—the skills of a manager, a teacher and a supervisor. The present curricula of most medical schools in Africa do not inculcate such skills in medical students!

Recently CAMAS, again in collaboration with WHO, embarked on a study of medical education in Africa and its relevance to attaining Health for all by the year 2000 through PHC. The study, carried out by Dr T. Solanke of Nigeria, culminated in a workshop in November 1985, held in Cotonou, Benin, with the theme “Orientation of medical training and medical teachers towards primary health care.”

The workshop recommended that medical schools and universities should train community health-oriented doctors and other medical personnel, and emphasised that the approach to such training must be interdisciplinary and multi-sectoral, taking into account the health profile of the country. Such training would necessitate modifying existing curricula in many countries to include such subjects as economics, statistics, sociology, behavioural sciences, environmental studies, communication skills, history, culture, ethics and philosophy, as well as management science. All disciplines within the medical school setting should be involved in the training and teaching of PHC. CAMAS urged medical schools to take advantage of courses and workshops developed by WHO in many African countries, and also sought to persuade existing medical journals in Africa to devote at least a quarter of the articles they publish to PHC.

This decade has witnessed a serious downturn in the economic fortunes of African countries. Coupled with such ecological disasters as drought and desertification, this has resulted in health problems unprecedented in the history of mankind. At the same time, human reproduction continues unabated at an annual population growth rate of 3.6 per cent. So CAMAS next organized a workshop in Ibadan, Nigeria, in May last year with “the role of health centres in the deliv-
Weighing-in session for babies in Zimbabwe. Medical education in Africa is being oriented very positively towards primary health care.

Photo WHO/Lisa Taylor

...continuing education of health personnel especially at the district level".

Coinciding with the fourth CAMAS congress, the workshop attracted almost 100 participants from 15 member associations and countries, and was opened by King Moshoeshoe II of Lesotho. The key issue was continuing education for PHC workers at the district level, since the district is a vital administrative unit for giving operational support to primary health care.

A resolution on health management and development at the district level enjoined CAMAS members to adopt, study and implement the three-level support strategy for primary health care (at the peripheral, operational and district level), and to intensify efforts to mobilise and use health resources for district health management and development so as to increase the pace and coverage of primary health care in Africa.

The issue of traditional medicine and its role in health care delivery remains a subject of controversy within medical circles in Africa. CAMAS has yet to formulate a common policy but when the subject has been discussed, the trend of opinion seemed to suggest that CAMAS should acknowledge traditional medicine as an integral part of African culture. Hence it should not be completely ignored, and traditional practitioners should be recognised for the role they play in society. They should be encouraged to share their knowledge with orthodox medical practitioners, and should at the same time endeavour to learn basic human sciences to further their knowledge and improve the safety of their practice.

Addressing the fourth congress in Maseru, Professor Monekosso said that CAMAS represents a young dynamic organization, born quietly in the midst of turmoil, fearless of the untrodden path and ready to innovate on lines similar to primary health care. Nothing can better describe the five-year journey of CAMAS so far.
Schisto comes to town

Rural people in the tropics catch schistosomiasis* as they farm, fish, swim, fetch water, wash and bathe. City-dwellers, who have less water contact and better sanitation, ought to be luckier. Instead, in slums and shanty-towns, more and more of them are getting the disease

by Rajendra Kumar Sarda

Until the early 1960s, no-one knew of any schistosomiasis in the large towns and cities of developing countries. Now, surveys have revealed that it is not only present but on the increase. Addis Ababa, Dar es Salaam, Harare, Kampala, Kinshasa and Lusaka have all reported schistosomiasis as a public health problem in their inner-city areas. Cities in Latin America—Sao Paulo and Recife—are not immune.

