Poverty and TB control

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10 October 2002
Montreal, Canada

Acknowledgements: Review commissioned by the Stop TB Partnership

Voices of the poor

- World Bank study: 60,000 poor, 60 countries
- Findings
  - Poverty is multi-dimensional
    - Food, income, access
  - States have been ineffective in reaching poor
  - Role of NGOs for poor is limited
  - Households suffering from poverty
  - Social fabric is unravelling

Source: World Bank, Voices of the Poor: Can Anyone Hear Us; 2000

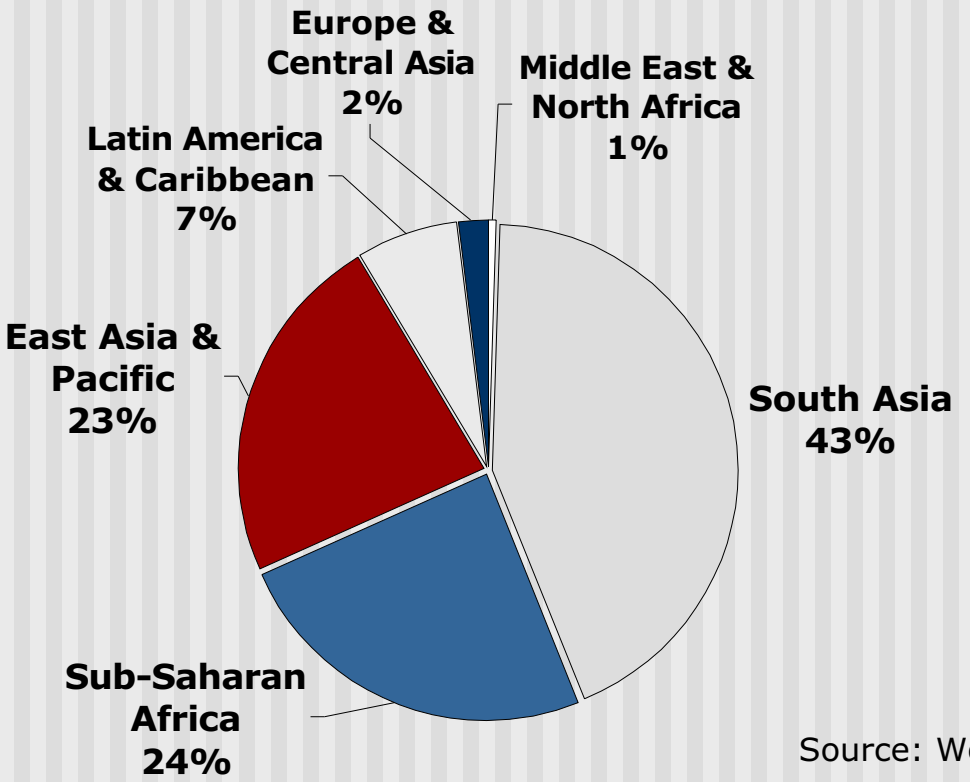
Poverty is voiceless: components of poverty

- Lack of material well-being
  - Food, housing, land
- Absence of infrastructure
  - Access
- Lack of voice, power, independence
- Illness is dreaded

Source: World Bank; Voices of the Poor, 2000

Distribution of Poverty

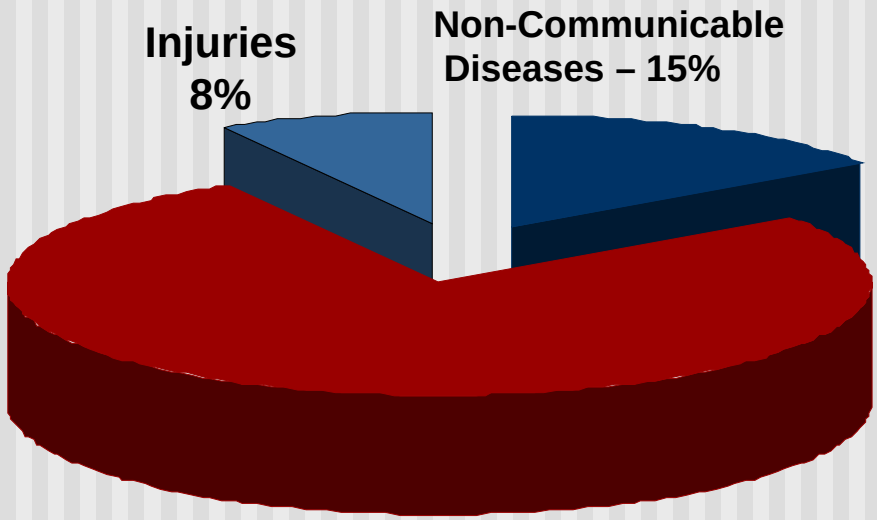
Distribution of population living on less than $1 a day, 1998 (1.2 billion)



