

WE 205
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TB

A Global Emergency

LOW
PRIORITY

WHO REPORTS ON TB PANDEMIC

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WIF205
94TB
C.2



Editor: Kraig Klaudt
Layout: Craig R. Smith
Graphs: Dan Halberstein
Brochure: Marilyn Langfeld

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TB Infects $\frac{1}{3}$ of the World's Population



TB Is a Low Priority

Tuberculosis is one of the world's most neglected health crises. In spite of its alarming danger, surprisingly little action has been taken to address the TB epidemic. TB has been a low priority on the world's health agenda.

Every day, I ask why this situation is allowed to continue.

Is it possible that no one really cares whether **30 million people** will die in the next decade from TB?

How can TB be such a neglected priority, when ***TB is one of the most cost-effective adult diseases*** to treat?

How can one ignore ***a germ that infects a third of the world's population?***

The numbers are so staggering that I suspect we can't grasp their full impact. Can we really believe that millions of people are dying from TB each year when an inexpensive cure is available? Can we comprehend the magnitude of this injustice?

Perhaps it would be more helpful to think of what it means to let one person die from TB, instead of the faceless millions—to realise that this person has a family, hopes and dreams. Who would refuse to spend **\$30—the cost of TB medicines in many countries**—to save this human life?

Dramatic action is needed to end this apathy—whether it is for the sake of one person or 30 million.

In April 1993, WHO declared a global TB emergency. This report will document, in specific terms, what steps must be taken to address the TB epidemic.

For those with TB, the battle is half won. They don't need to wait for a cure: one already exists that is 95 percent successful.

What is needed now is coordinated, responsible action by people in governments, foundations, multilateral organizations, corporations and NGOs who can finance and implement more TB treatment programmes.

The growing TB epidemic is no longer an emergency only for those who care about health, but for those who care about justice.

Dr Arata Kochi
TB Programme Manager
World Health Organization
April 1994

The Leading Infectious Killer of Adults

TB kills more adults each year than any other infectious disease—more than AIDS, diarrhoea, malaria and other tropical diseases combined. Never in the history of medicine has one disease caused so many deaths yet remained so invisible.

3 Million Deaths Each Year

Imagine a sports stadium, filled to capacity with 50,000 people. That's how many people die from TB each week. Their deaths could be prevented, since an effective cure is available which costs less than the price of one stadium ticket.

But people with TB are not dying in stadiums, where everyone is watching. Over 95 percent of the deaths take place in the developing world, where no one seems to notice. TB causes 26 percent of avoidable adult deaths in the developing world. Eighty percent of those cases strike persons who are in their most productive years of life (ages 15 to 59).

Most people in Europe and North America have been watching other crises besides TB. In their minds, TB is an ancient disease that was wiped out in the 1950s.

In reality, while TB was virtually eliminated in industrialized countries, nothing changed for the developing world. In developing nations, tens of millions of people have been dying needlessly from TB for decades. Now TB is returning to industrialized countries with a vengeance, in new and even deadlier forms.

Industrialized Countries Where TB Cases Are Increasing

Country	Increase	Period Of Time
Austria	5%	1989-1990
Denmark	20%	1986-1992
Ireland	9%	1988-1991
Italy	27%	1988-1992
The Netherlands	19%	1987-1992
Norway	21%	1988-1991
Spain	28%	1990-1992
United Kingdom	5%	1987-1991
USA	20%	1985-1992

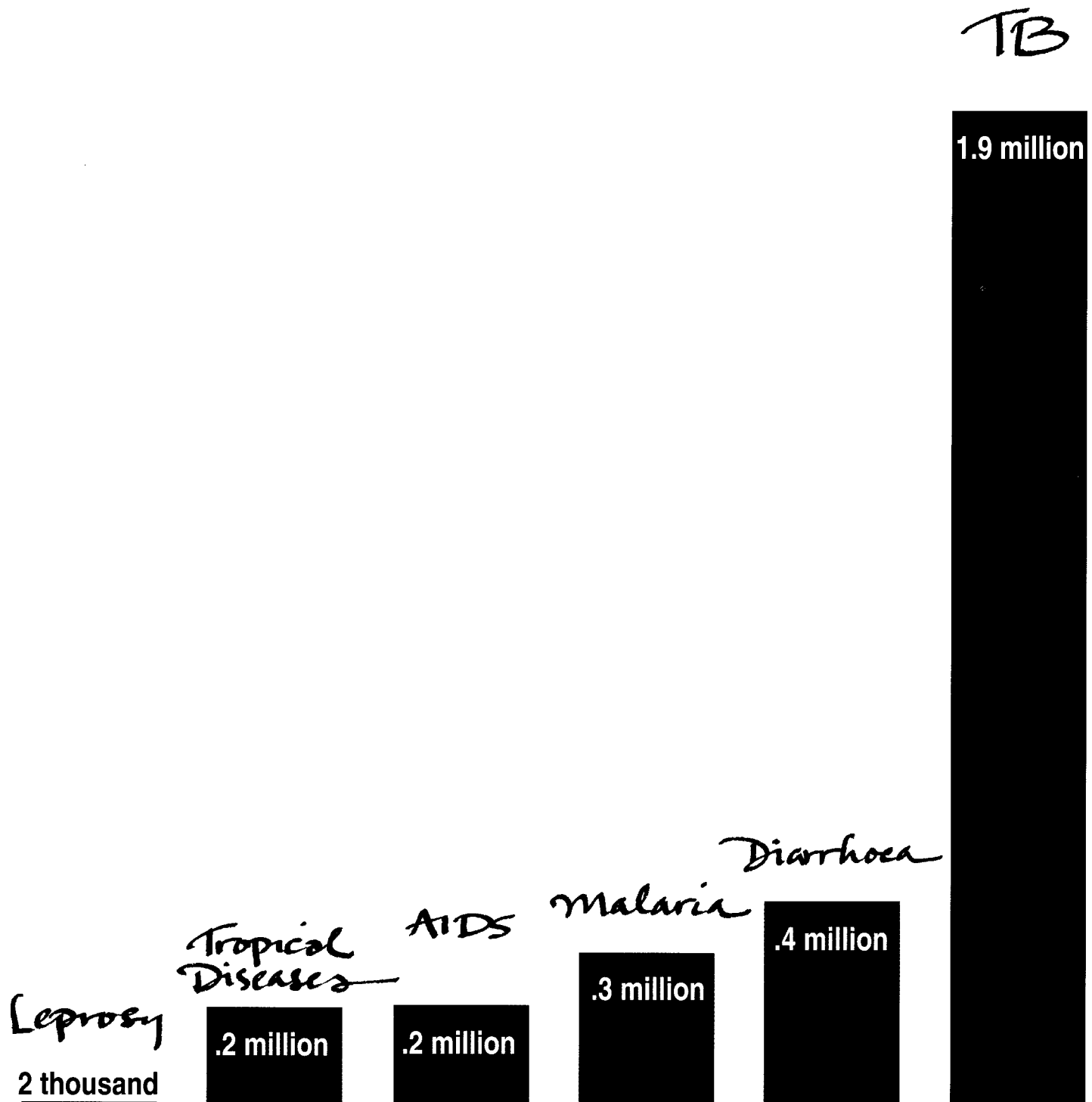
Source: WHO TB Programme

TB Returns to Wealthy Countries

In the United States, the number of TB cases had been declining at a rate of six percent each year. In 1985, this decline stopped and TB cases have been increasing ever since. In New York City, TB cases have doubled since 1985. It is estimated that 15 million people in the US are now infected with the TB germ.

The return of TB to wealthy nations is no mystery. The HIV epidemic and the neglect of TB control programmes has facilitated TB's spread. In addition, with fast and accessible travel, migration and immigration, infectious diseases like TB do not stop at national borders. It is no longer possible to eliminate an infectious disease in one corner of the world and allow it to run rampant in another. In short, it will be impossible to control TB in the industrialized nations unless it is sharply reduced as a health threat in Africa, Asia and Latin America.

