

WHO, World Bank and India's Disease control programs:

Questionable Strategies, Targets,
Evidence, Practices

The Case of Leprosy

- The National Leprosy Eradication Programme (NLEP), WHO, World Bank achieve a Virtual Elimination of Leprosy and a Real Elimination of Concern for Patients

The disease

Disease of nerves, skin.

Diagnosis : clinical .

Treatment :

“Curable.”

Multi-drug therapy (MDT) for 6-12 months.

Treatment can be punctuated by worsening of status by reactions.



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(पंजीकृत)

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Patients need care after
‘cure’





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- Prevalence : total number of existing cases in a population at a point in time.
- Incidence: number of new cases of a disease occurring in a given time interval.
- Prevalence= incidence x duration

Some definitions from the CDC

- Control:
Reduction of the incidence, prevalence, morbidity, mortality, to a locally acceptable level
- Elimination of a disease:
Reduction to zero of the incidence of a disease in a specified geographical area as a result of deliberate efforts. E.g. neonatal tetanus.

- Eradication : Permanent reduction to zero of the worldwide incidence of an infection by a specific agent, as a result of deliberate efforts. E.g. smallpox.

WHO sets an untenable target

1986: WHO sets target for elimination of leprosy by 2000.

WHO CHANGES THE GOALPOSTS

1991

- Target : Elimination of leprosy as a *public health problem by 2000.*
- *Novel definition evolved:*
Elimination not measured by absence of incidence but by reduction of prevalence below 1 case per 10,000.

Liable to create confusion.....

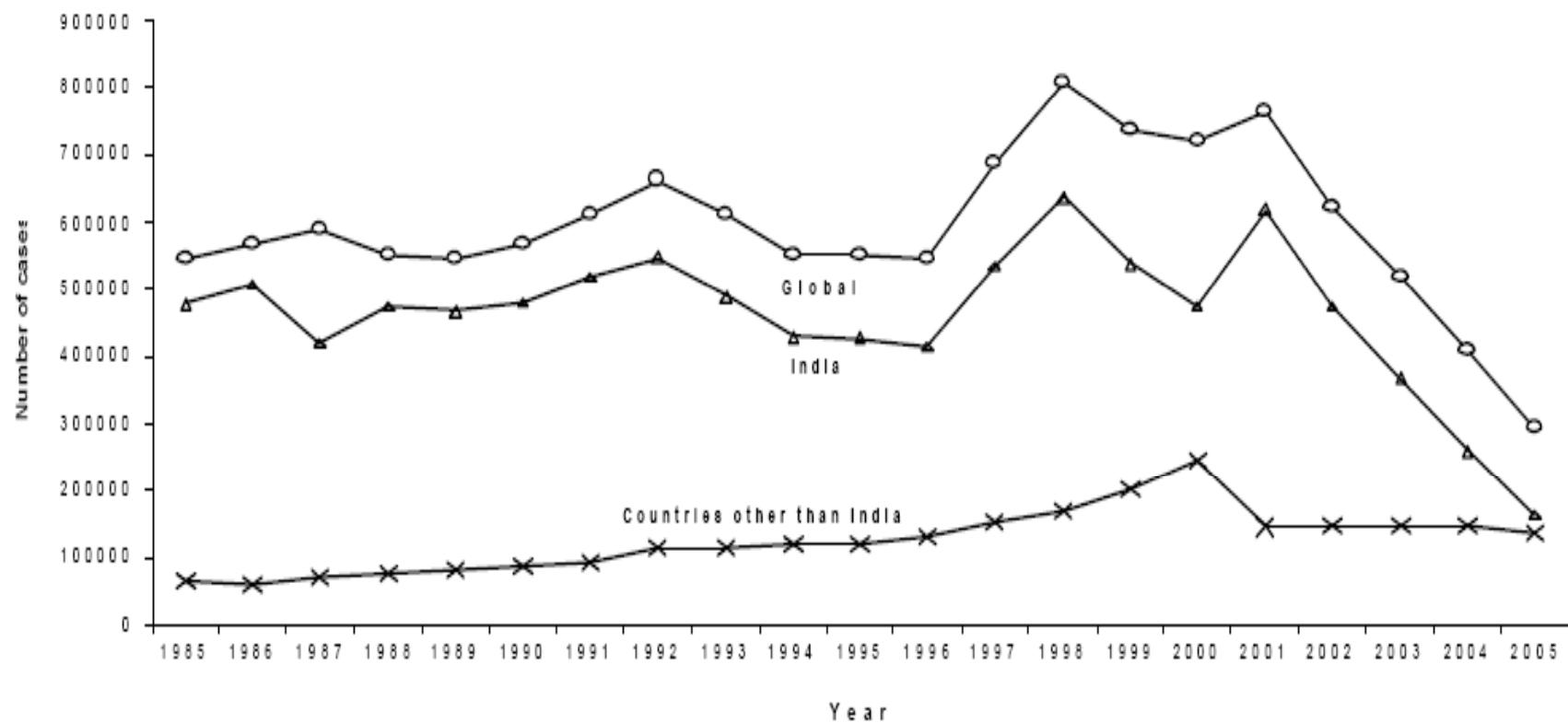
- National Health Policy as well as World Bank documents do not understand this delicate distinction!
- Use of the term detrimental to adequate control and effective treatment of leprosy.

