Socioeconomic Determinants of Health

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Peoples-Uni HealthE Module

This slide shows a medical center near where I live, and a small primary care clinic in a rural part of a lower-middle income Asian country. These two facilities reflect a key aspect of health economics, that wealthy countries can spend lots of money on large health facilities that have expensive equipment and specialist clinicians. But the reality is that health differences between rich and middle-income countries are getting smaller.

What are the main economic factors in Global Health?

Rich countries:

1. Low burden of disease, mostly non-communicable and chronic diseases
2. High spending on health, but also rapidly rising costs
3. Aging populations
4. Unhealthy lifestyles
5. High coverage of tax-financed healthcare and social insurance
6. Health policies are based on ideology and politics as well as on science

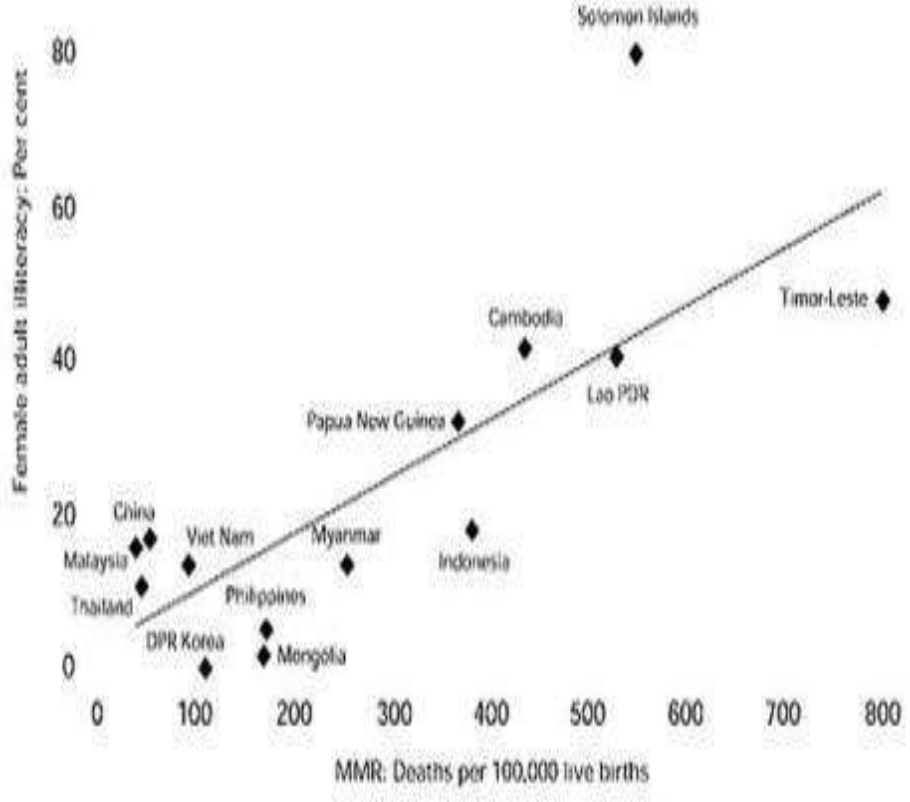
Low and Middle-Income countries:

1. High burden of disease, mainly among poor people, women, and children.
2. Low spending on health, but wealthier people can pay for good care.
3. Young populations
4. Unhealthy environments
5. High out-of-pocket payments
6. Health policies are often donor-driven


You can look down on scenes like this from luxury apartments in many booming cities.

Social and environmental factors
(determinants of health)

- Safe water and sanitation
- Geographical location and political “connections”
- Food security and nutrition
- Social status and discrimination
- Transportation and roads
- Stability (war, disasters)
- Stress, unemployment
- Illiteracy and gender bias (look at the effect on MMR) ---------→
- Housing
- Culture and Personal behaviour (substance abuse, risky sex)



"Access barriers" are other determinants of health that prevent people from getting good medical care:

Financial access: Cost of treatment to the patient at the time of illness (or copayments if insured)

Physical access: Distance to health facilities, transportation and opportunity costs

Quality of care and "social distance" of health workers

Knowledge access: information, education, and literacy.

Access and Environmental factors in 2 neighbouring countries

(2005/2006 data)	Cambodia	Thailand
% of births attended by a skilled person	44%	97%
Maternal mortality ratio (maternal deaths per 100,000 live births)	540	110
Safe water in rural areas	61%	97%
Malnutrition rate (<5 yrs underweight for age)	28%	7%