Deaths



Deaths from Infectious and Parasitic Diseases in 1990, Over Age 5

Deaths by cause, as reported by the World Bank, are lower than cause-specific mortality estimates developed by WHO on the basis of detailed country reports. Tropical diseases include trypanosomiasis, Chagas' disease, schistosomiasis, leishmaniasis, lymphatic filariasis and onchocerciasis. Source: World Bank, World Development Report 1993.

Multidrug-Resistant TB

While it was always important for people to avoid TB infection, the incentive has now increased dramatically because of the spread of potent strains that are resistant to two or more of the major anti-TB drugs. Multidrug-resistant TB develops when the treatment of a TB patient is inadequate or incomplete and some bacilli survive and multiply.

In 1992 in New York City, more than one-third of TB strains tested were resistant to one drug, and almost one-fifth were resistant to the two main drugs, rifampicin and isoniazid. A few strains, such as strain “W” recently found in more than 100 New York City cases, resist almost all the known anti-TB drugs. So far in the US, outbreaks of multidrug-resistant TB have killed nearly 80 percent of the people they have infected. Most of these deaths have been among people who were also HIV-positive, so it is difficult to estimate the overall death rate from multidrug-resistant TB.

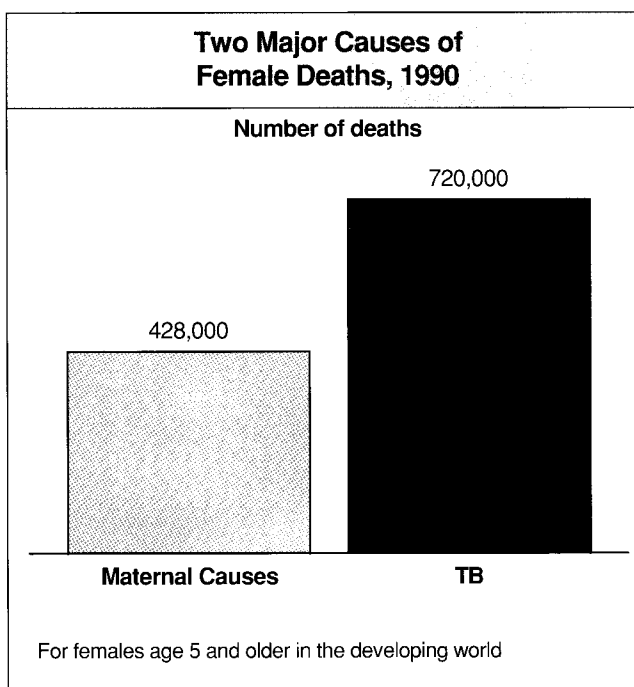
Many TB programmes around the world are not aware of how to provide the safeguards to prevent the spread of multidrug-resistant strains of TB. By providing inadequate or incomplete treatment to TB patients, these programmes are serving as virtual breeding grounds for multidrug-resistant TB. As these drug-resistant strains spread, TB threatens to become an incurable disease for future generations.

TB & HIV Co-Epidemic

The human immunodeficiency virus is a nightmare-come-true for TB control workers and patients. Even though a third of the world’s population is infected with TB, most people never become sick because their immune system keeps the TB germ in check. HIV destroys those cells that keep the TB germ in check.

While TB/HIV co-infection currently produces just a small percentage of all TB deaths, it is one of the most rapidly growing factors in the TB epidemic. In 1990, TB/HIV co-infection was present in four percent of all TB cases. By the year 2000, co-infection will dramatically increase to nearly one in seven of all TB cases.

The TB/HIV co-epidemic is already underway in Africa, and the impact has been devastating. Since the late 1980s, the annual number of TB cases with HIV co-infection has nearly tripled in Zambia and more than doubled in Malawi. Deaths from TB among those who are co-infected have skyrocketed. Asia should be bracing itself for a similar TB/HIV co-epidemic: it already has two-thirds of all TB infections, and now HIV is spreading rapidly there. In 1990, it was estimated that only one percent of all TB cases in the region were attributable to HIV infection. That proportion may reach 10 percent by the year 2000.



Source: World Bank / WHO Global Burden of Disease Project / WDR 1993



Father in Uganda grieves the death of his children

TB deaths are unnecessary and avoidable. The HIV epidemic is quickening the spread of TB, and new multidrug-resistant strains are making the disease more difficult to cure. Photo: WHO / E. Hooper

The Most Cost-Effective Adult Treatment

Fortunately, the worst infectious killer of adults is also a very cost-effective disease to combat. The drugs needed to cure a person with TB cost as little as \$13 and rarely more than \$100 in developing countries. And by curing even one person of TB, the disease can be prevented from spreading to dozens of other people in the community.

Value for Money

Few public health expenditures provide so much value for so little money. In some parts of the world, the cost of curing TB is as little as 90 cents for every year added to the patient’s life. Yet many nations are spending more than half of their health budgets on expensive hospital services that, by comparison, save very few lives. For example, some heart surgeries cost as much as \$100,000 for every year added to the patient’s life.

The World Bank’s *World Development Report 1993*, “Investing In Health,” recently presented the results of the most comprehensive study ever made on the relative value of treating and preventing various diseases. According to the report, TB control is “among the most cost-effective of all interventions.” The report recommends that resources for worthwhile interventions such as those used to fight TB be doubled or tripled.

Making TB Treatment Even More Effective

A 12-month “long-course” treatment of TB was very popular until the 1970s. However, the discovery of a new anti-TB drug made it possible to develop a shorter and more effective six-month “short-course” treatment.

As its name implies, long-course therapy takes much longer than short-course chemotherapy, and as a result, only half as many people complete the treatment. When treatment is not completed, one is playing “triple jeopardy”: not only is the patient’s life jeopardized, but the patient continues to infect others in the community, and that infection has a greater likelihood of becoming multidrug-resistant. After closer analysis, the cost of long-course therapy—which is initially lower than short-course—is ultimately higher when one considers the cost of treatment failure.

WHO’s policy is that all countries should replace long-course therapy with short-course chemotherapy as soon as possible. One of WHO’s goals is to ensure that when TB cases are treated, they are treated successfully.

The Success of Treatment Programmes In Developing Countries	
Cure Rates Over 80%	Under 60%
● Benin	● Burkina Faso
● Malawi	○ Burundi
● Tanzania	● Gabon
● Chile	○ Kenya
● Honduras	○ Madagascar
● China	○ Mali
● Korea, Rep.	○ Niger
● Malaysia	○ Togo
● Viet Nam	○ Zaire
	○ Haiti
	○ Cambodia
	● Indonesia
● Projects in areas using short-course chemotherapy	
○ Countries still using long-course treatment in the majority of cases	

Source: WHO TB Programme

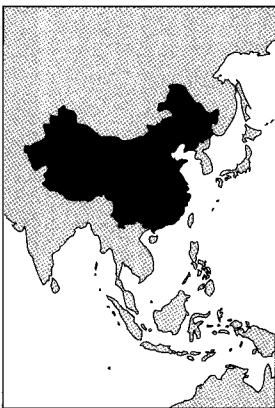
Effectiveness

By following WHO's recommended TB control policies, countries can attain cure rates of over 80 percent. Some of the world's poorest countries are already achieving these successful results, and are surpassing the cure rates attained in many industrialized countries.



Tanzania's Model Programme. Tanzania's cure rates have risen from 43 percent to nearly 80 percent in the past decade. Tanzania's success can be credited to its adherence to the TB treatment guidelines now recommended by WHO and pioneered by the International Union Against TB & Lung Disease. These guidelines emphasize the importance of a good recording and reporting system, which is essential for ensuring that patients take the required medicines. In addition, the strong support of the Tanzanian government and donor governments have helped the country avoid problems faced by many other African TB control programmes, such as interruptions in the supply of drugs.

Fighting the Epidemic in Somalia. Cure rates of 85 percent are being recorded in one of the world's most chaotic regions. A TB clinic in Merka, Somalia, 50 miles south of Mogadishu, is following WHO's recommended treatment guidelines and obtaining outstanding success. Another nearby TB control project is achieving 75 percent cure rates among Somali nomads. Health workers in northern Kenya are providing temporary housing to each infected nomad and their family, thereby making it possible to administer supervised treatment. Nomads stay in this temporary housing until all members of the family are out of danger.