- WHO had no evidence that reduction of prevalence to this level would :
 1. Reduce the transmission.
 2. Reduce the number of new cases.

- “In 2001 WHO claimed that leprosy had been eliminated “at a global level,” even though 719,330 new patients were registered in 2000.
- IN endemic countries the incidence did not fall between 1985 and 1999.

- in the six countries that account for 88% of new cases the numbers and incidence of new cases are rising. Children comprise 15% of cases, indicating that active transmission continues.
- Lockwood D. Leprosy elimination –virtual or real

Figure 1. Trends in new case detection by global, countries other than India and India, 1985-2005



Source: Gupte MD, Pannikar V, Manickam P . Health Administrator Vol XVIII no.2 :

WHO AND THE VIRTUAL ELIMINATION OF
THE DISEASE

1. SHORTENING OF THE DURATION OF TREATMENT.

24 months to 12 months.

2. “CLEANING OF THE REGISTERS”.

- The elimination of leprosy will be a virtual phenomenon –elimination of registered cases through very short treatment regimes without reducing the number of new cases.
 - Lockwood D. Leprosy elimination- virtual phenomenon or reality. **BMJ**

2001- 2005 : THE FINAL PUSH TO ELIMINATE LEPROSY

WHO pushed treatment policies which have no Scientific evidence

1. Single dose treatment for single lesions.
2. Uniform MDT: shortening of treatment of Multibacillary treatment to only 6 months.
3. Accompanied MDT: provision of full year of drugs at first visit.
4. Treatment of reactions.

The final push strategy attracted widespread criticism.

- Leprosy elimination – virtual phenomenon or reality – British Medical Journal 2002.
- Uniform MDT: Another example of wishful thinking . Leprosy 2003.
- Final push of leprosy in India: What is being pushed? Ind J Dermatology Venereology Leprology. 2005
- Leprosy : What is being eliminated ? Bull WHO.2007
- Treatment of Leprosy : Science or Politics? Tropical Medicine and Int . Health 2006

The reaction

- Indifference.
- ILEP expelled from the Global Alliance for Elimination of Leprosy in December 2001.

Unethical practices in India.

- “The SLO (State Leprosy Officer) issued an order in May 2000 that patients having no ration card or voter’s identity card should be treated separately.
- Their cases should not be reflected in the reports on the grounds that the PR (Prevalence Rate) was not coming down even after repeated efforts.” – Comptroller Auditor General’s report.

Unethical practices : January 2005 : Kathmandu recommendations

- Every leprosy case detected was to be confirmed by a special team at district level.
- Active case detection to be discontinued

- Salutary effects of these practices.

- New cases detected in India in 1993: 423,000.
- New cases detected in 2002: 473,658.
- New cases detected in 2005: 161,457.
- India had a decline of 66% in 3 years which accounted for 96% of the global decline.

Leprosy was
Declared Eliminated as a
Public Health Problem
from India
on the **Predetermined Date** of
December 31, 2005

On this Auspicious Date the
Point Prevalence of Leprosy
Supposedly fell below
1 case per 10,000 Population

**In Everybody's Mind,
Elimination has become
Equated with Eradication**

The Consequences are
Tragic for the Thousands of
Patients for whom the
Leprosy Bacillus forgot to
keep its tryst with destiny

NLEP and the World Bank

World Bank : funded the program

- NLEP-I : 1993-94 to September 2000.
- NLEP-II: April 2001 to March 2004.
- Funded about 70% of project costs, about 32 million dollars.

