

AN EPIDEMIC OF INJUSTICE

Tuberculosis provides a clear measure of the impact of poverty, inequity and injustice on human health. Fortunately, not all those infected develop active tuberculosis. About 5% of those infected develop the disease within three years of infection – so-called primary tuberculosis. In the others, the bacilli lie dormant in the tissues for years or decades, leading to post-primary tuberculosis in a further 5 per cent.



*Currently there are more people with tuberculosis than at any previous period of human history and, unless there are radical advances in control strategies for this disease, 200 million people alive today will eventually become ill. **John Grange** throws light on the situation and explains why the WHO had to take the unprecedented step of declaring tuberculosis a Global Emergency.*

There are about 20 million cases of tuberculosis at any given time and these infect a further 100 million people each year. According to the World Health Organization (WHO), there are currently more people with tuberculosis than at any previous period of human history. Unless there are radical advances in control strategies for this disease, 200 million people alive today will eventually become ill. As a result of this horrific situation, in 1993 the WHO took the unprecedented step of declaring tuberculosis a Global Emergency.

Although treatable, 3 million people die of tuberculosis each year and this disease is responsible for a quarter of *preventable* adult deaths. Indeed, half the world's cases of tuberculosis occur in just three countries – India, China and Indonesia. The indirect economic impact of tuberculosis is severe – three quarters of all cases occur among those aged 14 to 54 years, the economically active age group.

On an average, a single case of tuberculosis reduces the income of a household by 25% and the death of an adult from this disease causes 15 years of lost income. Although most cases occur in the poorer nations of the world, there is a distinct relationship between the disease and poverty and social deprivation in the more wealthy nations, many of which are experiencing increases in the incidence of this disease.

The 'cursed duet'

The impact of the HIV/AIDS pandemic on tuberculosis is devastating and the combination of the two infections has been called the 'cursed duet'. A person with AIDS exposed to a source case of tuberculosis has an extremely high chance of rapidly developing the disease.

HIV has emerged as the most important predisposing factor in the tuberculosis pandemic. Only ten percent of those infected develop tuberculosis but the risk is greatly increased in those also infected with HIV.

This is one of the reasons why the incidence of tuberculosis has soared in many African countries. Zambia, for example, has experienced a 400% increase in

notifications of tuberculosis over the last decade. This has imposed an enormous burden on already over-stretched and under-funded health services. Similar adverse trends will be seen in other continents, notably Asia, unless the spread of HIV can be halted.

There are at present some 40 million HIV-infected people worldwide and an estimated 4 million of these will die of AIDS this year. A third of these deaths, over a million, will be



Peter Williams/WCC

caused by tuberculosis.

WHO's DOTS strategy

It is a tragic paradox that while tuberculosis is a global emergency, its treatment is not only one of the most effective, but also among the

most cost-effective of all therapies for life-threatening diseases. As many patients are young adults, many years of life are saved if the disease is properly treated and this can be achieved for around 16 US

control services is that inadequate treatment leads to the emergence of strains of the tubercle bacillus that are resistant to one or more of the standard drugs used to treat the disease. Surveys by the World Health Organization has revealed that, world wide, around 2% of cases of tuberculosis are multi-drug resistant but in certain 'hotspot' regions it is very common, occurring in up to 35% of cases.

By use of alternative drugs, multi-drug resistant tuberculosis can be treated effectively in a high proportion of patients but at enormous cost. A single case in the USA can cost around 250,000 US dollars to treat. Thus the treatment of such resistant tuberculosis, even if it were attempted at all, would place an enormous burden on health services in many regions of the world.



V.P. Sharma/WHO



Peter Williams/WCC

dollars for each patient. In the absence of complicating factors such as drug resistance, the great majority of patients are cured by a six-month course of drugs, provided that treatment is given under supervision to ensure that the patient receives all the doses. Accordingly, the WHO has called for the worldwide adoption of its DOTS (Directly Observed Therapy, Short Course) strategy. This strategy is based on government commitment to tuberculosis control, diagnosis by sputum microscopy, provision of good quality therapy under supervision, audit of the efficiency of the control programme and the training of health care workers. This strategy has been shown to be effective in many studies but at present only a quarter of tuberculosis patients have access to DOTS programmes.

The nightmare of unmanageable tuberculosis

Another tragic consequence of the failure to provide good tuberculosis

The dawn of hope?

The WHO has estimated that unless there are radical changes in the control of tuberculosis the annual number of deaths from tuberculosis could rise from 3 to 4 million by the year 2004.

Fortunately, there are signs that attitudes are changing. In addition to a genuine altruistic concern for the poor and underprivileged, there is the realization that infectious diseases can rapidly spread around the globe and that nobody is safe from infection until all are safe.