Saving Millions of Lives in China. While China has nearly 25 percent of the world's TB cases, cure rates in most of China have been less than 50 percent. An ambitious seven-year project, covering half the country, is on its way to raising this to 90 percent. In 1991, WHO, the World Bank and the Chinese government jointly initiated this project in five counties of Hebei Province. The project is now being extended to over 1000 counties in 12 provinces, reaching nearly half a billion people. Cure rates averaging 92 percent are being achieved. One unique facet of the China programme is that the "barefoot doctors" are given an incentive for doing an effective job of controlling TB. These local doctors are paid \$1 for every TB case they find, and \$5 for every one of their cases who successfully completes treatment.

Community-Based TB Control in Bolivia. A successful TB control project is being conducted among the Aymara Indians in the tropical, mountainous area of Caranavi, Bolivia. This project is especially noteworthy in its attempt to respect and preserve the culture of the Aymaras while at the same time using modern medical practices for controlling TB. Members of the community play a primary role in making sure all who are sick with TB seek treatment and take all of their medicines. Although Bolivia has the highest annual incidence rate of TB among all Latin American countries, the project in this remote part of the country is achieving cure rates over 80 percent.



Low Cost Drugs are Essential

Many countries continue to use long-course therapy because of the expense involved in switching to the more expensive drugs needed for short-course chemotherapy—such is the case in two-thirds of the African nations. Currently, there is a great need to provide developing nations with a dependable supply of TB drugs at affordable prices. WHO has found that in nearly half of 74 developing countries recently surveyed, there have been disruptions in the supply of anti-TB medicines. These disruptions are a sure way to encourage the spread of multidrug-resistant strains of TB.

TB Case Rates for Selected Countries, 1990

Over 200 Cases per 100,000 People Each Year

Zambia	345
Bolivia	335
Philippines	280
South Africa	250
Peru	250
Nigeria	222
India	220

Between 100 to 200 Cases

Mozambique	189
China	166
Korea, Rep.	162
Pakistan	150
Tanzania	140
Honduras	133
Mexico	110

Under 100 Cases

Malaysia	67
Portugal	57
Brazil	56
Saudi Arabia	22
Germany	18
Uruguay	15
Greece	12
United States	10
Australia	6

Good Supervision is Needed

Perhaps the most important aspect of successfully treating TB cases is ensuring that the patient actually takes his or her medicines, especially during the critical first two months of treatment. While TB medicines can be administered at the patient's home or at a local clinic to help make the treatment more affordable, a health worker must always be present to directly observe the patient taking the medicines.

WHO's policy is that a rigorous evaluation system must be in place in every national TB control programme to track the patient's progress. This system of record-keeping and reporting motivates individual health workers and entire TB programmes to be responsible for good performance. Health workers or treatment centres which are not achieving good results can be easily targeted for further supervision and training.

When there is an adequate supply of TB drugs, and short-course chemotherapy and WHO's monitoring system are properly used, over 95 percent of TB cases can be cured in many of the world's worst-affected countries.

Cure is the Best Prevention

People can only spread the TB germ to others when they are sick with TB and coughing. The emphasis must be on successfully treating all infectious TB patients, making sure they take all of their medicine. Strategies such as vaccinations, quarantines, ultraviolet lights and expensive ventilation systems may be affordable for wealthy communities but are far less cost-effective in controlling the spread of the disease than simply treating contagious cases.

Source: World Development Report 1993



Young girl in Mexico is given a basic examination

It costs as little as \$13 for the medicines to cure a person of TB. Moreover, when properly administered, the treatment is over 95 percent effective. Photo: Uniphoto / Daemmrch

An Ignored Opportunity

Infectious diseases cause nearly a third of all deaths in the developing world, killing over 13 million men, women and children each year. Yet only \$811 million in foreign aid was spent in 1990 to control all infectious diseases, including TB, AIDS, diarrhoeal diseases, malaria and vaccine-preventable childhood infections. This amount is less than what some cities spend to construct, equip and staff one modern hospital.

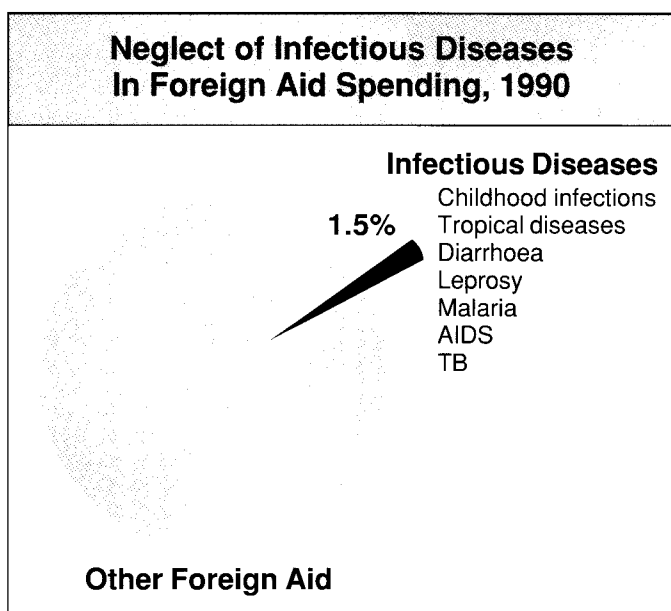
A Low Funding Priority

Tuberculosis receives the least amount of funding among this neglected group of infectious diseases. In 1990, only \$16 million of foreign aid from all donors was available to control the TB epidemic, making TB the world's most neglected health crisis.

In the past, governments have regarded TB as a low priority. Less than one-tenth of one percent of all external aid to developing countries is devoted to TB control. TB funding accounts for only four-tenths of a percent of all health-related foreign assistance to developing countries. In developing countries, TB control receives less than two-tenths of a percent of all health expenditures, even though TB is a leading cause of death in many countries.

Poor Public Policy

Addressing the TB epidemic is good public policy; ignoring it is not. Effective TB treatment will provide substantial savings in medical costs in the near future.



Disbursements, all sources. Source: World Development Report 1993, Background Paper, C. Michaud and C. Murray. "Aid Flows to the Health Sector in Developing Countries."

The United States provides one example. Until 1992, the National Institutes of Health was provided with less than \$4 million annually for TB research, during a time when multidrug-resistance was gaining a foothold. Now, larger amounts of money must be spent to prevent the spread of these drug-resistant strains. The cost of treating a TB patient in the US—usually around \$2,000 for outpatient treatment—jumps to as high as \$250,000 when the patient has multidrug-resistant TB. More expensive control efforts are now becoming more necessary. For example, New York City is constructing an isolation facility on Riker's Island, at a cost of \$64 million, to control the spread of multidrug-resistant TB strains among prisoners. It is now estimated that the direct and indirect costs of the TB epidemic for the US will total over \$2 billion by the year 2000.

Businesses around the world will absorb many of the costs if the TB epidemic continues uncontrolled. Corporations are affected as they lose productive workers and must pay higher insurance premiums and sickness benefits. Since TB strikes most people in their "breadwinning" years, the buying power of an economy is

Funding

AIDS & STDs



\$185
million

Leprosy



\$77
million

Tropical Diseases



\$74
million

Diarrhoea



\$55
million

Malaria



\$47
million

TB



\$16
million

External Aid Flows for Infectious and Parasitic Diseases

Millions of dollars spent in 1990 on leading infectious and parasitic diseases. Tropical diseases include trypanosomiasis, Chagas' disease, schistosomiasis, lymphatic filariasis and leishmaniasis. Source: World Development Report 1993, Background Paper, C. Michaud and C. Murray. "Aid Flows to the Health Sector in Developing Countries."