A number of factors have led to this spread of schistosomiasis in the urban environment, the most important being rural-urban migration. Cities in the developing world are increasing in population at 3.8 per cent a year, twice the rate of rural growth, as people from the countryside flock to town in search of white-collar jobs. The economic prospects they find there are very often dismal, and unemployment is widespread. To sustain themselves they start small farms along the rivers and streams, growing food crops.

The only areas available to them for housing are on steep hillsides and in areas liable to seasonal flooding. Because they live in unplanned settlements they are rarely or inadequately supplied with water, while latrines are almost non-existent. These migrants introduce new sources of disease into previously disease-free areas. Because of the overcrowded conditions, they have many health problems, including schistosomiasis.

The urinary (bladder) form of schistosomiasis occurs along the Tanzanian coast where Dar es Salaam, the capital, suffers like other fast-growing cities from the great phenomenon of urbanisation. It has a large number of swampy depressions and lakes; a network of small streams and canals cut through the city, most of them draining off into the Indian Ocean via the Msimbazi creek. In Dar es Salaam the markets overflow with rice, maize, cassava and other food crops grown in the city. Farming is fast becoming a major occupation. In the 1981 national census, it emerged as the second most common profession in urban centres in Tanzania. The economic conditions are making food dearer, so people are going figuratively “back to the land”.

Dar es Salaam’s population increased from 0.3 million in 1970 to 1.3 million in 1981. In the 1960s, planned settlements were set up on the outskirts of the city, but so many people came in that other, unplanned settlements have grown up around them. All these areas, planned and unplanned, have been provided with water from outdoor public standpipes—largely satisfying the need for clean water for domestic purposes—and pit latrines are in common use. Nevertheless, urinary schistosomiasis and fecal-borne infectious diseases are rampant amongst adults and children.

Surveys made by the Parasitology Department of the Faculty of Medicine, University of Dar es Salaam, showed that the average prevalence of urinary schistosomiasis was 20 per cent in school-age children, though in some schools over half of the children are infected. The city has a population of 300,000 primary-school children; an estimated 60,000—\(\text{per cent}\)_
very likely more—are infected. Over the years more adults, too, have been seen in the city's dispensaries suffering from schistosomiasis.

After the surveys, the Kigogo area was chosen for more detailed studies. The aim was to find out how schistosomiasis was transmitted and to examine the factors which bring the city population into contact with contaminated water.

Located only three miles from the city centre, Kigogo has a population of 56,000. A meandering, all-year-round watercourse runs through the area: its water comes mainly from the textile factories at Ubungo as they discharge their wastes. Human waste from overflowing pit latrines also enters the watercourse at several points. Snails, the intermediate hosts for schistosomiasis, have been found in abundance in this polluted stream. Rice and vegetables are cultivated extensively on both sides of it. The adults actually do the farming, but children of all ages help with vegetation clearance, planting, weeding and harvesting.

The water from the stream is diverted into shallow earth channels which provide ideal conditions for the snails. Adults work barefoot, some channeling water into their shambas, others drawing water into a watering-can, all making contact with the contaminated water. All along the watercourse there are signs of defecation.

Some residents have built several small water impoundments for fish-farming, so creating new sites of transmission. Dense masses of water hyacinth cover these impoundments. Usually it is the children who are seen clearing the hyacinth. Over 55 per cent of them in this area suffer from urinary schistosomiasis already, and these new man-made reservoirs will make the disease increasingly prevalent.

The construction of a new road from Kigogo to Magomeni has also created suitable habitats for the snails. The road had to cross a valley, so several bridges were built. Due to poor excavation and drainage, the surrounding areas became waterlogged. The people were quick to take advantage of this and started planting rice, but within a few months infected snails were found at these new sites. As a result of the poor drainage, the surrounding areas flood during the rainy season, which in several places makes it difficult to cross the valley without coming into contact with the contaminated water.

