BODHI TIMES
FOUNDING PATRON: HIS HOLINESS XIV DALAI LAMA
JULY 1992 Public Health Adviser: Dr. Maurice King

TUBERCULOSIS: NEW OPPORTUNITIES FOR AN OLD KILLER

Tuberculosis (TB) is much more than a romantic, literary disease afflicting nineteenth century French heroines and Russian villains or people in the U.S. Civil War days. It is an extremely infectious disease thought to have been eradicated in the West but once again on the rise. One in four people worldwide have been exposed to TB in some form. That's 1.25 billion people - the populations of the United States, Australia, the UK and India combined. Once a person is exposed, the disease can manifest at any time during the rest of his life - any time, that is, that his immune system lets down its guard.

TB always has been a major disease in the developing world. It is a disease of poverty, malnutrition and overcrowding. Approximately ten million cases occur annually, of which almost one-third are fatal. Most of these deaths occur in the developing countries of Asia, Africa and Latin America.

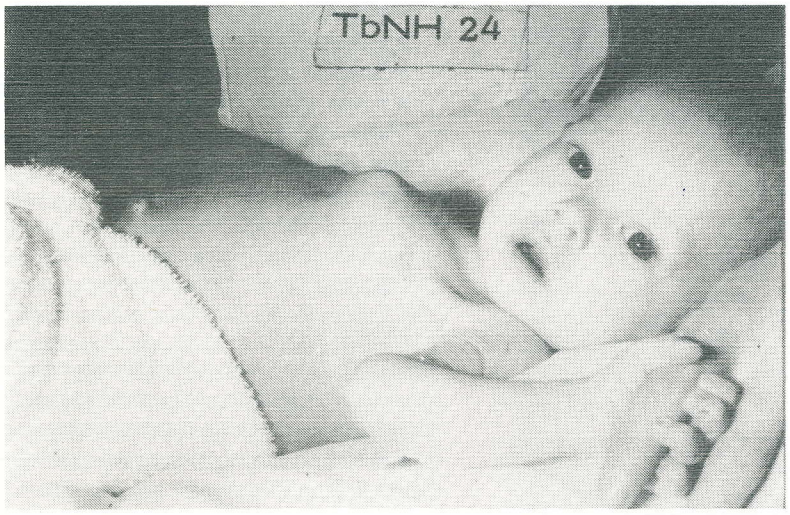
CATCHING TB

TB can affect any organ of the body, although it is found most commonly in the lungs. Two factors make it extremely difficult to eradicate: its highly infectious nature and the long course of treatment involved. You can catch TB:

- by being close to an infected person who coughs in your face;
- by being kissed on the cheek by an infected person;
- from someone with whom you live in close quarters; or
- from eating contaminated dairy products.

TREATING TB

Effective drug treatment was developed in the 1940's. TB treatment was one of the early great successes of the antibiotic era. However, a serious drawback is length of treatment time. TB treatment is protracted, even 40 years after its development. Original treatment courses took 12-18 months and are still routine in the third world. "Short-course" treatments still take 4-6 months. The World Bank recently described short-course TB drug treatment as one of the world's most cost effective health measures. This is almost a mockery. Despite the optimism of the World Bank, the expense of such drugs is well beyond the resources of those most affected by this killer disease - the poor.



Baby afflicted with TB

A significant problem with curing TB is a lack of compliance (taking all the doses) by the patient. This can worsen the problem by promoting drug-resistant disease. Think about it for a moment. How many of us take our prescribed medication for even two weeks? And many of us are the "educated West." The motivated patient who does take his TB medication faces the risk of many side effects, some of them fatal. One of these is Stevens-Johnson Syndrome, in which the patient may lose his mucous membranes.

PREVENTING TB

The TB vaccine (BCG) has been available for more than 60 years, but its efficacy is variable. Unfortunately, in countries such as India, BCG seems only to be able to modify the course of, rather than fully prevent, TB.

How then can we prevent TB, especially in India? Prevention is best achieved by effective treatment of patients with infective pulmonary TB. This stops the spread of infection. Improvements in hygiene, nutrition and living standards will also help. All this costs money - money that refugee communities and the poor don't have.