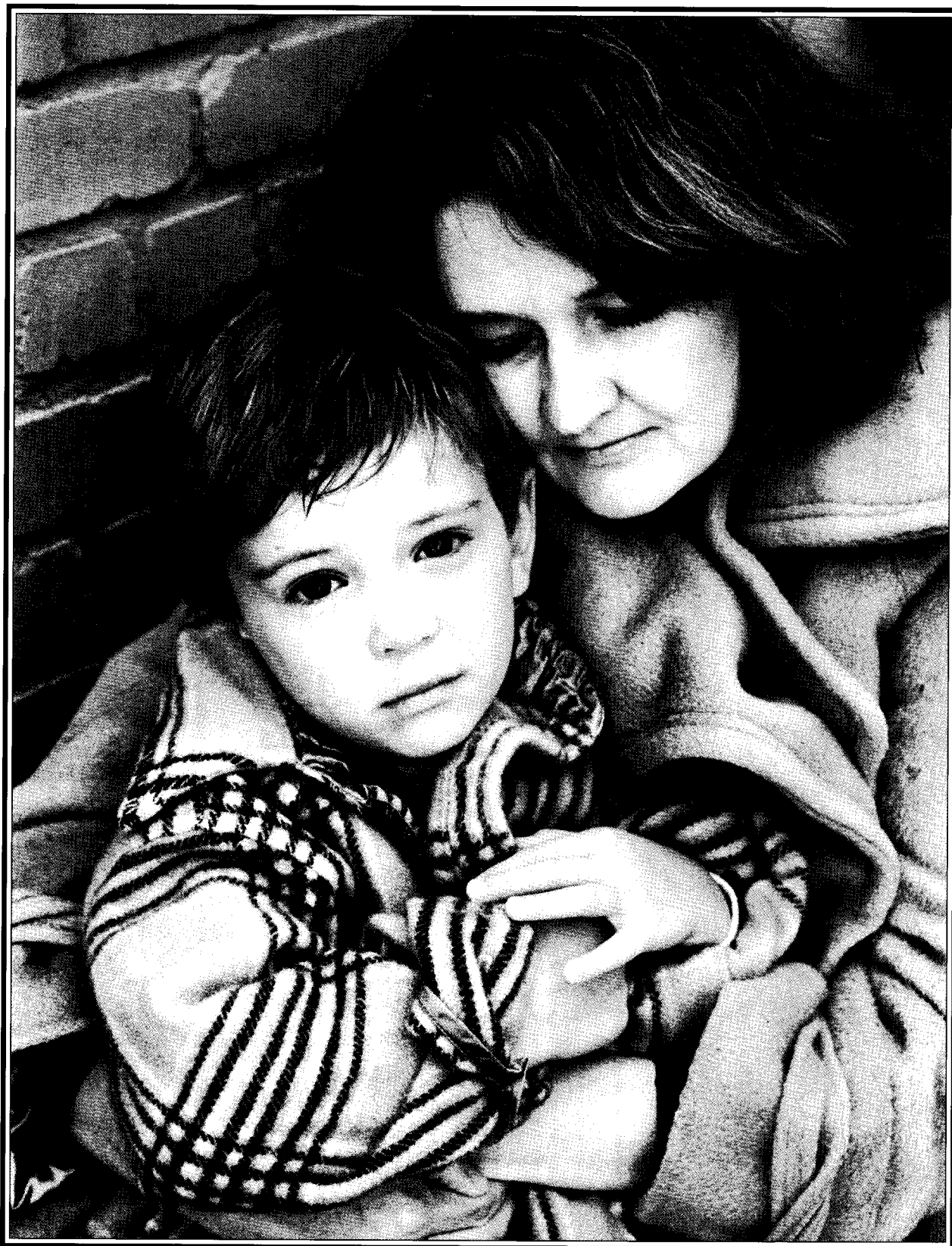
weakened when families must reduce their savings or sell their assets in order to pay medical expenses.

It is important that industrialized nations not remain on the sidelines in dealing with infectious diseases such as TB. They must not repeat the ignorance and neglect that was shown at the beginning of the AIDS epidemic, when much could have been done to contain the disease.

New Attention to an Old Disease

Fortunately, many of the factors that have conspired to cause the shocking world-wide neglect of TB are changing:

- **The extent of the TB crisis has been confirmed by recent studies.** While TB has always been a serious problem for developing countries, it has only been within the past five years that studies have clearly demonstrated the enormous extent of the epidemic.
- **TB in industrialized nations has sparked a new awareness of the disease.** Since 1985, reports have been documenting the rapid return of TB cases to industrialized nations—prompting an awareness of the crisis in developing nations as well. Prior to that time, many people had been under the false impression that, because TB had been largely eliminated from wealthy nations, it had also been eliminated from the rest of the world.
- **New information exists on the cost-effectiveness of TB control.** Over the past few years, preparation for the World Bank's *World Development Report 1993*, "Investing In Health," has sparked an unprecedented amount of attention on the cost-effectiveness of addressing different diseases. It has persuasively demonstrated that TB is one of the most cost-effective of all adult diseases to treat.
- **WHO has recently re-established its TB Programme.** As recently as 1988, only one person was responsible for TB monitoring and control at the World Health Organization. With the assistance of a few donors, the TB Programme has been revitalized over the past five years to play a leading role in addressing the TB epidemic.
- **TB control is being recognized as a "horizontal" programme.** Because some have viewed TB control as a "vertical," centrally-administered programme, TB has suffered in the debate over Primary Health Care and the need for "horizontal" programmes. While effective TB control needs to have some vertical aspects, the best TB control is done at the Primary Health Care level. WHO's TB policy is built on that foundation.
- **TB research has been given greater priority.** As TB was dramatically reduced in industrialized nations, many of the best scientists and research specialists began devoting themselves to other diseases. With renewed attention to TB in the past few years, the disease has become a much higher research priority.
- **Child survival initiatives have broken new ground.** In the past decade, the enormous success of the Expanded Programme on Immunization has helped remove much fatalism toward controlling diseases in less developed countries. In addition to expanding child survival programmes, a logical next step is to develop a similar package of cost-effective health interventions for adolescents and adults.



Mother and son in America

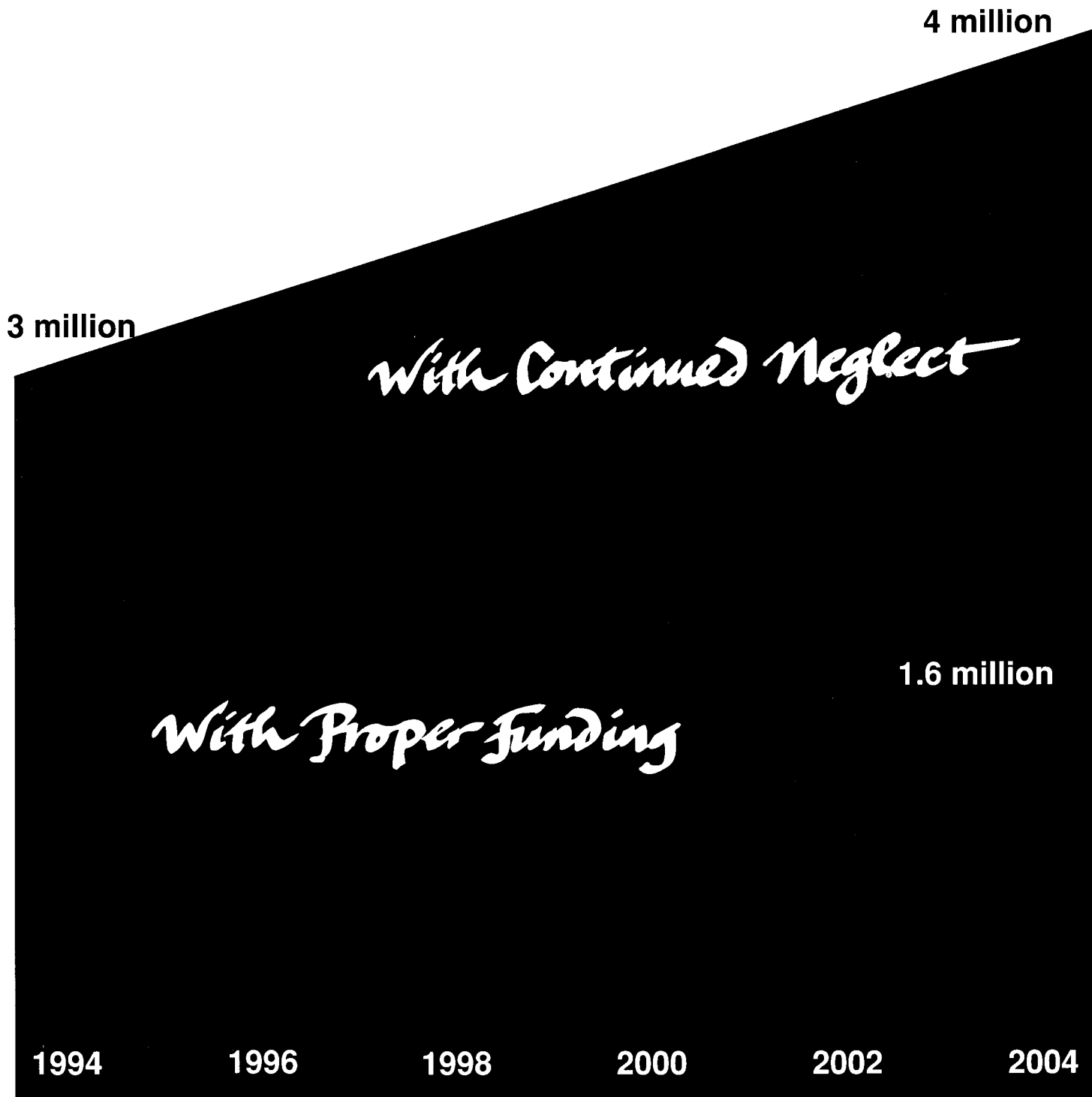
If TB continues to be ignored in less developed countries, the disease could become an expensive—even incurable—disease for future generations. Photo: Human Issues Collaborative