Source: World Bank, WDR 2000

Causes of Poor-Rich Health Status Gap

1990 Deaths

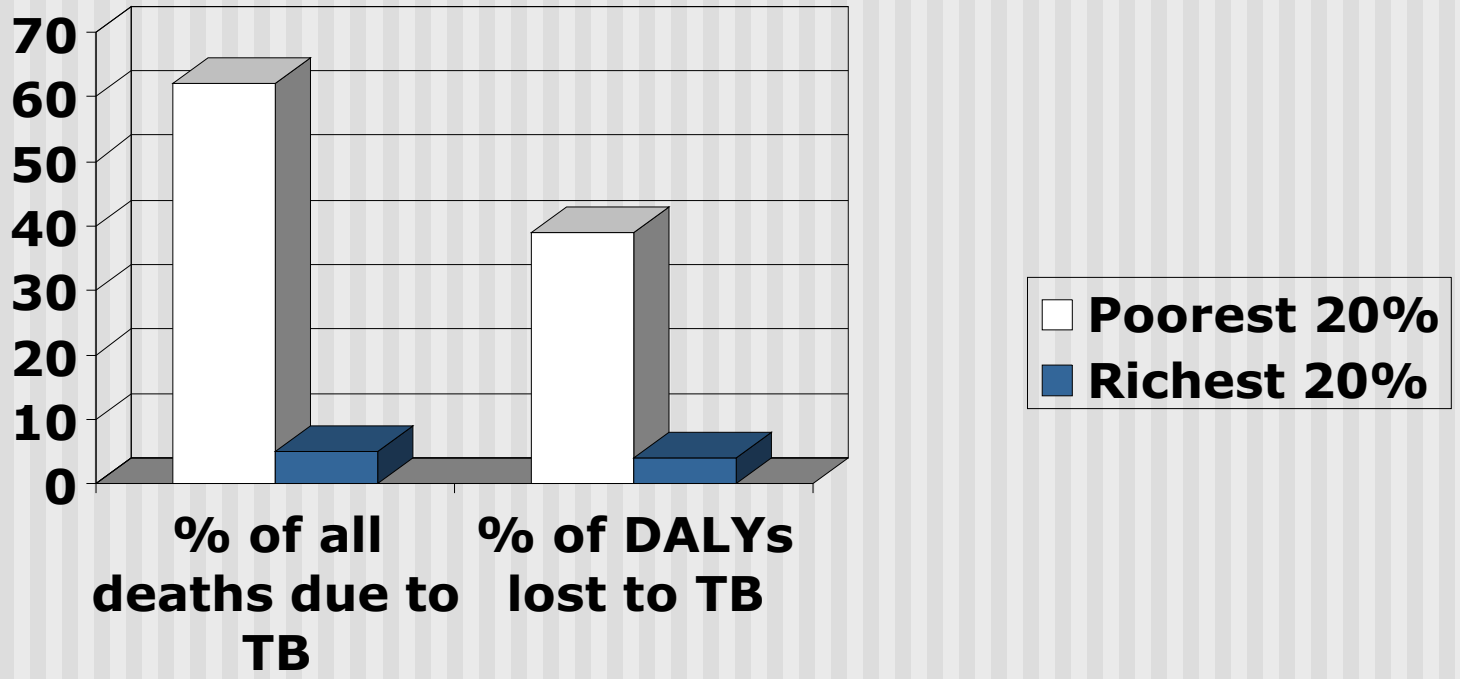


Source: World Bank; Gwatkin, D.; 2000

* "poor" and "rich" represent poorest countries / richest countries

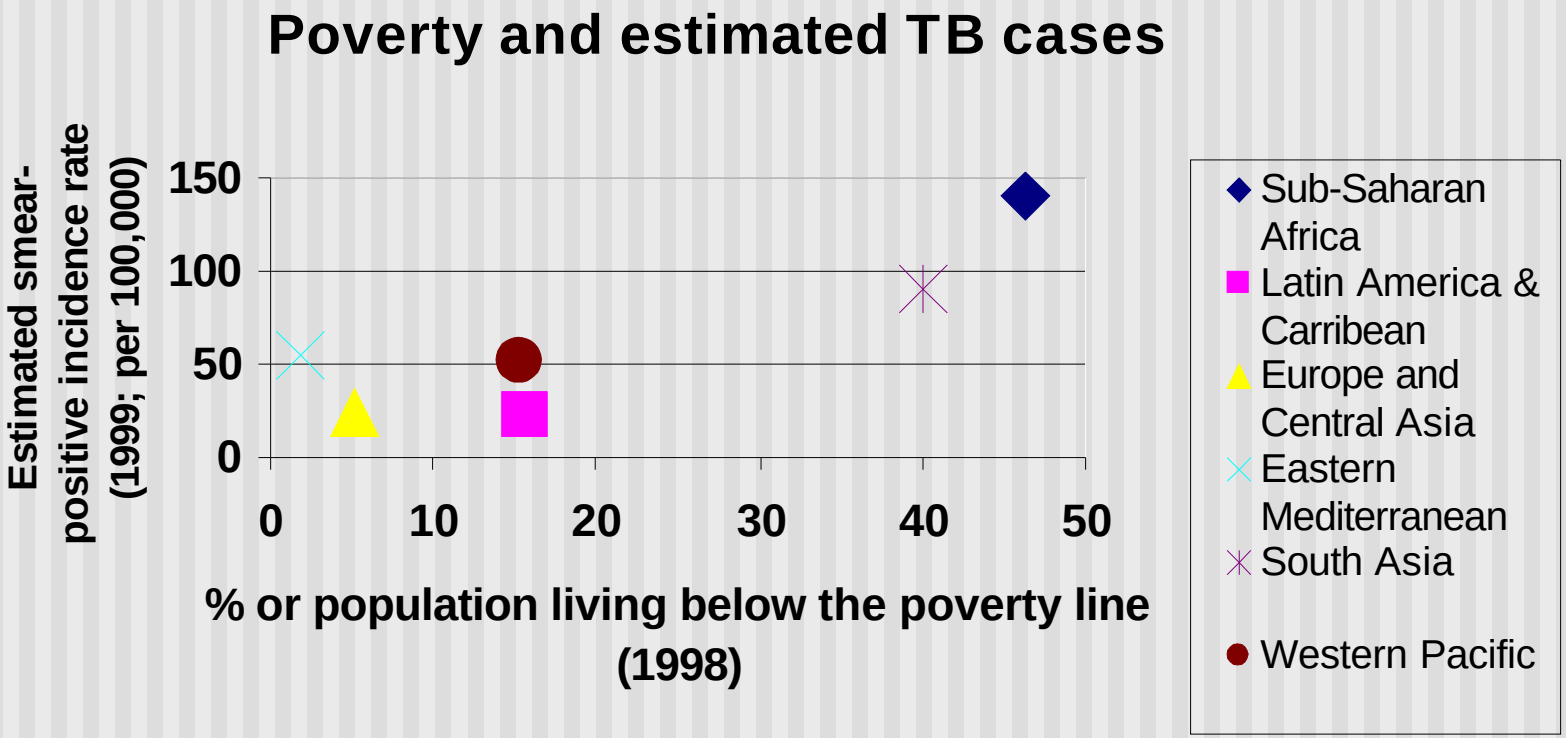
Disproportionate disease burden among the poor*