The city's expanding population exerts pressure on all the social services, including clean and safe water. Dar es Salaam has frequent water shortages, or outright cuts, in the lower Ruvu water-plant supply. This has resulted in more people going to streams and ponds to do their washing and bathing. Our studies in the Kigogo area have shown that the community stand-pipes supplying safe water were adequate for some domestic needs; however, they did not prevent people going to contaminated water for bathing, laundry and recreation. Most women questioned about the stand-pipes said it was more comfortable to carry their laundry to nearby streams than to carry the water home from the pipe.

Swimming in the watercourse and the small fish impoundments was the most important water-contact activity throughout the year for the Kigogo children. With the adults, it was largely bathing, washing clothes and farming that brought them into contact with con-
Schistosomiasis (bilharziasis) is a water-borne parasitic disease affecting mainly developing countries. Over 200 million people are thought to be infected and 500-600 million more could catch it at any time, because of poverty, ignorance, poor hygiene, poor housing and lack of clean water and latrines. Most of these people live in rural areas in Asia, Africa, the Caribbean and Latin America, but urban schistosomiasis is now gaining ground.

taminated water. The children in Kigogo and other areas of the city have no recreational facilities. Their former playing fields have either been cultivated or have had houses built on them.

By itself, providing public standpipes for water and promoting sanitation will not control schistosomiasis in cities located in endemic areas. Studies in Kinshasa and in Dar es Salaam show that even when public taps are available, human contact with contaminated water is unavoidable. However, research in the Caribbean island of St Lucia showed that when a public standpipe system was supplemented by laundry facilities and showers, schistosomiasis was successfully halted. In Zimbabwe too, the installation of simple concrete washing slabs reduced people's contact with contaminated water. (See World Health December 1984, pp.24-26: refers to two articles.)

In the last few years the strategy of schistosomiasis control has changed. Several safe and highly effective drugs are now available, and new low-cost methods of rapid diagnosis have been developed. The spread of schistosomiasis can be checked.

In a city environment, the most effective places for diagnostic services and treatment are the urban health centres. Vigorous health education is necessary to influence people to change their behaviour to an alternative made possible by simultaneously providing communal laundry, shower and sanitary facilities and recreation grounds for children. These measures will reduce many infections and other parasitic diseases, including schistosomiasis.

The demand for food in cities suggests that the construction of small dams must be increasing rapidly. More local government departments are now realising the health hazards involved and are encouraging preventive health measures. In the long term, however, disease control needs to go hand in hand with better socio-economic conditions for those who live in both the rural and urban areas of the developing world.
Alcohol and disease

Drinking alcohol, the most widely used psychoactive drug in the world, can be a pleasure, but unless the amounts taken by regular drinkers are carefully limited many of the body’s vital organs are at risk. When some of these are damaged seriously enough by the daily intake of alcohol over a number of years, the health and even the life of the drinker is threatened, warns WHO in one of a series of information sheets on alcohol misuse, prepared in collaboration with the UK’s Health Education Authority.

Worldwide, the amount of alcohol-related illness puts a considerable strain on national health budgets and uses up funds which are badly needed to prevent and cure other diseases. One out of every three hospital beds in some European countries is occupied by a patient with a drink-related disease, and in developing countries the illness caused by drink is growing. In one generation’s time they will catch up with, or even exceed, the present per capita alcohol consumption in developed nations, if their consumption continues to rise at current levels. The natural outcome is likely to be a higher incidence of alcohol-related problems, and a further substantial drain on scarce economic and social resources.

Regular drinking can damage any of the organs of the body except the bladder and lungs. The brain, nerves, liver, muscles, kidney, heart, pancreas, sex organs, gutlet, stomach, and bowels are all at risk. After heart disease and cancer, alcoholic liver disease (cirrhosis of the liver) is now the chief cause of death among middle-aged men in many developed countries. The chances of survival depend on how soon the sickness is caught.

The brain, which when you drink is literally bathed in alcohol, is now being found by medical experts to function less well in the case of heavy drinkers. One result can be difficulty in walking properly and controlling the muscles. In addition, alcohol is of course a depressant, and drinkers who experience deep depressions often commit suicide.