12 Million Lives Can Be Saved

Tuberculosis deaths could be reduced nearly in half in the next decade. Approximately 12 million of the more than 30 million people expected to die from TB in the next decade can be saved through better use of proven treatment programmes. By the year 2004, annual TB deaths could be lowered to 1.6 million, rather than allowed to increase to nearly 4 million.

The best way to accomplish this objective is simply to cure people who are sick with TB, instead of ignoring them or providing them with ineffective treatment. Currently, less than 50 percent of detected, infectious cases are being cured. WHO believes the world could cure 85 percent of such cases by the year 2000.

The Future



Annual TB Deaths

TB deaths are anticipated to increase to over 4 million annually in the next decade. TB deaths could decline to 1.6 million annually in the next decade if an additional \$100 million in external assistance is made available each year to TB control programmes in developing countries. WHO's TB Programme will need \$11 million each year to ensure these resources are well spent. Source: WHO TB Programme estimates.



Rice farmer in the Philippines

Of the 30 million people who are expected to die from TB in the next decade, the majority are in the most productive years of their lives. An all-out battle against TB could save nearly half of these lives. Photo: Carl Purcell

The Strategy

There is little mystery as to what is needed to prevent 12 million people from dying of TB in the next decade. Simply put, more effective TB treatment programmes are needed in every region of the world.

WHO's TB Programme is taking the lead in promoting sound national control strategies. The TB Programme's plan of action is distinguished by the following objectives:

- **Demonstrate to governments the economic and social consequences of ignoring TB.** The WHO TB Programme has a crucial role to play as a catalyst for creating the political will to mobilize against the TB epidemic.
- **Help nations establish effective TB programmes.** WHO will provide technical help and advice to nations, not medical teams or direct funding. WHO will work with donors to ensure that funding provided to national programmes is well used.
- **Focus on the worst-affected countries.** Initial efforts must focus on countries with large populations where the TB epidemic is the worst.
- **Develop both the "vertical" and "horizontal" aspects of TB control.**
The most effective TB control strategies are both centrally initiated and locally administered, providing sound national programme management while integrating TB services into Primary Health Care systems, which are the most effective means for reaching local communities.
- **Promote short-course chemotherapy in place of long-course therapy.**
Governments must be encouraged to replace long-course therapy with short-course chemotherapy.
- **Emphasize supervised treatment.** Giving out drugs to TB patients is not enough. The key to successfully treating TB is to ensure that the patient takes all of the medicine. TB control programmes must be designed with good record-keeping, staff accountability, and patient monitoring.
- **Treat existing cases before searching for new cases.** Many health care programmes are wasting limited resources by searching for new TB cases when they are curing less than half the cases they treat. Only when cure rates are high should resources be devoted to finding new TB cases.
- **Funding should first emphasize treatment, then research.** The search for new medicines and technology should not be done at the expense of administering the highly effective medicines currently available. Effective treatment of TB victims has been so neglected that it must be given the highest priority—to save lives and prevent further TB transmission. The first research priorities should be the development of new drugs to deal with growing drug resistance, and the development of improved diagnostic methods. For the longer term, a better vaccine will also be needed.

Management Committees

"CARG"

COORDINATION, ADVISORY AND REVIEW GROUP

A management group representing TB "endemic" countries, financial contributors, NGOs, and permanent members (UNDP, the World Bank, and WHO)

Dr Gijs Elzinga (Chair) Director of Public Health National Institutes of Public Health and Environmental Protection The Netherlands	Dr Abdul Rahman Al-Awadi Executive Secretary Regional Organization for the Protection of the Marine Environment Kuwait	Prof Nguyen Dinh Huong Director National Institute for TB & Respiratory Diseases Viet Nam	Dr. Tayseer Abdel Jaber Board of Directors Jordan Kuwait Bank Jordan
Dr Wiesław Jakubowski Deputy Minister Under-Secretary of State Ministry of Health and Social Welfare Poland	Dr Pagbajabyn Nymadawa Minister of Health Mongolia	Dr J. Kumate Rodrigues Secretary of Health Ministry of Health Mexico	Dr He Jie Sheng Vice-Minister Ministry of Public Health People's Republic of China
Dr Soekirman Deputy Chairman, Social & Cultural Affairs National Development Planning Board Indonesia	Dr Azeb Tamrat Deputy Minister of Health Ministry of Health Ethiopia	Dr César Verduga Vélez President Latin American Human Rights Association Chile	

And representatives from...

Ministry of Health and Welfare Japan	Ministry of Foreign Affairs The Netherlands	Ministry of Foreign Affairs Italy	Belgian Service of Medical Cooperation Belgium
Swedish International Development Authority Sweden	Ministry for Cooperation in Economic Affairs (BMZ) Germany	Ministry of Cooperation and Development France	International Union Against TB & Lung Disease
The World Bank	United Nations Development Programme	International Federation of Anti- Leprosy Associations	

"TRAC"

TECHNICAL AND RESEARCH ADVISORY COMMITTEE

Individuals serving in a personal capacity who review and advise the Programme on scientific and technical matters

Prof Richard Feachem (Chair) Dean London School of Hygiene and Tropical Medicine United Kingdom	Dr Mazakazu Aoki Director Research Institute of TB Japan Anti-TB Association Japan	Dr Pierre Chaulet Professor TB and Respiratory Medicine Clinic of Pneumo-Phthisiology Algeria	Dr Donald Enarson Director of Scientific Activities International Union Against TB & Lung Disease France
Dr A. S. Muller Professor of Tropical Health University of Amsterdam The Netherlands	Dr Richard Peto Professor Clinical Studies Unit Radcliffe Infirmary United Kingdom	Dr Angélica Salomão National Director of Health Ministry of Health Mozambique	Dr Dixie Snider Assistant Director for Science National Center for Prevention Services Centers for Disease Control USA
Dr S. P. Tripathy Director-General Indian Council for Medical Research India	Dr Hans Wigzell General Director Swedish Institute for Infectious Disease Control Sweden		

Role of the TB Programme

The TB Programme is dedicated to reducing the spread of TB. It is imperative that the global effort be properly coordinated, avoiding unnecessary duplication and helping to ensure that funding is effectively applied to the areas of greatest importance. WHO's TB Programme has taken on this coordinating role, both in treatment programmes and in research.

- The TB Programme can *coordinate and target resources* so that they are efficiently used to meet the greatest needs.
- The TB Programme has the *experience and credibility with governments* in the developing world to help them organize effective treatment and prevention programmes.
- WHO has both a *regional and country-level structure*—and contacts within individual ministries of health—that make it uniquely suited to lead the fight against the TB crisis.
- The TB Programme is in a unique position to combine and *coordinate control efforts and international research*.