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BODHI AUSTRALIA

Colin and Susan are now in Australia, where BODHI Australia is being incorporated thanks to David Lucas, a Melbourne lawyer whom we learned about through the International Committee of Lawyers for Tibet in San Francisco. David has offered to guide us through the tax-exempt status maze as well.

Neil Baker of Hobart, Tasmania, is working on a brochure and is an enthusiastic font of publicity and fundraising ideas.

Veterinary researcher Dr. David Hennessy of Melbourne is interested in helping us to sculpt the wild dog sterilization program (see **WILD DOG STERILIZATION** under **PROJECT UPDATES**).

From The Medical Director's Desk:

THE DEMOGRAPHIC TRAP AND PUBLIC HEALTH

This edition of the **BODHI TIMES** focuses on tuberculosis, a never-ending problem in developing countries. Yet, insidious and relentless as it is, TB is just the tip of the third world's health problem iceberg.

In addition to health, we should be thinking about two "traps" that threaten to affect us all: first and third worlds, rich and poor, North and South alike. These are the demographic trap and the technology trap. In this issue, I would like to consider the demographic trap.

Many people question the wisdom of saving lives in the third world. Doesn't saving more lives, especially those of children, mean that there will be more births, with more adults surviving to have their own children - meaning even more births? Doesn't this then lead to escalating stresses on the environment, more pressure for diminishing resources and ultimately, unless the birth rate falls quickly, more deaths? If so, then this is the demographic trap. Some of the world's leading public health authorities believe that some countries, such as in the Horn of Africa, are already caught in this trap.

Birth control programs alone are not enough to spring free from this trap. But they help. Yet worldwide family planning budgets have been slashed, particularly as a result of the U.S. withholding funds. Ironically, this has been largely as a consequence of the domestic Pro-Life movement within the United States, even though family planning need not rely on abortion.

The South Indian state of Kerala shows that the demographic trap can be avoided. For a long time, Kerala has been a third world success story, with its low birth rate and high literacy rate, including education of women. Public health theory hypothesizes that empowerment of women is a key to better child care and lower infant mortality and birth rates. Education of women and girls may be a cost-effective way to escape the demographic trap.

To some people, Kerala is so different from the rest of India that is seems like another country. If it were, Kerala would be very poor, with the ninth lowest per capita Gross Domestic Product (GDP) in the world. Kerala's low rates of infant mortality and population growth suggest a far wealthier society. This illustrates the inadequacy of conventional economic measures - but that's another story.

However, Kerala is no paradise. Very few job opportunities exist for educated Keralans in their home state. Perhaps resultant frustration leads to their very high suicide rate: more than 17 per 100,000. By comparison, the US rate is about 12 per 100,000.

To even consider the demographic trap is taboo to some people. Perhaps its complexity makes it unpopular. Saving children with oral rehydration solution, vaccines and TB drugs seems so simple. However, no single issue solution is enough.

In the next **BODHI TIMES**, I would like to discuss the Technology Trap, another third world problem that may affect us all.

A Tibetan boy and the symbol of a homeland he has never known.

OBJECTIVES

Our two major projects among Tibetan refugees in India are health education for monks and nuns and wild dog sterilization. We are not at this stage proposing to develop a specific tuberculosis program. At the moment, short-course treatments, which we feel are the most effective, are beyond our budget. We feel that we are contributing indirectly to TB eradication by focusing upon health education.

We are, however, developing proposals for an environmental project, perhaps promoting solar cookers in Himalayan India to reduce the deforestation which is such a problem there.

NEXT EDITION OF BODHI TIMES

Our next newsletter will focus on the environment.

FIELD REPORT AVAILABLE

Thanks to Catherine Pleteshner of Melbourne, Australia who is giving form to the content of the report of our 1990 trip to India. A copy of this report is available for US$7 or A$8 (cost of production and postage). Please remit in either US or Australian dollars.

WE NEED

Our current needs include:

- Fundraising committees in both the U.S. and Australia. If you have any talent, inclination, experience or contacts in this area, please contact us immediately.
- 2 fax machines, one in the US, especially one in Australia
- Corporate donors
- Individual sponsors
- Feedback. It's important to us to hear from you.

THANK YOU

Thanks to all of you worldwide who have responded so generously in these strained financial times and who have offered your expertise, time and opinions. A special thanks to Jann Rucquoi for helping with the logo.