The digestive system is also a prime target of alcohol, and scientists have discovered it is involved in cancer of the mouth, throat and gutlet, which since 1950 has been an increasing cause of death. One reason why heavy drinkers die earlier than other people is high blood pressure, caused by the effects of alcohol. There is also damage to their heart muscles which prevents the heart from pumping effectively.

Sex drive in men may be harmed by too much drinking. Sex hormone levels fall, leading to less interest in sex and a reduced ability to make love, or even impotence. Research among women has been less, but the evidence indicates that their interest also diminishes when they drink heavily.

To combat the health hazards of drinking, different approaches have been adopted from one country to another. However, the general lines agreed by experts include education, encouraging people to stay within safe limits when they drink, restricting the availability of alcohol, and imposing a tax large enough to make drink a luxury. Ultimately, the responsibility rests with each one of us, aware that the less we drink, the better it is for our bodies.

Regular drinking can damage any of the organs of the body except the bladder and lungs.
Photo WHO/Anenden

US research in health promotion

A federal grant for a five-year project that could help to set the course for health promotion and disease prevention policy throughout the United States has been awarded to the University of Texas Health Science Center at Houston. The project, called the Southwest Center for Prevention Research, is one of three demonstration sites in the country approved by
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- Health education award. An annual award of US $5,000 is to be made by WHO for outstanding contributions made by individuals, institutions or non-governmental organizations towards strengthening Health Education in primary health care. The cash prize is intended to be used for continuing these health education activities, and will be accompanied by a commemorative plaque. The award has been made possible by the generosity of the US-based philanthropic association, the L.I.S.Z. Foundation.

Nominations for the 1987 award must reach WHO before 31 August this year, and should be addressed to: Health Education Service, Division of Public Information and Education for Health, WHO, 1211 Geneva 27, Switzerland. They should include the name and address of the person or institute nominated, a brief summary of the primary health care project concerned, and a description of the health education activity being carried out as part of the PHC project, emphasising the planning, implementation and evaluation phases and highlighting the innovative approaches being used and the impact of the education on people's behaviour.

Only a health education activity still in progress will be considered for the award. And the UN family of organizations and members of their staff are not eligible for nomination.

- Emergency kit. An emergency immunization Kit perfected by Oxfam of the UK will enable Oxfam and other agencies to keep a stock of pre-packed kits of cold chain equipment for use in emergency areas. The kit contains all the equipment necessary to deliver 5,000 doses of vaccine—about one week's work in an epidemic-stricken or earthquake-hit region.

- Breakthrough! Research carried out in Bangladesh has convinced US physicians that, if your mother gave you chicken soup when you were ill—she was right! Chicken soup, like any other simple formula that contains protein, starch, salt and water, is an excellent remedy for diarrhoeal illnesses, which can be lethal because they drain the body of water and salt. Reporting this “breakthrough,” the US National Council for International Health, compared such home remedies, commonly used in the Indian subcontinent, with oral rehydration salts (ORS) which are saving half a million children's lives every year.

- Honoured. The Leon Bernard Foundation Prize has been awarded this year to Sir John Reid, formerly Chief Medical Officer at the Scottish Home and Health Department and now Consultant Adviser on International Health with the UK's Department of Health and Social Security. Sir John has been a member of WHO's Executive Board from 1973 to 1986, and was its Chairman at the time of the Alma-Ata Conference in 1978. Established in honour of one of the founders of the Health Organization of the League of Nations, the Leon Bernard Foundation Prize is awarded for distinguished contributions to knowledge and practice in social medicine.

In the next issue

The United Nations has declared 1987 the International Year of Shelter for the Homeless. The July issue of World Health will examine the plight of the homeless in many parts of the world, and the harmful effects that unsatisfactory housing and sanitation have on human health.

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