Source: World Bank; Gwatkin, D.; 2000



* “poor” and “rich” represent poorest countries / richest countries

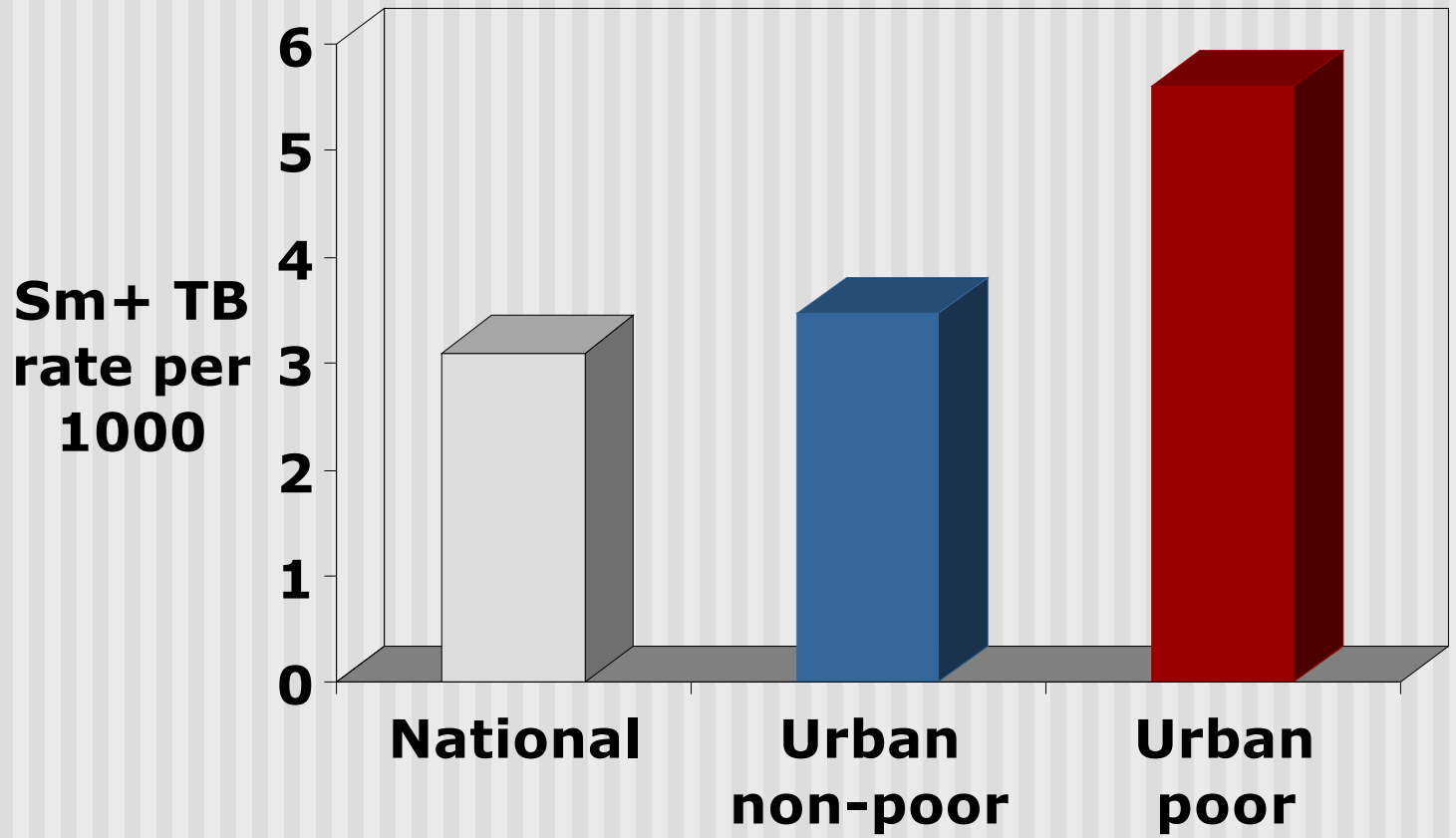
TB incidence and poverty



22 Highest TB burden countries

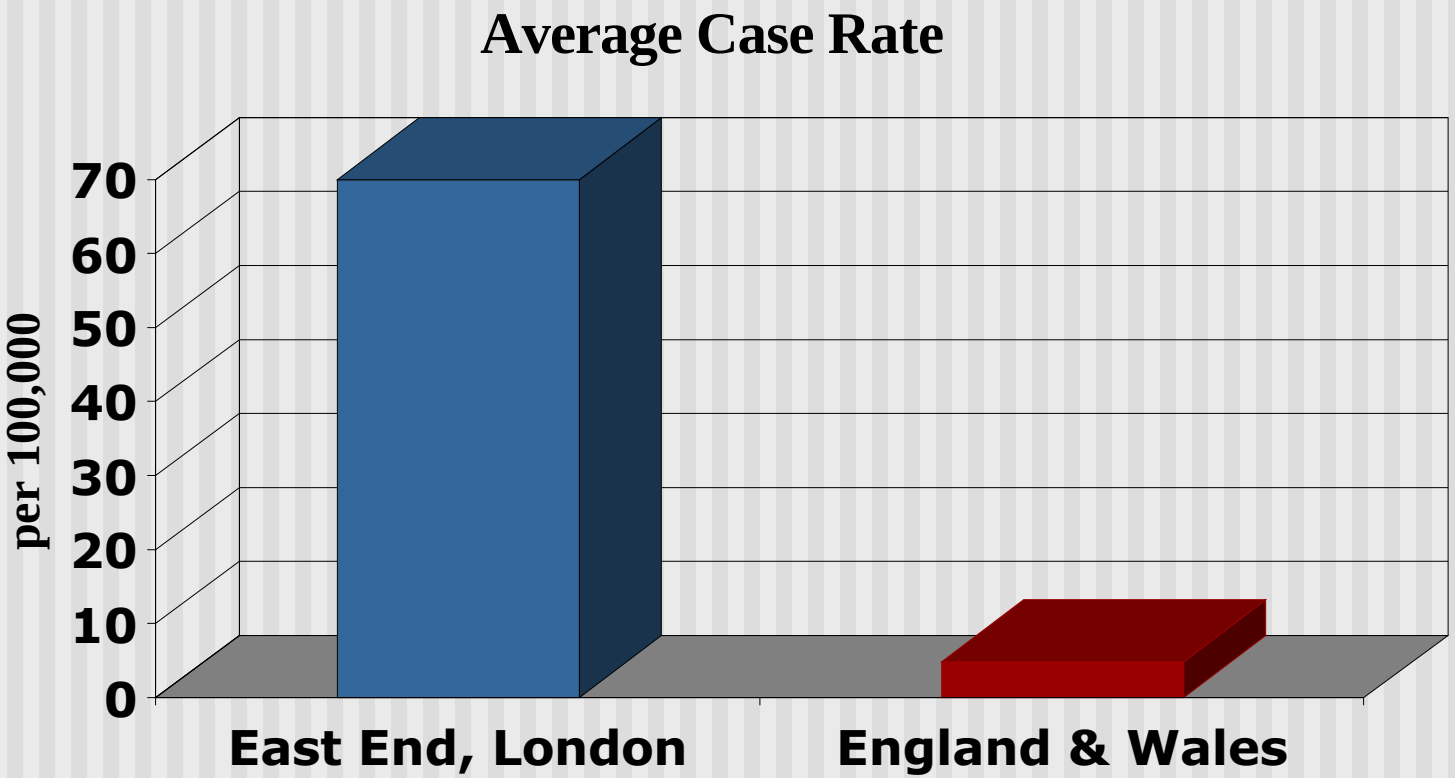
- None are high-income countries
- 78% have GNP per capita of less than $760 (low income)
- Estimate: over 50% new TB patients without access to DOTS are living on less than $2 per day

TB prevalence among poor and non-poor, Philippines

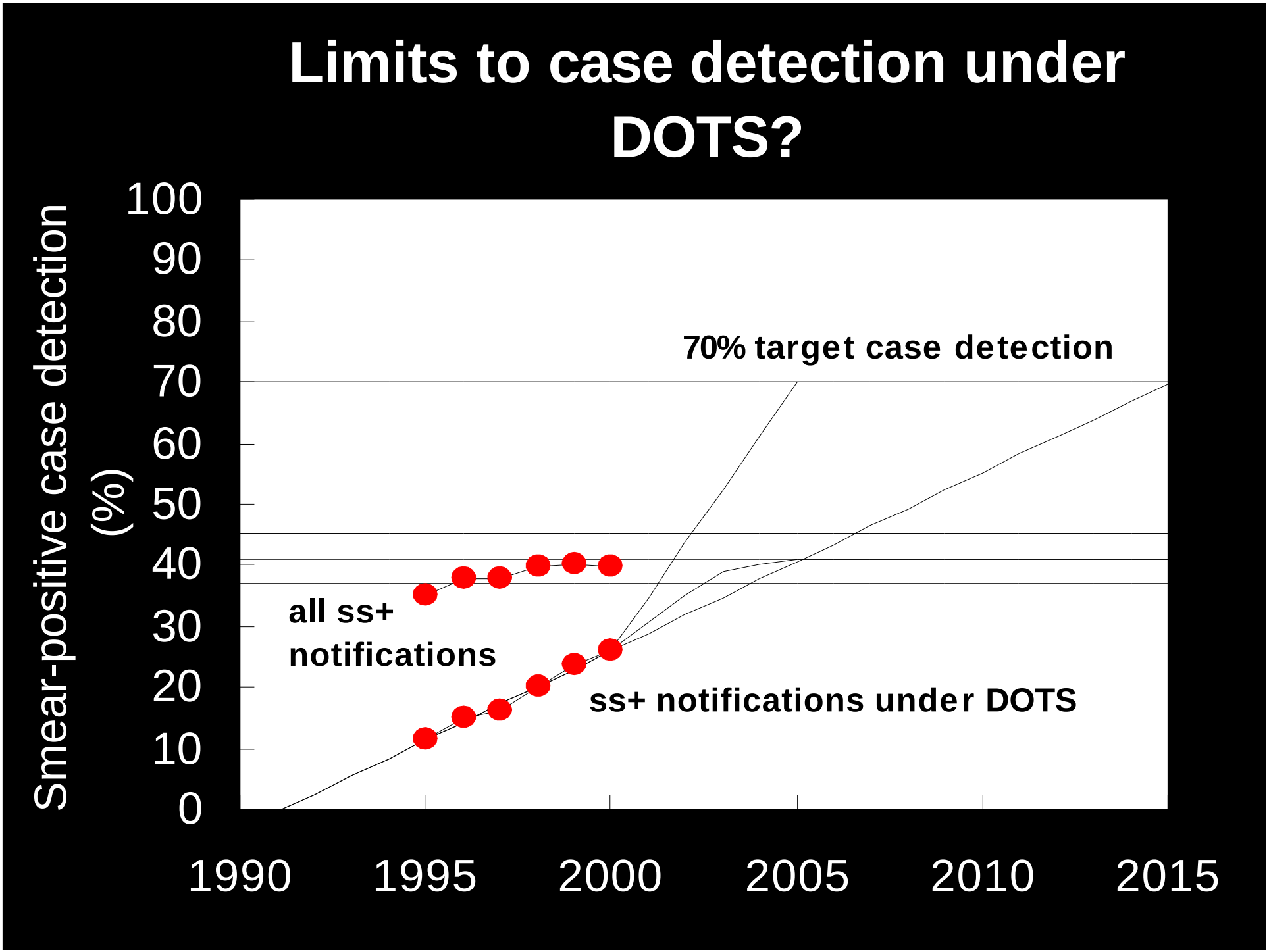


Source: Tupasi et. al.; IJTLD 4(12): 1126-1132

TB and poverty: correlation in a high-income country



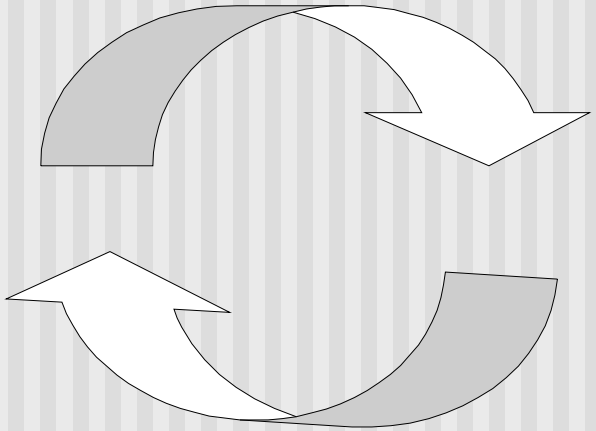
Limits to case detection under DOTS?