John Grange. Visiting Professor, Centre for Infectious Diseases and International Health, Royal Free and University College Medical School, Windeyer Institute for Medical Science, Room G40, 46 Cleveland Street, London W1P 6DB, UK. Tel/fax: 0107-679-9311



WHO IS SCARED OF TB?

*Bangladesh, a tiny developing country sandwiched between India and Myanmar has found a unique way to fight TB. The foot soldiers in this battle are women, who by custom are so timid that they do not even dare to say their husband's name aloud. But now with governmental support they have managed to document a new success story on TB. Inputs by **Reena Mathai-Luke***



Lars Astrom/UNICEF

People in the villages of Bangladesh are a fairly laid-back lot and it is not easy to get them excited about anything as mundane as a health programme.

Apart from football and politics, it's difficult to fire public interest, and as for diseases like malaria, leprosy or TB, well, what's the noise about, when these are just part and parcel of life's everyday grind?

In that case, what makes DOTS such an unique programme?

Women power

The sanctity attached to DOTS in the villages today is enviable, thanks to the initiative taken by an enterprising NGO called Bangladesh Rural Advancement Committee (BRAC). This organization, with its widespread grassroot base and commitment to health, hit upon the unique idea of involving women from the neighbourhood to keep a tab on the community. These women are the backbone of the success story.

They scout villages and help actively in identifying cases that display symptoms of TB. They then encourage the patients to visit the *Shuswasthos* or health centres and after the disease is confirmed they ensure that the patients complete the full course of treatment under their direct observation. This has helped to bring down the prevalence of sputum-positive cases to 50% in the DOTS areas compared with areas where DOTS was not implemented.

Of course, all this would not have been possible if the DOTS programme did not get a boost from the health sector. TB control is a part of the essential service package and the government gives

technical back-up along with secondary and tertiary level support.

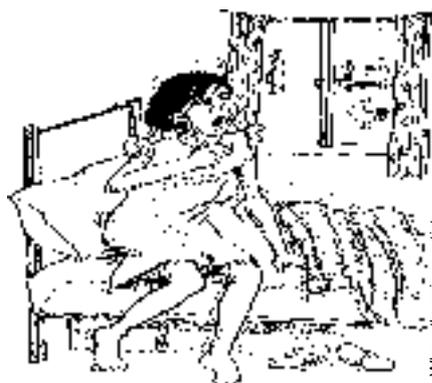
The DOTS strategy to control TB was introduced in 1993. By 2000, 90 per cent of its 127 million population had access to the treatment. Free provision and constant availability of medicines were ensured by the government and along with motivated volunteers, the programme was soon off to a flying start.

A unified system of recording and reporting, training, and management of supplies ensured that there are no bottlenecks. The effectiveness of the strategy is evident from the success rate of over 80%, compared with 57% in the non-DOTS treatment areas. The current estimated TB incidence in Bangladesh is 241 per 100,000 of population.

BRAC started in 1992 with nine districts. Another eight districts were added in 1995 and it now covers a population of 14 million. BRAC also brought workplaces into the DOTS purview. One example of this effort was establishing a DOTS treatment centre in a large textile factory to reach the workers and their families.

The Bangladesh experience illustrates the potential of Government-NGO collaboration to achieve countrywide coverage. NGOs have helped in the national effort to scale up operations without adversely affecting the quality. As a result of the collaboration, the programme has been able to reach areas where the government infrastructure is inadequate.

For more information on BRAC, contact BRAC Centre, 75 Mohokali, Dhaka 1212 Bangladesh. Web www.brac.net



Where there is no artist

MOLDOVA'S COFFERS HOLD THE KEY...

*The best of intentions — like the massive effort — cannot take off unless it is supported by financial outlays to sustain the programme. TB like other infectious diseases cannot be put on hold or treated in an erratic manner. **Natalia Cebotarenco** narrates the Moldovan experience — a case in point how health priorities get pushed aside because of the lack of 'dedicated' funds.*



Natalia Cebotarenco

Background

Moldova has a population of about 4.3 million and is situated between Romania and Ukraine in Eastern Europe.

Like most of the newly independent states, Moldova is struggling with economic and social crises following the collapse of the Soviet system in 1991.

As a result, Moldova is faced with rising poverty as well as an increase in the diseases that are related to poverty.

To make matters worse, lack of finance at the state level for drug procurement has made the health care system inept and made access to essential medicines for the majority of the population a near impossible task.