Since 1988, the WHO TB Programme has grown from what was a one-person programme at headquarters to a team of 12 professionals. Also, regional and country office TB staff have increased during that time.

TB PROGRAMME PROFESSIONAL STAFF

GENEVA HEADQUARTERS

Dr Arata Kochi
Programme Manager

Ms Anna-Kari Bill
Programme Management
Officer

Mr Richard Bumgarner
Senior Programme Management
Officer

Dr Petra Graf
Medical Officer

Mr Kraig Klaudt
External Relations &
Advocacy Officer

Dr Jacob Kumaresan
Medical Officer

Dr Fabio Luelmo
Medical Officer

Dr Paul Nunn
Medical Officer

Dr Richard O'Brien
Medical Officer

Dr Mario Raviglione
Medical Officer

Dr Sergio Spinaci
Medical Officer

Ms Diana Weil
Scientist

REGIONAL AND COUNTRY OFFICES

Dr Leopold Blanc
Western Pacific

Dr Peter Eriki
Africa

Dr Ben Vanhercke
Africa

Dr Pierre Yves Norval
Cambodia

Dr Liisa Parkkali
Bangladesh

Steering Committees

TB OPERATIONAL RESEARCH

Dr Christopher Murray (Chair)
Assistant Professor of Health
Economics
Harvard School of Public Health
USA

Dr Jaap Broekmans
Director
Royal Netherlands TB Association
The Netherlands

Dr Young Pyo Hong
Director
Korean Institute of TB
The Korean National TB Association
Korea

Dr Dean Jamison
Professor
University of California at Los Angeles
USA

Dr Sandra Lane
Department of Anthropology
Case Western Reserve University
USA

Dr Edward Maganu
Permanent Secretary
Ministry of Health
Botswana

Dr Toru Mori
Vice-Director
Research Institute of TB
Japan Anti-TB Association
Japan

Dr Peter Smith
Chair, Dept. of Epidemiology and
Population Sciences
London School of Hygiene and
Tropical Medicine
United Kingdom

Dr Pravin Visaria
Director
Gujarat Institute of Development
Research
India

TREATMENT OF MYCOBACTERIAL DISEASES

Dr Jacques Grosset (Chair)
Department of Bacteriology and
Virology
Faculty of Medicine, Pitié-Salpêtrière
France

Dr Marijke Becx-Bleumink
Senior Consultant
Royal Netherlands TB Association
The Netherlands

Dr Shiu-Lun Chan
Director
Wanchai Chest Clinic
Hong Kong

Dr Santha Devi
Director
Division of Chemotherapy
TB Research Center
India

Dr Lawrence Gelter
Chief
Clinical Research Branch
Centers for Disease Control
USA

Dr M. D. Gupta
Central Jalma Institute for Leprosy
Field Unit for Epidemiology of Leprosy
Indian Council for Medical Research
India

Dr Philip Hopewell
Director, Chest Service
San Francisco General Hospital
USA

Dr Keith McAdam
Chairman, Dept. of Clinical Sciences
London School of Hygiene and
Tropical Medicine
United Kingdom

Dr D. V. A. Opromolla
Director
Instituto Lauro de Souza Lima
Brazil

Dr Peter Smith
Chair, Dept. of Epidemiology &
Population Sciences
London School of Hygiene and
Tropical Medicine
United Kingdom

IMMUNOLOGY OF MYCOBACTERIA

Dr Douglas Young (Chair)
TB and Related Infections Unit
Hammersmith Hospital
United Kingdom

Dr Åse Andersen
State Serum Institute
Denmark

Dr M. Barral-Netto
Immunology Service
HUPES-UFBA
Brazil

Dr A. Basten
Director
Centenary Institute of Cancer
Medicine & Cell Biology
The University of Sydney
Australia

Dr Patrick Brennan
Department of Microbiology
Colorado State University
USA

Dr Jerrold Ellner
Chief
Division of Infectious Diseases
University School of Medicine
Case Western Reserve University
USA

Dr Paul Fine
London School of Hygiene and
Tropical Medicine
United Kingdom

Dr John Foulds
Respiratory Diseases Branch
National Institute of Allergy and
Infectious Diseases
National Institutes of Health
USA

Dr Brigitte Gicquel
Unit for Molecular Biology
Pasteur Institute
France

Dr N. D. F. Grindley
Department of Molecular Biophysics
and Biochemistry
Yale Medical School
USA

Dr Carole Hellman
Respiratory Diseases Branch
National Institute of Allergy &
Infectious Diseases
National Institutes of Health
USA

Dr Rabia Hussain
The Aga Khan University
Pakistan

Dr S. H. E. Kaufmann
Department of Medical
Microbiology & Immunology
The University of Ulm
Germany

Dr Jan D.A. van Embden
National Institute of Public Health &
Environmental Protection
The Netherlands

Dr P. Vassalli
Department of Pathology
University Medical Centre
Switzerland

Dr Takeshi Yoshida
President
Tokyo Institute for
Immunopharmacology
Japan

TB Programme Funding

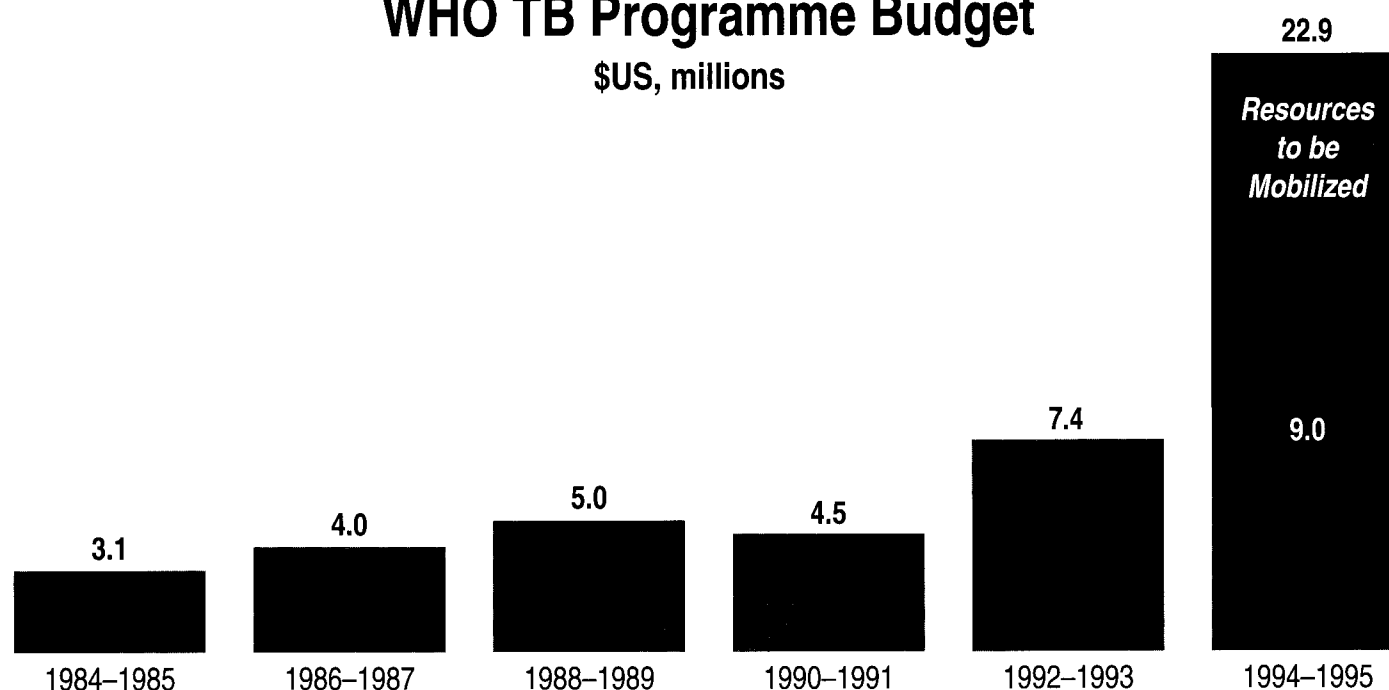
Over the next two years, \$22 million is needed to enable the TB Programme to coordinate a worldwide attack on TB. This money will enable the TB Programme to provide the most severely affected countries with technical advice, assistance in preparing projects for consideration by donors, proven training programmes, registration systems and monitoring tools. These resources will also be used to fund and coordinate practical research projects to build the basis for effective long-term TB control.