Income poverty and TB

The poor lack:

- Food security
- Income stability
- Access to water, sanitation
- Access to health care



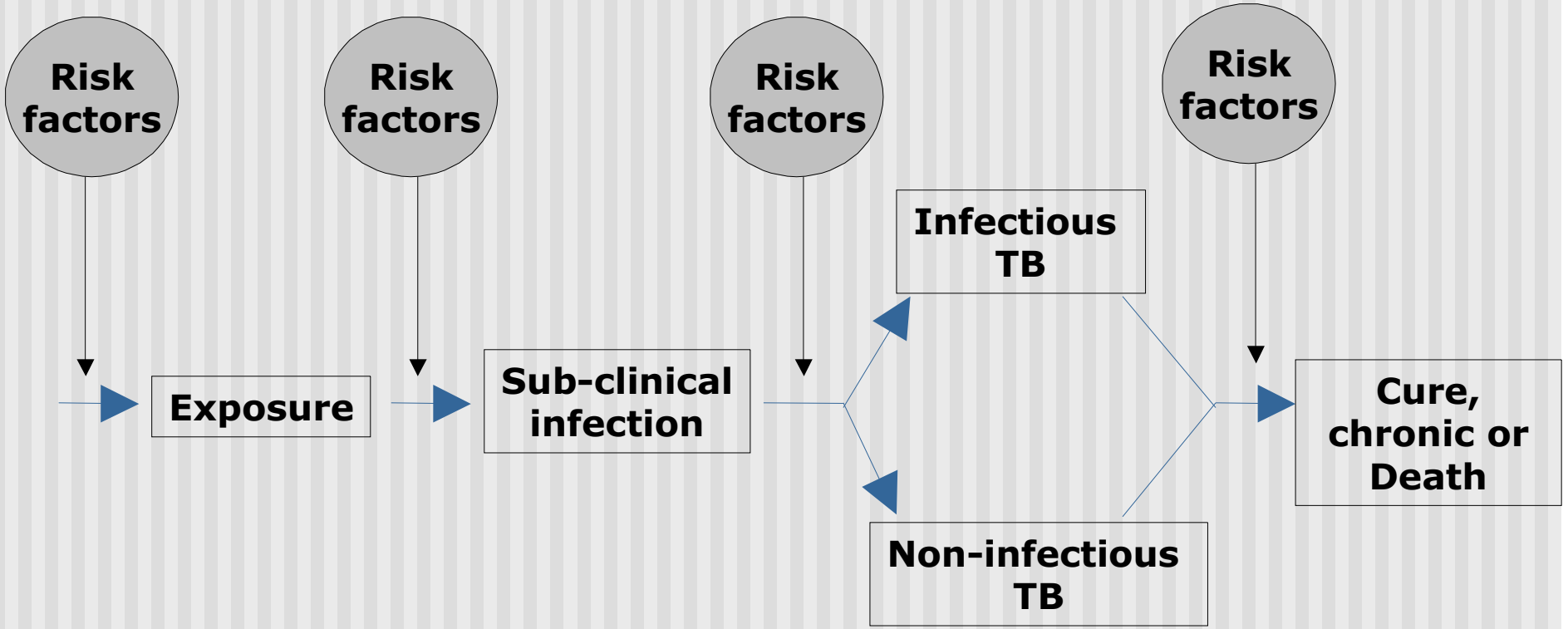
Income poverty

TB disease

TB may lead to:

- Loss of 20-30% of annual wages among poor
- Global economic costs: $12 billion annually

TB Epidemiology

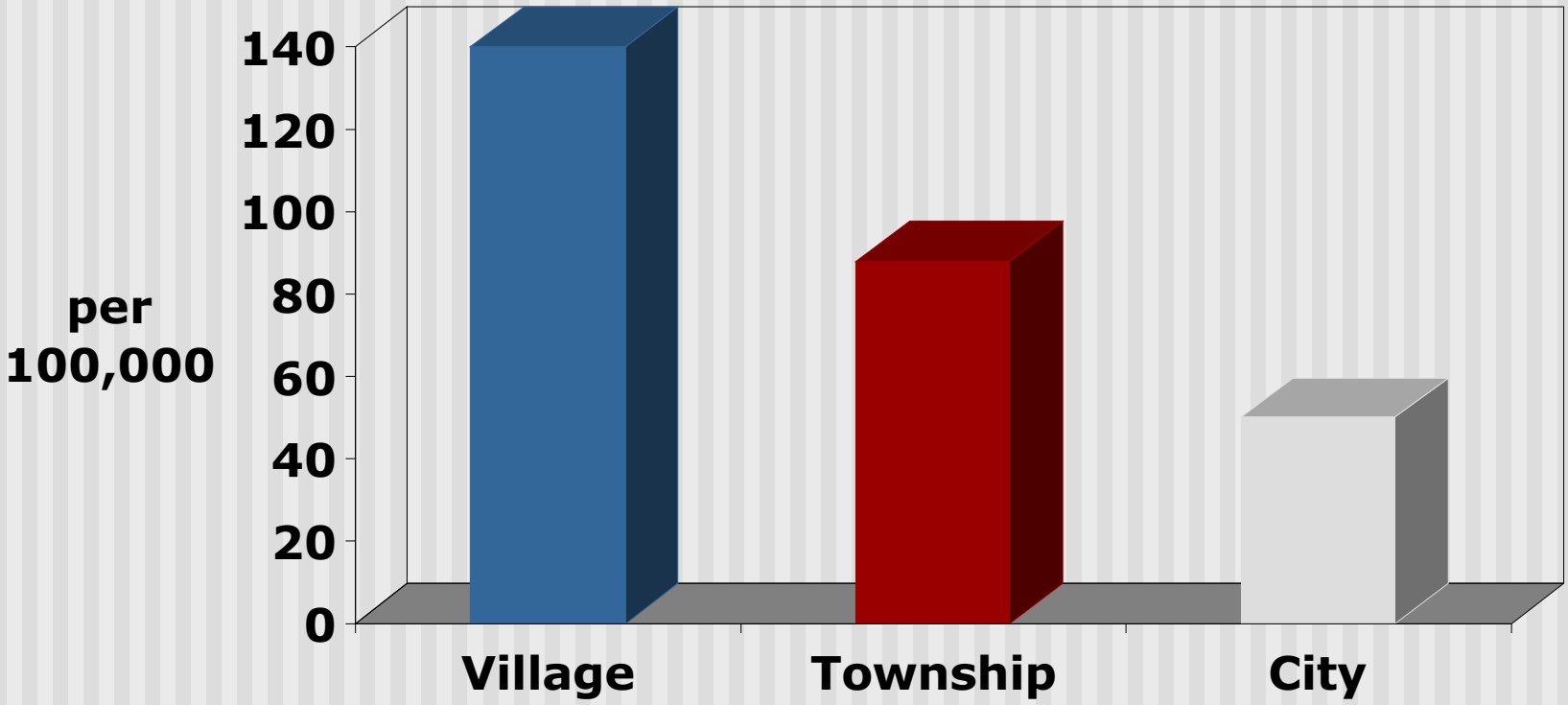


Source: adapted from Urban & Vogel; Am Rev Respir Dis 1981

Poverty links to TB exposure, infection and disease

- Overcrowding
- Malnutrition
  - TB → anemia, low retinol & zinc, wasting
  - Vit D deficiency → 10x risk of TB disease
- Gender differentials
  - Higher prevalence among men
  - Women:faster breakdown to TB disease (2x)
- Marginalized populations
  - Ethnicity
  - Prisoners