Presently the country's per capita GDP is \$315, making it one of Europe's poorest countries. Although registered unemployment is only about two percent, the actual number is estimated to be about 52%. In addition, Moldovans who are employed face low and often delayed wages. Average salary for public sector employees (including doctors and teachers) is \$25 and average pension is about \$10 per month. In the rural areas,

the state has defaulted payment by more than seven months and the national income dropped in 2000 to one-fifth of what it was in 1990.

Poverty is largely responsible for the increase in the disease burden as well as the inability to access treatment. For even though many medicines are available in the country, most of them remain beyond the reach of the poor.



Peter Williams/WCC

TB update

Given this background it is not surprising that there is a sudden increase of TB morbidity in the last ten years. Of these a large number of them are infected with lung TB.

Ninety per cent of the registered cases are new cases while the remaining ten per cent were relapses. Of the

total number of new cases, 10.4% were registered in prisons.

Chisinau registered the highest number of cases. Other living areas like Ungheni, Soroca and Orhei also have high incidences.

According to WHO criterion for assessing the threat by TB, a situation when there is one eliminator of bacilli per

We are now beginning to pay for our neglect - a price over and above the tragedy and suffering infectious diseases inflict on millions of people annually.

one million inhabitants is not alarming and does not present a threat to the general population. The Moldovan statistics – 689 eliminators of bacilli per one million inhabitants – tells you its own story.

Statistics also indicate that the incidence of TB among children is on the rise - 16.5 in 1990 and 24.4 in 1998 – and there seems no way to halt this rise given the fact that accessibility to essential drugs continues to be elusive.

Erratic government support

Earlier, TB hospitals were supposed to provide routine free services. However, in reality TB patients had to buy all the medicines from the pharmacies themselves. Given the high costs of TB drugs, for the majority of TB patients – most of whom are poor and have large families to support – this is not easy and therefore sustaining the treatment became difficult.

In an effort to check the problem the government of Moldova adopted a national tuberculosis programme in 1996. But soon this collapsed due to erratic drug supply, inadequate drug delivery and an unmonitored drug intake. Under this programme only 38 per cent received TB drugs in 1997, and a year later the figure dwindled to about ten per cent with many districts complaining that they did not receive any money for TB drugs in 1999.

Patients therefore, are hard put to receive the necessary treatment thereby making treatment a spasmodic exercise. This in turn leads to a dangerous increase in resistance to TB drugs – known as multi-resistant mycobacteria- and according to available data, these may account for ten to 15% of new cases.

Last year, funds for the TB programme were released in June and December, but since availability of medicines are directly hinged to the availability of finances, the supply of drugs was impeded and irregular. This fluctuation in the availability of drugs chokes even the best of programmes like DOTs. Besides patients losing interest, drug resistance can undo whatever little good has been done.

With financial outlays for TB drugs for the present year still remaining unclear, Moldovans are pinning their hopes on international assistance to supply TB drugs as donations. Fortunately, The German Institute for Medical Mission, Tübingen, Germany has come to their rescue. They will provide TB drugs through the orthodox church to two TB hospitals: Edinet and Soroca Judet. But Moldova has miles to go...

Natalia Cebotarenco, Drug Info Moldova, P.B. No. 90 Moscow Ave. 13/3, Chisinau, Moldova E-mail: office@drugs.mldnet.com

A CHURCH SHOWS THE WAY TO GO...



Dorothy B. Lee

*More than 1.2 billion people survive on less than one dollar a day and another 1.3 billion scrape out a living on less than two dollars a day. While the government needs to put more funding into development, as Christians we must closely re-examine our individual and congregational responsibilities to the poor. **Dorothy B. Lee** shares how the Presbyterian Church (PC) in USA supports the Massive Effort in an effort to meet this challenge.*

Last June, the Presbyterian Church in USA, called for Presbyterians to engage in advocacy efforts such as the World Health Organization's *Massive Effort* against the Diseases of Poverty and to increase related funding. The goal of the Massive Effort campaign is to decrease malaria deaths by 50%, TB deaths by 50% and AIDS deaths by 25% over the next ten years.

The 0.7% Initiative (an UN approved figure as aid target for the Organization for Economic Cooperation Development-OECD) was subsequently embraced as a very practical way for Presbyterians to accomplish both these goals. Presbyterians are encouraged to become involved in advocacy to pressurize the US Government to commitment 0.7% of the GNP to international aid. It is hoped that by 2007, fifty percent of PC (USA) congregations will subscribe to the 0.7 principal and by 2010, the USA will increase its overseas aid budgets to 0.7 % of its national wealth (GNP).

Why should Christians participate in the 0.7% Initiative?

The 0.7% Initiative provides an achievable and measurable opportunity for the church to make a