PROJECT UPDATES

HEALTH EDUCATION FOR TIBETAN MONKS AND NUNS

We have been corresponding with the Voluntary Health Service (VHS) at Gaden Shartse University, a monastic institution in Mundgod, a Tibetan settlement in North Kanara in southern India. The VHS crystallized in 1991 after a meeting with Ven. Thubten Jinpa, official translator to His Holiness XIV Dalai Lama, who is presently studying at Cambridge University in England. The VHS consists of four voluntary members concerned about health in their community. Its initial working capital comes from donations from within the community.

Recognizing that garbage and standing water present a potential health problem, the VHS has cleaned up the area around its monastery four times already. The VHS has contracted with Indian workers from the local municipality to clean privately twice a week.

The fact that the monks are taking the initiative to solve newly-identified problems augurs well for the success of health projects that we want to do with them. In India, many people asked us for money for unsustainable projects, such as ongoing community sponsorship, which we feel just perpetuates the beggar mentality.

We hope to work with the VHS to design a comprehensive health care program. As the first stage, we are researching sponsoring a monk and a nun for health education training in India. Among the schools that we are investigating is the Christian Medical College in Vellore, South India. The question of appropriateness is an issue. Our aim is not to turn monastics into primary health care workers who are able to diagnose illness and dispense medication, but rather to increase awareness and implementation of health principles within the monastic community.

NUNS

The nunnery with which we hope to work is urgently in need of education, we hear. The nuns have no concept of what disease is or how it is spread and no understanding of nutrition and its connection to health. Their diet is almost 100% starch - bread, rice and noodles - with a small amount of one type of vegetable and sometimes meat. If they wish to supplement their diets by purchasing eggs, fruit and vegetables, then they must buy a stove and cook their own food - something which very few nuns can afford or even want to do.

We have been advised that the first step in formulating a health program for the nuns is to begin a health education project with the monks at Gaden Shartse, since the nuns look up to them and would follow their lead.

CULTURALLY RELEVANT SCHOOL HALL AT KOLLEGAL?

In 1991, we investigated the possibility of building a school hall for the residents of Dhonden Ling. Namgyal Teykhang, the Settlement Officer, identified it as a major need for the community; however, our Board of Directors decided that, among other things, the school hall was too expensive and too discordant with our basic philosophy to be one of our first projects.

Things change. Charlie Cambridge, an anthropologist at the University of Colorado at Boulder, would like to present this as a project for his design class in culturally relevant buildings. Charlie designed three Navajo hogans for the university as part of an experiment in architecture, solar energy and anthropology.

Blending old traditions with new technologies is congruent with BODHI's philosophy. We don't know what the outcome will be on this project. Bureaucratic obstacles loom large at the Indian end and much research remains at this end. Stay tuned!

WILD DOG STERILIZATION

As those of you know who read our last newsletter, wild dogs are a problem in Tibetan settlements in South India and indeed in much of India. Settlements are overrun with these animals, who present health problems out of proportion to their numbers. We have been investigating sustainable ways to solve this problem.

We are still in the research phase of this project, having rejected elastration (castration by elastic bands) of male dogs and surgery on female dogs. The former may be too painful. The latter may be too convoluted, expensive and ultimately non-sustainable, since the continuing presence of veterinary surgeons would be required.

In February, 1992, Colin and Susan met with Dr. David Hennessy, an Australian veterinarian who is leading a research team in Melbourne in the development of an injectable birth control vaccine for animals.

Dr. Hennessy is interested in going to Kollegal, a Tibetan settlement in South India, under BODHI's auspices, to set up a wild dog sterilization program. As this goes to press, Dr. Hennessy is getting together a budget. We're interested in your ideas on this. As with all of our projects, we welcome your participation.

If successful, we hope to implement this program in other afflicted areas, such as among the Indian population surrounding the Tibetan settlements and possibly, among the Navajo Indians in the American Southwest.