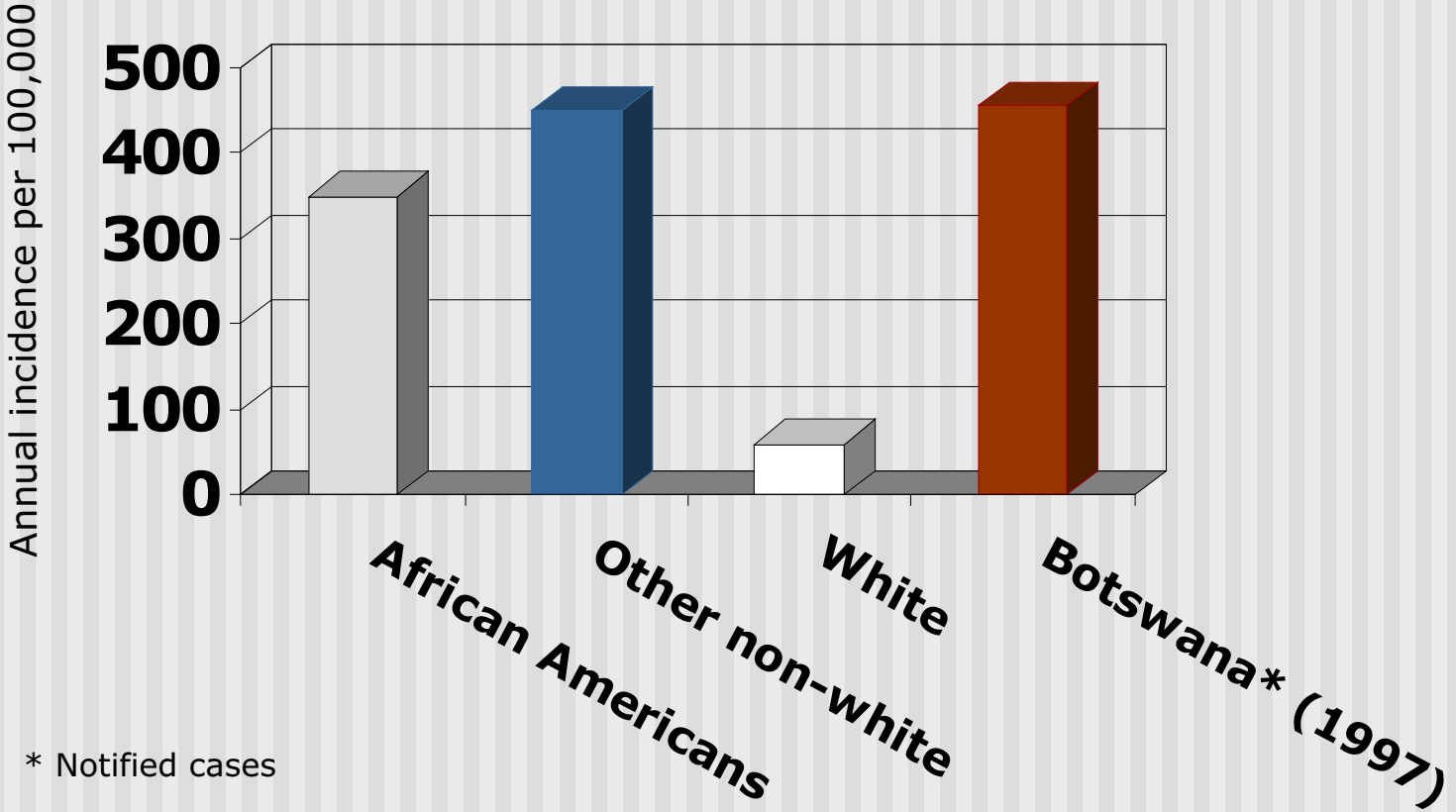
Sm+ prevalence rates: China



Source: Ministry of Health, China prevalence survey, 1990

TB in the homeless

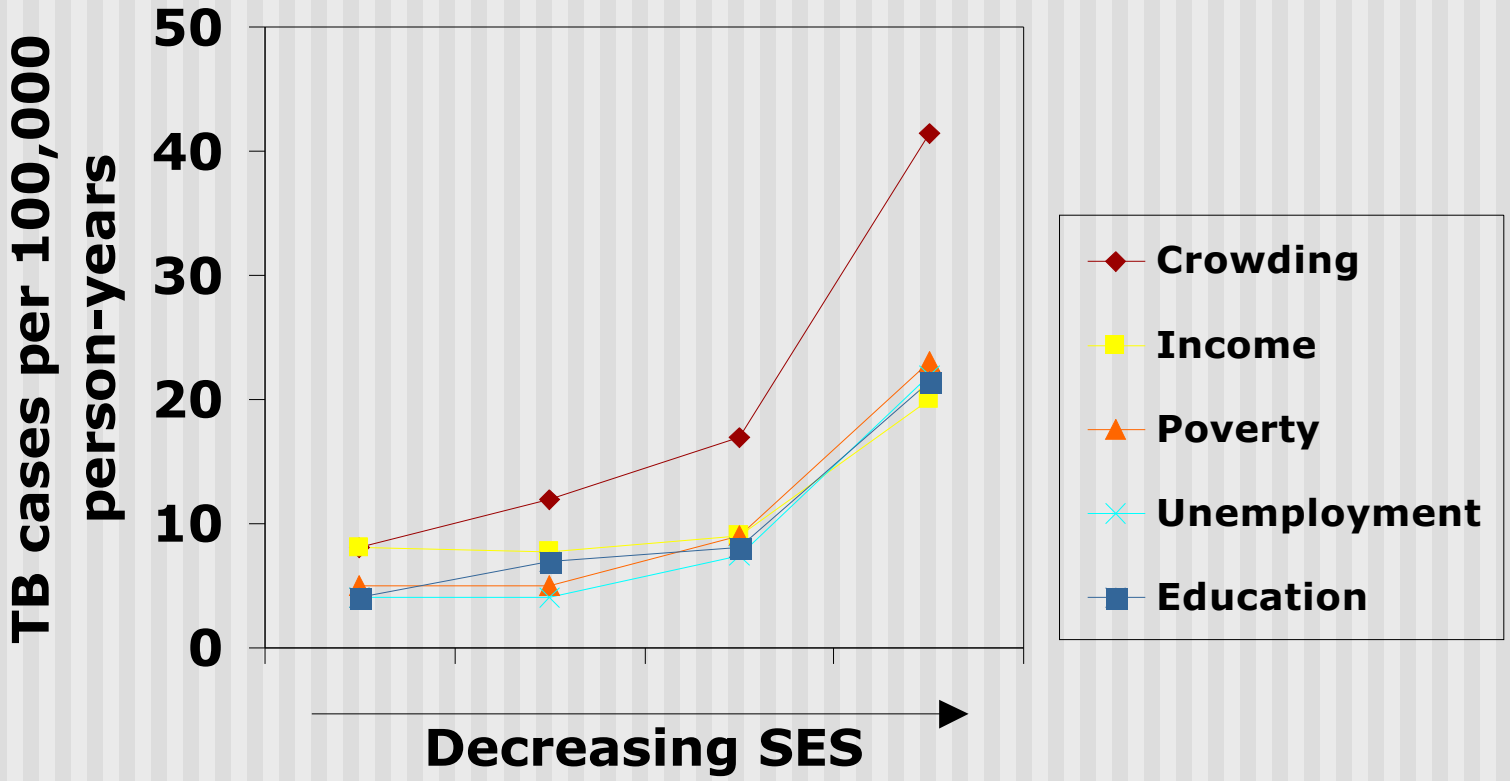
San Francisco homeless: TB cases 1992-1996