From the WB implementation completion report no. 32044

- The NLEP II had the advantage of a well-recognized, internationally accepted outcome: '*elimination of leprosy*' defined as $PR < 1/10,000$.
- Though an element of confusion was evident in the issue of whether this would be '*actual*' prevalence or
- '*recorded*' prevalence, *GOI essentially interpreted it to mean the latter*, as is apparently the *internally accepted practice*.

- Reduction of 'actual' prevalence of leprosy to less than 3/10,000 by the end of 2004: As 'actual' prevalence has not been measured, it is not possible to rate the achievement of this target.
- The final IDA supervision mission of December 2004 raised this issue, and suggested the conduct of robust, scientifically designed surveys of representative sample populations to estimate the 'actual' prevalence rates.

Post-script

- New WHO strategy ::**Global Strategy for Further Reducing the Leprosy Burden and Sustaining Leprosy Control Activities**
- **(Plan period: 2006-2010)**

Use case detection as the main indicator to monitor progress.

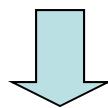
Discontinue the campaign approach.

Case 2: Tuberculosis

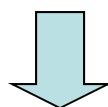
A look at the Revised National Tuberculosis
Control Program

BIOLOGY OF THE DISEASE

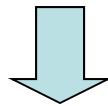
- Exposure to infection



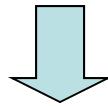
- Infection.



- Development of disease



- Extensive disease.



- Death.

- Infection with M.tuberculosis: 38% of all Indians are infected – 400 million.
- Infection remains latent in 90% of people because of development of immunity.
- *Only 10% develop disease after infection.*-about 2 million every year in India
- About 400,000 deaths every year.

Global Tuberculosis Strategy of WHO.

- Case detection rate of 70%
- Cure rate of 85% in those treated.

Shall control the disease and decrease prevalence.

The RNTCP

- Political commitment to TB control.
- Diagnosis based on smear microscopy
- Standardised short course regimes given under DOT.
- Rigorous monitoring

- Does not address the basic question

of

who develops the disease

and

why they do so?

Only case detection and treatment of those with disease, does not lead to control!

- In the Chingleput trial area inspite of 95% case detection rate and good cure rate, there was an increase in the incidence of sputum positive tuberculosis in those who were uninfected at the beginning of the study.
- T Jacob John: Tuberculosis control without protection from BCG. Indian Pediatrics, Jan 2000



TB patient, Orissa

Ref: Status Report of the RNTCP
2001:



“Not only is the persistence of widespread undernourishment in India — more than in all other regions in the world — quite extraordinary, so is the silence with which it is tolerated, not to mention the smugness with which it is sometimes dismissed.” (Amartya Sen in The Little Magazine, issue on Hunger)

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Comparing body weights in patients with TB in rural Chattisgarh with sub-Saharan Africa

- Weights (Mean) of Patients with Pulmonary TB at Zomba, Malawi* (~70% were HIV positive):
Males: 52 kg.
Females: 45 kg.

* Van Lettow M, et al. Int.J Tuberc Lung Dis 2004;8(2): 211-17.

In Rural Chattisgarh the weights are 10 kg lower!

There were 244 patients below the weight of 35 kg.

Malnutrition and its effects on immunity.

Malnutrition is the leading cause of acquired *correctable* immune system dysfunction throughout the world.[\[i\]](#)

- [\[i\]](#) - US surgeon general's report.

Nutritionally acquired immune deficiency syndrome

- N-AIDS is far greater in prevalence than HIV disease and equally devastating in its effects.
- 50% of all childhood deaths are attributable to the effects of PEM.
- It is entirely preventable and correctable.

Evidence from the POW camps of World War II.

- Russian soldiers: 1600 calorie diet.
- British soldiers : 1600 calories + 1000 calories/day from Red Cross rations.
- Prevalence of TB in British soldiers: 2%.
- Prevalence of TB in Russian soldiers: 19%.
- GB Leyton.Lancet 1946.