A BRIEF LOOK AT TUBERCULOSIS IN THE US AND AUSTRALIA

A set of conditions ideal for a major outbreak of TB has been developing in the U.S., reports Kathy Lechowicz, a UCLA microbiologist. These factors are the Human Immunodeficiency Virus (HIV) and large - and growing - populations of homeless people and immigrants, mainly Asian boat people, living in overcrowded, unsanitary conditions. At present, the U.S. has a

Continued on page 4, See TB US

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TUBERCULOSIS AMONG TIBETANS IN INDIA

Tuberculosis was unknown in old Tibet, before the Communist Chinese invaded in 1949, bringing disease and genocide to a hitherto TB-free people. In 1959, the Dalai Lama and 100,000 faithful Tibetans fled their homeland, driven to seek asylum in India, a country very different from their own both geographically and culturally. Their immune systems were weakened by two factors: the stress of escaping and their subsequent refugee status. Many crossed the Himalayas on foot, only to die of TB and malaria in refugee camps in India.

Out of the 120,000 Tibetans refugees now scattered throughout India, approximately 4.5% are infected every year, making TB the major chronic health problem of the Tibetan community in exile. That's equivalent to about 14 million Americans or 750,000 Australians. Tuberculosis strikes the Tibetan community in India ten times as often as it does the surrounding Indian population.

At present, TB control programs administered by the Tibetan government-in-exile and international development organizations reach about 90% of the exiled Tibetan population. This reassuring figure hides the pathetic truth: that these programs barely keep the disease static. Increased funding is needed desperately.

A particular problem is treatment of the "sweater sellers". These Tibetan traders seasonally travel the length and breadth of the Indian subcontinent, selling from polluted city sidewalks and dusty country roads. Their mobility places them at greater risk of non-compliance.

TB IN TIBETAN CHILDREN

Tuberculosis is a particular problem in the young. People rooming together are at great risk. One senior school dormitory we visited in Dalhousie alone reported four new cases of TB within a three-month period. We observed one child with TB as she lay coughing, mouth uncovered.

Dalhousie, like many other settlements, is too poor to provide a sick room in which to isolate children with infectious diseases. Overcrowding is so severe that all the beds touch one another. All of these students, the creme de la creme of Tibetan youth, are at great risk of infecting one another.

TB US, continued from page 3

reservoir of approximately 10 million people who have contracted the organism. Most of these people are elderly; TB is the result of endogenous reactivation of past infection.

HIV infection was named as the strongest risk factor for development of tuberculosis yet seen, according to a study published in a recent issue of the *Journal of the American Medical Association*. The World Health Organization states that more than three million people worldwide have both HIV and TB, mostly in sub-Saharan Africa. In the past five years, incidence of TB in these areas has increased up to 100%. In some ways, TB is more frightening than AIDS: you can't catch AIDS by being coughed upon by strangers or friends; and TB is just as deadly if you can't afford the treatment.

In the U.S., the trend of declining TB rates reversed in 1989, so that the disease increased by 5%. Preliminary results suggest that in 1990 the rate increased by 9%. Similar trends are being seen in Japan.

In Australia, as in the US, public health officials are reporting a rise in TB. Aggressive eradication programs were replaced with complacency. National TB statistics have not even been maintained in Australia since 1986.

As the US and Australia illustrate, constant vigilance is vital. It's easy to believe that TB is a thing of the past. Will it become a disease of the future? Given the shrinking planet, increased mobility and the dance of life, we need to remember that TB is never really eradicated. Tuberculosis requires constant- and renewed - vigilance on the part of the complacent West.

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MONASTIC HEALTH EDUCATION FUND

With your help, we can implement our health education projects. Please consider making a donation of at least $100. If that is inconvenient, then whatever you are able to send will be much appreciated.

PHOTO: Ikuko Bacon

BODHI COMMUNICATIONS

▲ We're now on some sort of mailing list and are receiving interesting mail from countries as diverse as Zimbabwe and Bhutan.

▲ Since the last newsletter, communications have been mainly of the seed scattering variety. We've had many meetings with Western aid organizations, in the U.S. and Australia. Among these were Direct Relief International, Project Concern International and Save the Children Fund.

▲ Colin had a letter published in the *Medical Journal of Australia* regarding the risk to global public health from the environment and population crises.

PLEASE—
WE NEED YOUR HELP

BODHI has been able to begin some exciting and innovative programs to benefit Tibetan refugees in India. We need your donations to continue these efforts. We can do so much more if you'll support us with a contribution.

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