* Notified cases

Source: Moss, Hahn, Tulsky et al.; Am J Respir Crit Care Med 2000

TB case rates by SES indicator: United States 1987-1993



Source: Cantwell, McKenna, McCray, et al.; Am J Respir Crit Care Med, 1998

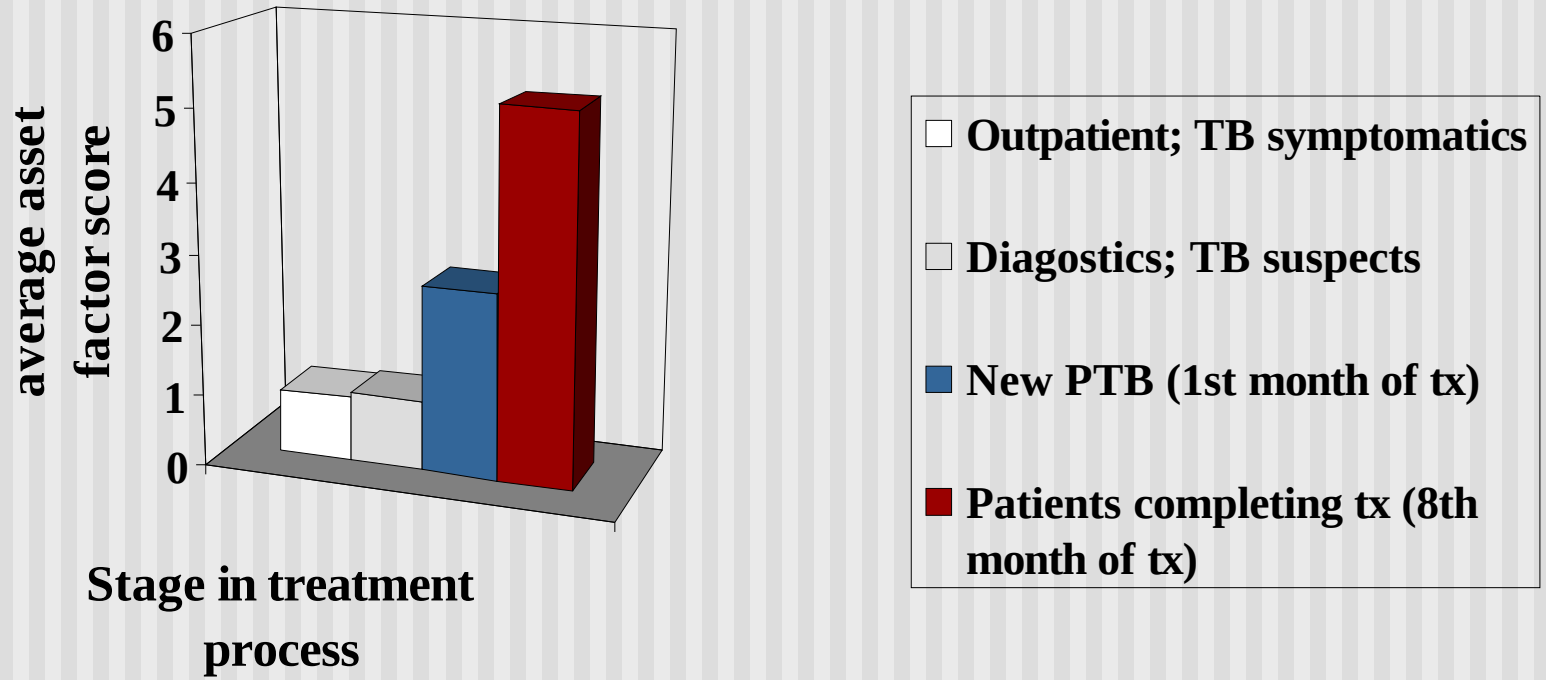
Poverty & TB disease outcome

- Impoverishing effects of TB
  - Economic: 20-30% of household wages
  - Social: stigma
  - Women fear social impoverishment, men fear economic
- Delayed treatment seeking
- Worse outcomes?
  - Barriers to access
  - Inhibited continuity

Change in wealth profile of patients along the continuum of diagnosis and treatment

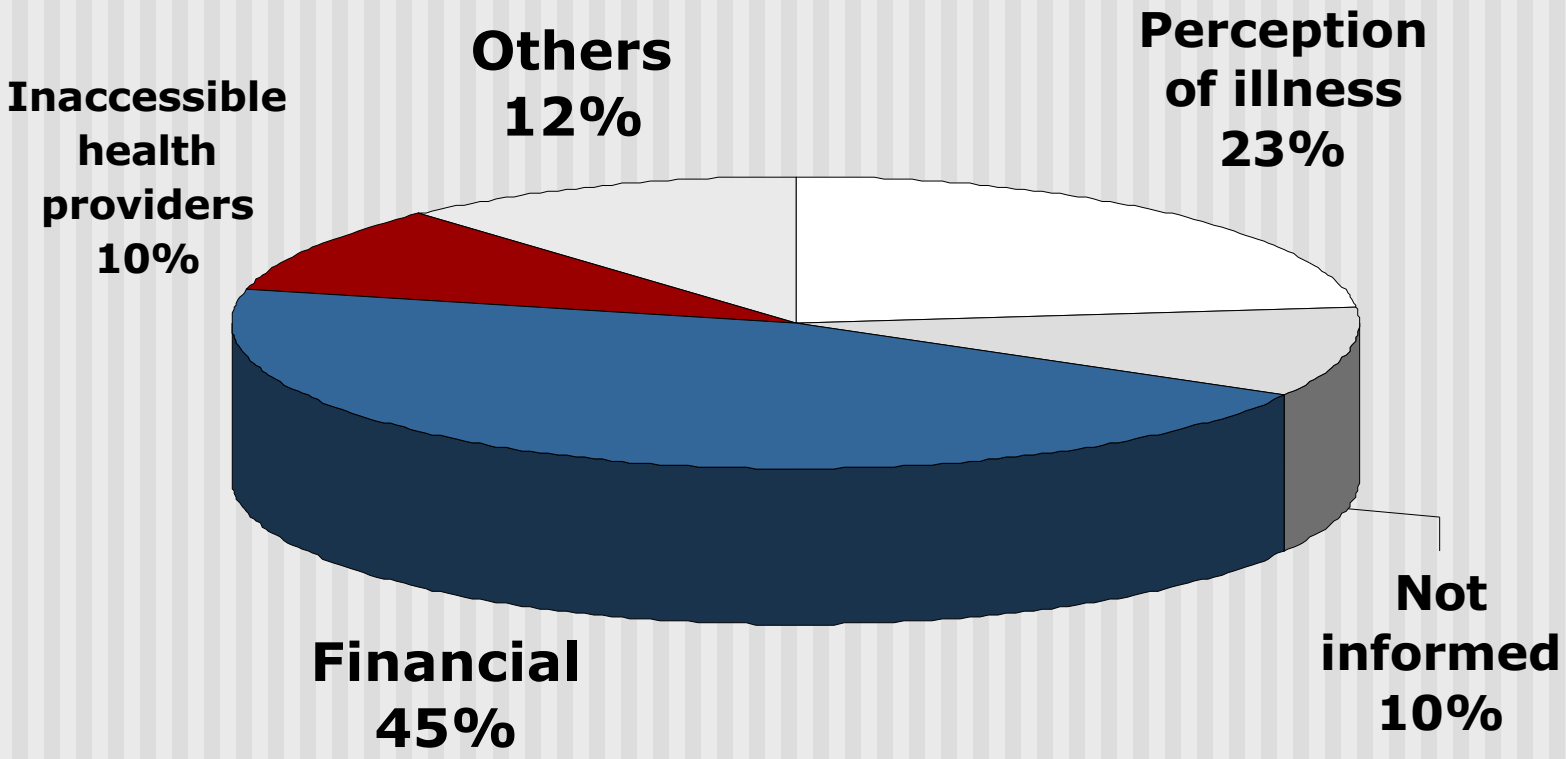
Public sector patients in Nairobi

n=85



Source: Hanson and Kutwa (unpublished)