In addition, the donor community needs to provide approximately \$100 million each year to finance medicines, microscopes and a modest infrastructure to enable poor countries to undertake TB control programmes that really work. This money should go directly to national TB control programmes within the framework of each donor's normal procedures.

The cost of waging an all-out battle against TB would be comparable to the cost of initiating the Intensified Smallpox Eradication Programme in the 1970s, and the cost of the Expanded Programme on Immunization in the 1980s.

WHO TB Programme Budget

\$US, millions



Source: WHO Financial Reports, 1984-91; Programme Budgets, 1992-95, global & interregional level, voluntary fund for health promotion; 1984-91 amounts are in 1991 constant prices, adjusted by consumer price index, industrial countries, International Financial Statistics, IMF, Washington, DC.

1992-93 Financial Statement

Estimated, thousands of US \$, 1 January 1992 to 31 December 1993

EXPENSES	Global Activities	Regional & Country Activities	TOTAL
National programme support	217	3,345	3,562
<i>Country and interregional support</i>			
<i>Tool development and training support</i>			
<i>Drug supply analysis and policy support</i>			
<i>Monitoring and surveillance</i>			
Research and development	559	764	1,323
<i>Therapy of TB; TB/HIV interactions</i>			
<i>Basic mycobacterial research</i>			
<i>Immunology and diagnostics</i>			
Operational research	182	377	559
<i>Country-specific research</i>			
<i>Case detection and treatment</i>			
<i>Socio-economic and epidemiological studies</i>			
Programme direction and coordination	1,188	729	1,917
<i>Planning and management</i>			
<i>Advisory bodies</i>			
<i>Advocacy and education</i>			
<i>Administrative support systems</i>			
TOTAL EXPENSES	2,146	5,215	7,361
INCOME			
External Contributions			
Japan			2,400
The Netherlands			884
Sweden			477
Italy			431
Germany			327
USA (expert services)			187
France			104
Belgium (expert services)			29
World Bank			199
Global Programme on AIDS			275
UN Development Programme			141
Marrion Merrell Dow			150
Japan Anti-TB Association			118
Damien Foundation			84
Upjohn Co.			2
Interest			152
Subtotal			5,960
Reduction in Balance from Previous Biennium			246
Regular WHO Budget (HQ)			1,155
TOTAL INCOME			7,361

Highlights in 1992-93

Even with limited resources, the TB Programme has made a number of significant accomplishments in the past two years. The following are a few of the highlights from the many initiatives undertaken by the TB Programme during 1992 and 1993.

- **Declared a global TB emergency.** At a crowded news conference in London on 23 April 1993, WHO declared a global TB emergency. This was the first time in WHO history that such an emergency had been declared. This declaration sparked a wave of media coverage around the world. The London *Times* devoted front-page coverage to TB, and *The Economist*, BBC TV News, CNN and every major London newspaper prepared feature stories. On 17 May 1993, *Newsweek International* featured "TB: Return of a Killer Disease" as its cover story, highlighting WHO's work.
- **Organized a global TB coalition.** A major effort was launched to involve a wide variety of partners—NGOs, private industry, community groups and activists—to tackle this disease and leverage resources. A small but diverse coalition has begun to emerge, including the National Council for International Health in the United States, the Double Income Project in Switzerland, the German Leprosy Relief Association, the Damien Foundation, and numerous TB associations.
- **Surveyed the TB programmes around the world.** Until last year, very little information was available about the various TB programmes around the world. WHO has begun gathering and analyzing information on the TB control programmes in 139 countries.
- **Researched effective treatment programmes.** The TB programmes of Malawi, Mozambique and Tanzania were extensively studied to determine which aspects of their programmes were the most effective. The findings of these studies have been widely reported.
- **Developed training materials.** A set of new TB training guidelines has been developed and tested by WHO. Top health workers in charge of TB control have completed WHO's six-day training course. In turn, these individuals have returned to their countries to train their colleagues.
- **Targeted specific nations.** In order to make the greatest impact with scarce resources, WHO has focused its TB activities on a handful of major countries with serious TB problems, such as China, Mongolia, Bangladesh, India, Guinea, Zimbabwe and Bolivia.
- **Increased response to the TB/HIV co-epidemic.** The TB Programme and WHO's Global Programme on AIDS have begun collaborating on a number of research projects. These projects have been designed to gain a better scientific understanding of the diseases and to improve patient care in countries most affected by the co-epidemic.

1994-95 Budget

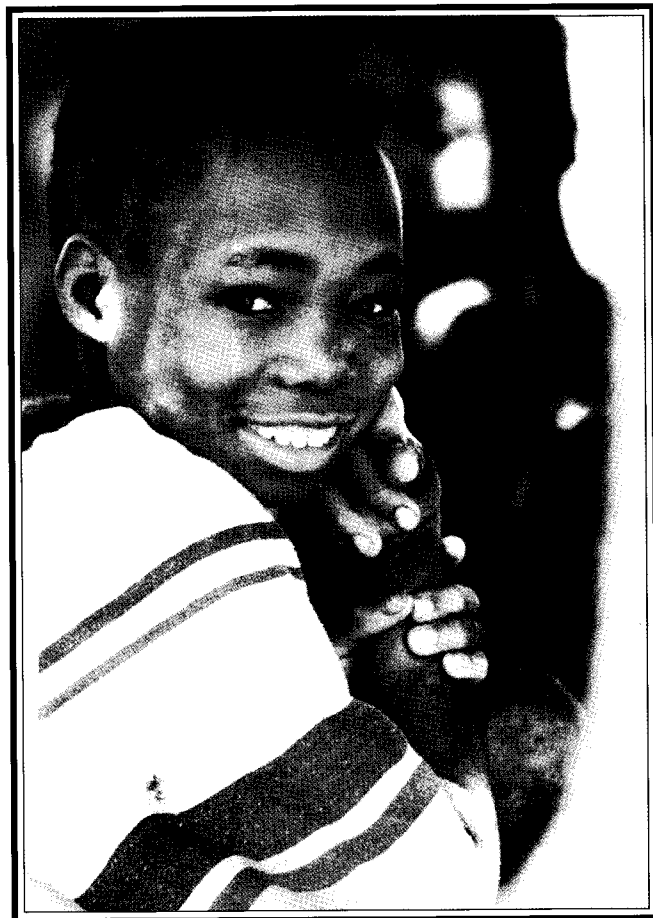
Estimated, thousands of US \$, 1 January 1994 to 31 December 1995

EXPENSES	Global Activities	Regional & Country Activities	TOTAL
National programme support	629	11,426	12,055
<i>Country and interregional support</i>			
<i>Tool development and training support</i>			
<i>Drug supply analysis and policy support</i>			
<i>Monitoring and surveillance</i>			
Research and development	1,291	3,819	5,110
<i>Therapy of TB; TB/HIV interactions</i>			
<i>Basic mycobacterial research</i>			
<i>Immunology and diagnostics</i>			
Operational research	971	2,129	3,100
<i>Country-specific research</i>			
<i>Case detection and treatment</i>			
<i>Socio-economic and epidemiological studies</i>			
Programme direction and coordination	1,706	890	2,596
<i>Planning and management</i>			
<i>Advisory bodies</i>			
<i>Advocacy and education</i>			
<i>Administrative support systems</i>			
TOTAL EXPENSES	4,597	18,264	22,861
INCOME			
Contributions Pledged or Anticipated from Previous Donors			6,709
Regular WHO Budget (HQ)			2,352
TOTAL INCOME			9,061
RESOURCES TO BE MOBILIZED			13,800

Urgent Priorities for 1994-95

In the next two years, the TB Programme will be helping additional nations become more effective at controlling TB. To meet this objective, the TB Programme will need to address a number of critical challenges.

- **Creating political will to address TB.** The help of journalists, advocacy organizations, corporations, and health and public interest groups is needed to encourage governments to respond to the TB crisis.
- **Disseminating WHO's TB treatment policies.** Most of the world's doctors, nurses and health workers are not familiar with WHO's policies for controlling TB. More workshops and training materials are needed to educate key health workers in the worst-affected countries.
- **Assisting additional nations.** More extensive technical assistance and financial support needs to be provided to more nations. A number of new countries need to be targeted, including Pakistan, Viet Nam, Nigeria, Indonesia, Mexico, the Philippines, Ethiopia and Romania. Two of WHO's regional offices were recently strengthened with TB advisors. Establishing posts for a TB advisor in Southeast Asia, the Americas and the Eastern Mediterranean is a top priority.
- **Focusing donor funds on priority TB projects.** TB can be substantially reduced as a threat, provided that foreign aid agencies and multilateral organizations take a leadership role in funding important projects.
- **Improving drug supplies.** So that essential TB drugs are always available, many national control programmes need to develop coherent drug supply policies, be guaranteed an adequate supply of funding, and improve procurement and distribution procedures.
- **Producing a simple and rapid test to improve TB diagnosis.** While effective diagnostic tools already exist, they must be improved. A more sensitive and reliable test is needed to identify TB illness in its earliest stages.
- **Developing better methods of treating TB in countries with high rates of HIV infection.** A drug called thiacetazone has been a mainstay of TB treatment in Africa, even though it can cause severe and sometimes fatal reactions in an unacceptably high proportion of HIV-infected TB patients. It is important that ways be found to help nations switch to safer drugs. The TB Programme is working closely with WHO's Global Programme on AIDS to fund research and projects in areas vital to fighting the TB/HIV co-epidemic.



Young boy in Burkina Faso

A cure already exists for TB, only it is not being fully used. The main obstacle to preventing millions of TB deaths is not in the research laboratory, but with how governments prioritize their public health dollars. Photo: WHO / TDR / Haadland

TB Control Budget of WHO Regional Offices \$US, thousands

	1992-93	1994-95
Africa	389	300
Eastern Mediterranean	1,106	1,031
Europe	---	---
South-East Asia	1,829 *	1,836
The Americas	310	444
Western Pacific	849	659
TOTALS	4,483	4,270

** Bi-lateral funding of \$6 million was also provided through WHO for TB control in India, completed in 1993 and not renewed.*

Making TB a High Priority

The TB epidemic is not a low priority for everybody. Many people are just learning of the enormity and neglect of the crisis for the first time. They are surprised by the information being presented, and want to know what can be done to address this crisis.

- **WHO & UN Agencies.** The same foresight that produced the Child Survival initiative needs to be applied in establishing a TB Treatment Campaign. The children that were saved through Child Survival programmes begun in the 1980s are becoming the teenagers and young adults of the 1990s. In some regions of the world, large numbers of these young adults are now infected with the TB bacillus.
- **Developing Countries.** All countries should adopt the TB control policies recommended by WHO. Countries using long-course therapy must shift to fully supervised short-course treatments. Developing countries should increase their requests for foreign assistance to deal with TB.
- **Foreign Aid Agencies.** Assistance will be needed from the United States, Great Britain, Canada, Norway, Denmark and Australia to make any sizable difference in addressing the world's TB epidemic. During the past two years, over 70 percent of bilateral support for WHO's TB Programme has come from just two countries: Japan and the Netherlands. Because of the emergence of multidrug-resistant strains of TB—which are very expensive to treat—the longer industrialized nations wait to fight the TB crisis, the more costly the epidemic will be later, in terms of both public health budgets and human lives.
- **Multilateral Agencies.** The impact of TB on developing countries needs to be appropriately recognized in financial assistance packages for the health sector. Procedures must be put in place to ensure that the essential principles of good TB control are not undone in an effort to quickly expand TB control programmes.
- **Corporations.** Financial assistance, marketing support and the personal involvement of executives is needed to assist WHO in informing the public about the spread of TB. Corporations cannot afford to ignore such a massive and contagious threat to their work force and to business travellers. Because TB is a communicable disease, it can spread in factories and offices.
- **Foundations.** With new information emerging on the seriousness of the TB epidemic, foundations should reexamine what they are doing to help stop its spread.
- **Media.** Journalists must cover the public policy issues surrounding the TB epidemic. A frequent critique of the coverage of the early years of the AIDS epidemic is that the press often failed to investigate the soundness of policy decisions made on the disease.

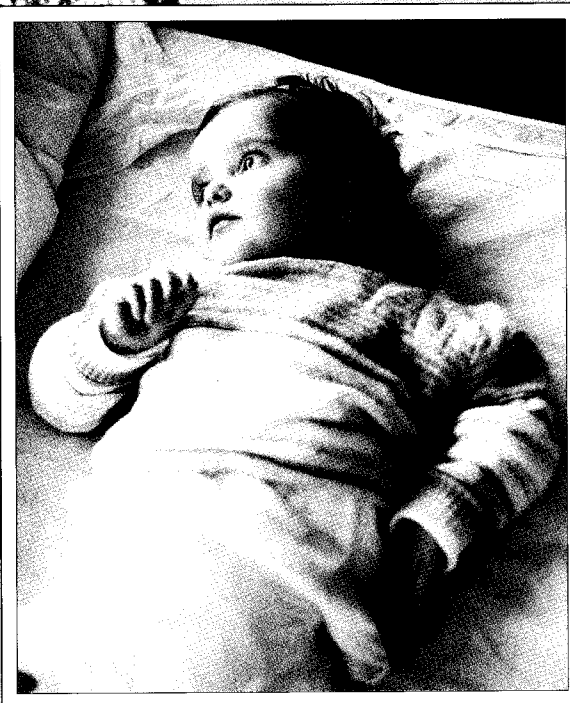
- **Health Workers.** An increased commitment is needed from front-line medical staff in developing countries to ensure that all TB patients complete their treatment. Doctors, nurses and health care workers need to become informed about WHO's TB treatment policy.
- **PVOs.** Private voluntary organizations can assist national TB programmes by providing badly needed supplies and technical assistance. For about \$5,000 a year, the necessary drugs and microscopes can be supplied to a region of a country to control the TB epidemic among 100,000 people, saving hundreds of lives. PVOs directly involved in primary health care should adopt WHO's treatment guidelines.
- **Advocacy Organizations.** At least one advocacy organization is needed in every nation to take the lead in mobilizing public pressure to make governments address this neglected disease. TB must not be limited to the agenda of medical organizations, but must also be on the advocacy agendas of organizations that care about international development, good public policy and social justice. Even the efforts of small advocacy groups can trigger enormous results.
- **Religious Groups.** Religious leaders must use their stature to address inequities in health care for poor people. Since there is a cure for TB—a cure that is not being fully used—TB is no longer a medical epidemic, but an epidemic of injustice.
- **Women's Groups.** Advocacy and direct financial support for TB control efforts are needed from this powerful constituency. TB kills more women than maternal causes. In some parts of the world, men are given greater access to limited supplies of drugs.
- **Groups Concerned About Children.** Children's groups should not dismiss TB as an adult disease. Nearly 300,000 children die of TB each year. Millions of children will lose their parents in the next decade from this preventable disease. In the next decade, millions of women in the child-rearing years of 15 to 44 will die needlessly from TB. Moreover, women with TB are a primary source of infection to their children.
- **HIV/AIDS Organizations.** The fund raising, advocacy, education and publicity skills of those working to fight AIDS are needed to improve TB control. One of the best things AIDS organizations can add to their work is helping to control the spread of TB. Currently, one of the most affordable and feasible ways to prolong the lives of people with AIDS is to treat opportunistic infections such as TB.
- **Researchers.** The scientific community should evaluate its research agenda. For the short term, research should be linked with the work of control programmes. For the long term, research should focus on finding cheaper, more widely applicable and effective curative and preventive TB treatment and diagnostic tools.



PRIORITY

If you can help make TB
a high priority, contact:

TB Programme
World Health Organization
20, Avenue Appia
CH-1211 Geneva 27
Switzerland
Phone: 41 22 791 2675
Fax: 41 22 788 4267



**30 Million People Will Die From TB
in the Next Decade Unless TB Becomes a
Funding Priority**