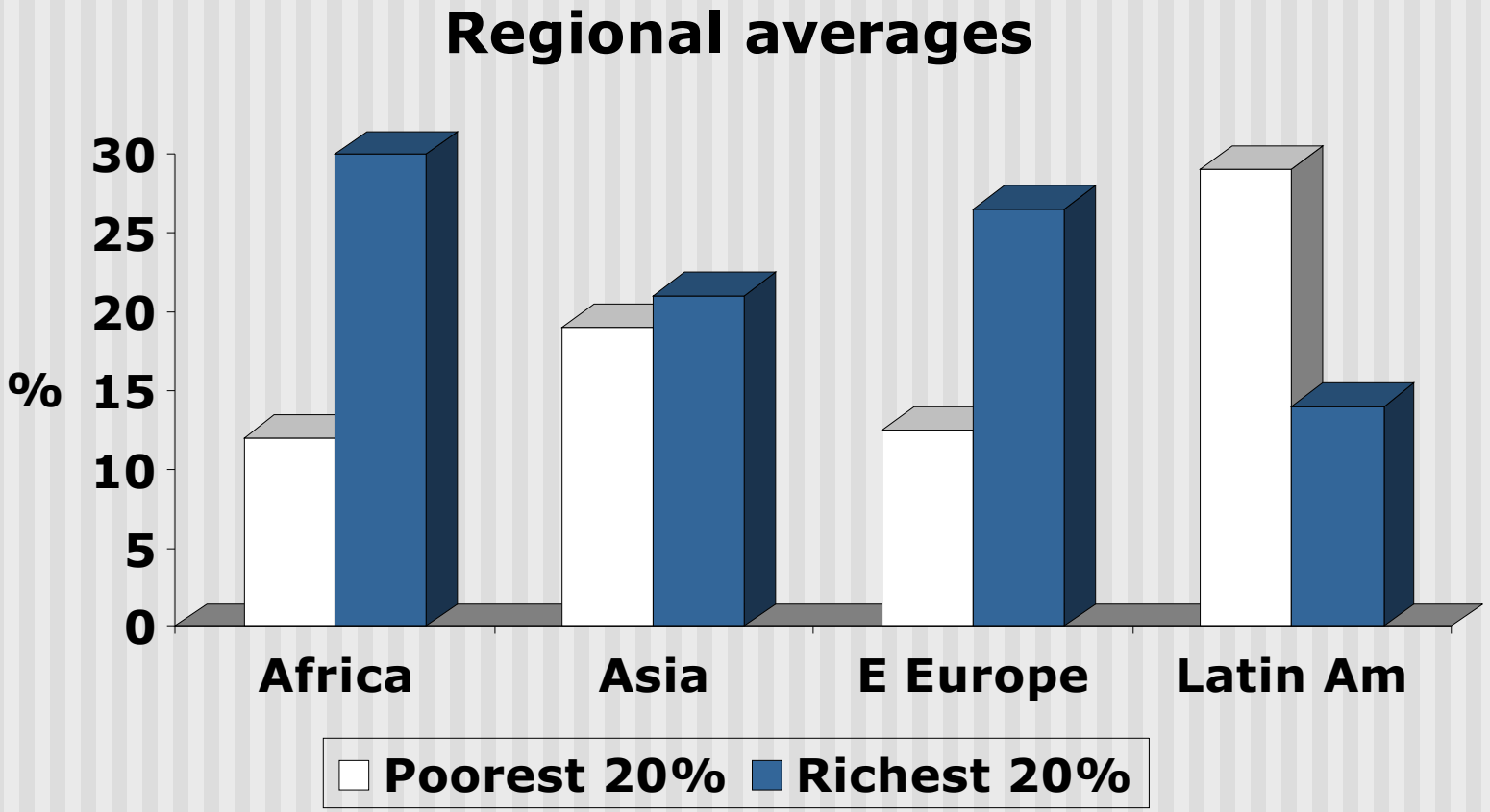
Reasons for treatment delay: China



Source: Ministry of Health, China; 1990 prevalence survey

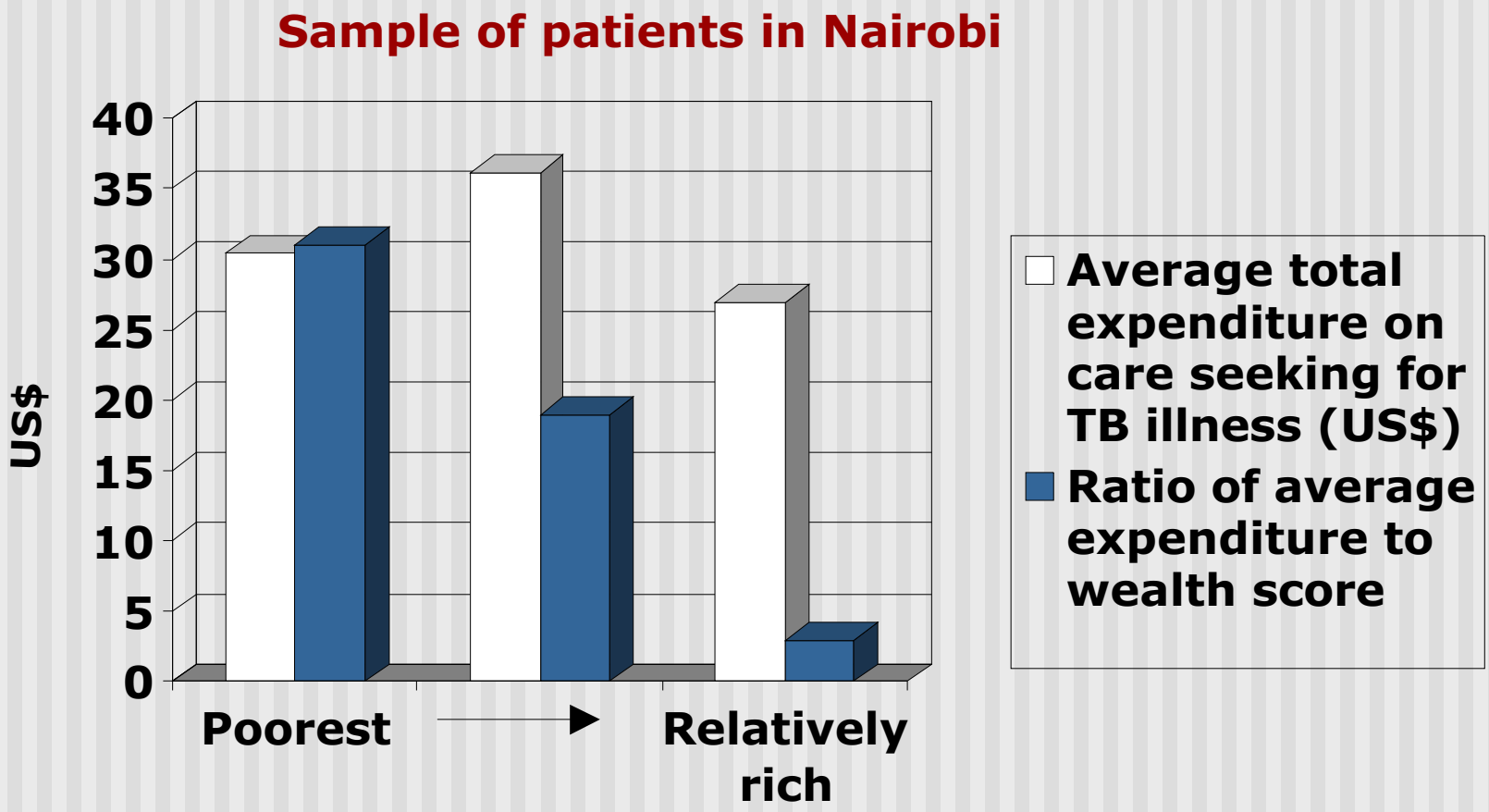
Financing public health: caring for the poor?

Financial subsidy from Government health services to poorest & richest 20%



Source: World Bank, 2001

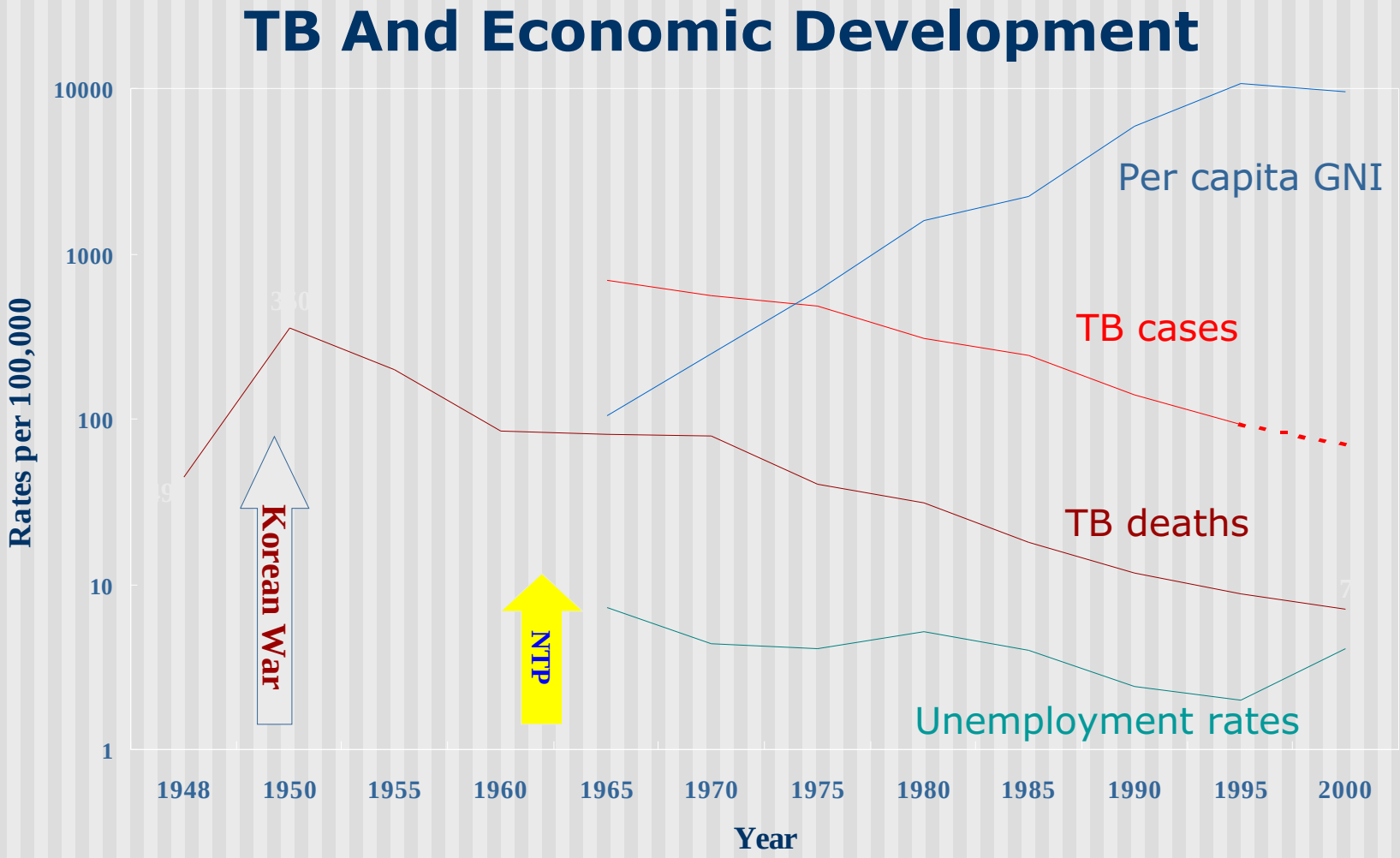
Expenditures on TB care by level of wealth



Source: Hanson and Kutwa (unpublished)

Mounting a response

Korea case study



Global Response to Health Inequities

- **Millennium Development Goals**
  - Intermediate target: reduce deaths due to TB by half by 2010
- **Poverty-Reduction Strategy Papers**
  - Re-orienting development agenda toward pro-poor approaches
  - Debt-relief, increased funds for social sectors
- **Global Fund for AIDS, TB and malaria**
  - Proposals from 101 countries ($1.15 billion)
  - Disburse $700-800 million in 2002

Pro-Poor Strategies

- Income poverty leads to ill health → Reaching the poor with quality essential services

Evidence gap: are the poor being reached?

- Ill health contributes to income poverty → Limiting the impoverishing effect of health expenditures

Evidence gap: food supplementation, income replacement, jobs

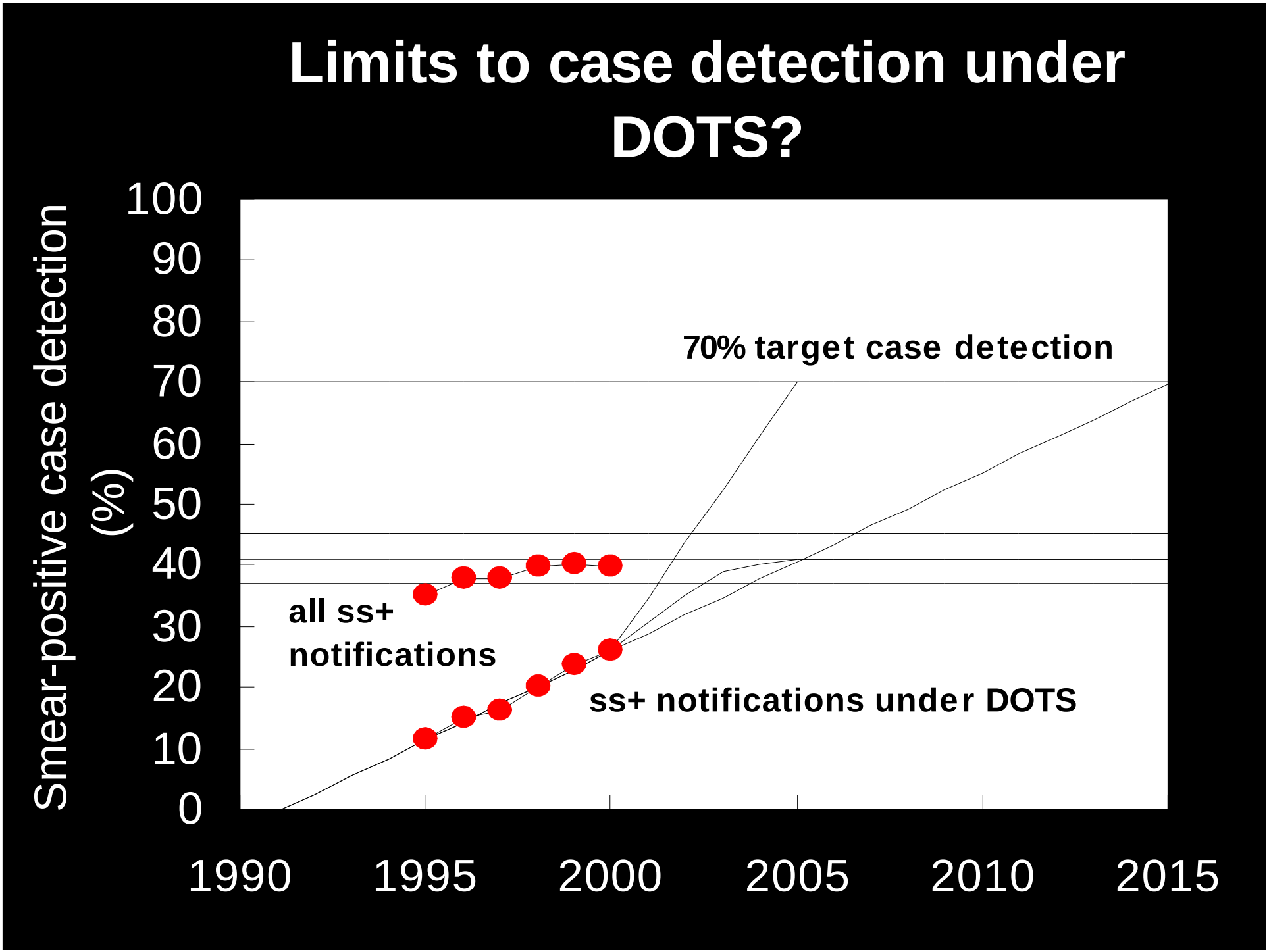
- Health services not reaching the poor → Agenda for system responsiveness and accountability to poor

Evidence gap: monitor public financing for poor, impact of pro-poor strategies

DOTS as a pro-poor approach

Costs of care	Free drugs,ambulatory treatment, incentives, income replacement
Distance to health facility	PHC-based, Community based DOTS, outreach
Service availability	DOTS expansion, PPM DOTS, HR incentives
Service quality	Monitoring, equity monitoring
Lack of knowledge	IEC

Limits to case detection under DOTS?



Increasing case detection: next steps for an equity approach

- **Who's being reached** (public, private)? Benefit – incidence
- **Who is being missed**? Where are they?: formative research
  - Urban/rural, poor/non-poor, public/private
- **Evaluate** impact and cost-effectiveness of existing approaches
  - Incentives, geographical targeting, community based care
- Understand what matters to the poor (demand)
  - Socio-behavioural analysis (supply)
  - Demand analysis
- Understand how to motivate poor health workers
- **Monitoring**
  - Specify and monitor equity objectives and targets
- **Policy considerations**: subsidize diagnostics, sm- patients

Voices of the poor: Can anyone hear us?

"The authorities don't seem to see poor people. Everything about the poor is despised, and above all, poverty is despised."

- Brazil, 1995