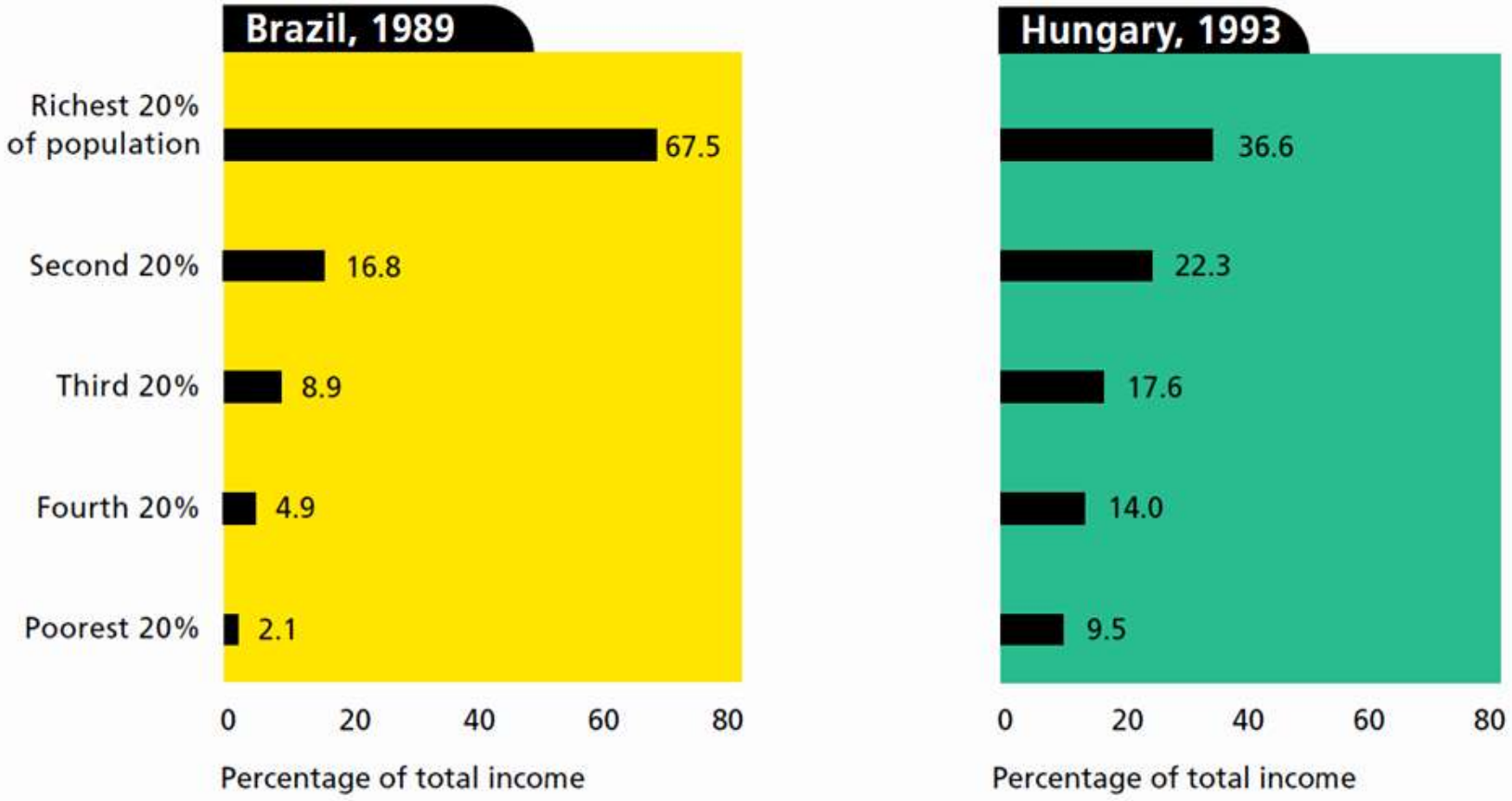
Health outcomes are determined by many factors. High maternal mortality rates are usually associated with high frequency of births without assistance by a trained midwife or other skilled person, but this table indicates that many Cambodian women are also malnourished and live in unsanitary conditions so their children are also unhealthy. Maternal mortality is much lower in Thailand and Korea not only because of those three factors, but because better rural infrastructure means that emergency transportation and nearby hospitalization are available if needed.

Economic Determinants of Health: Equity and Equality

- “Vertical” equity considers differences in health status, utilization of public services, etc., between different income groups. (this is discussed in Topic 3)
- “Gini coefficient” is a measure of inequality in a population, that can range from 0 to 1 (the higher, the more unequal).
- Many developing countries have more inequality than industrialized countries because they lack “social safety nets”.
- Among countries having similar wealth, high income inequality is associated with worse average health.

We usually use income groups of 20% (quintiles) when discussing equity

Figure 5.1 **Income distributed by population quintile in Brazil and Hungary**



Alternative Criteria for Income Poverty

1) Less than 60% of national **median** income
2) Living on less than $1.25 (**PPP**) per day: World Bank (PPP = **Purchasing Power Parity** *allows fair comparisons between countries because it adjusts for prices of basic goods)*
3) Income is less than cost of minimum calorie requirements
4) More than 60% of household income is spent for food

- **In developing country research, poverty and income are often measured indirectly by housing quality and possession of household and productive assets.**

Quiz: Poverty and Health:

O / X

- **A.** Many people are poor because they have bad health
- **B.** Many people have bad health because they are poor

Both of these are true!

A. Many people are poor because they have bad health

- *Sick people* cannot work as hard, or as much, so they lose income.
- Other family members must care for them, so those family members cannot work as much either
- "Catastrophic payments" and impoverishment: They often must sell land or other assets, or go into debt to pay for treatment

"Free" medical care exists almost nowhere. Even if there are no official charges, people must pay "unofficial" charges or give "gifts" to hospital. Where hospitals are under-funded, patients must supply their own food, and buy medicines and even surgical supplies from outside drugstores.

Without insurance, people must get money for treatment in ways that can permanently damage their economic condition. A farmer may have to sell land or tools. If they borrow money, it is often from moneylenders who demand very high interest.

B. Many people have bad health because they are poor

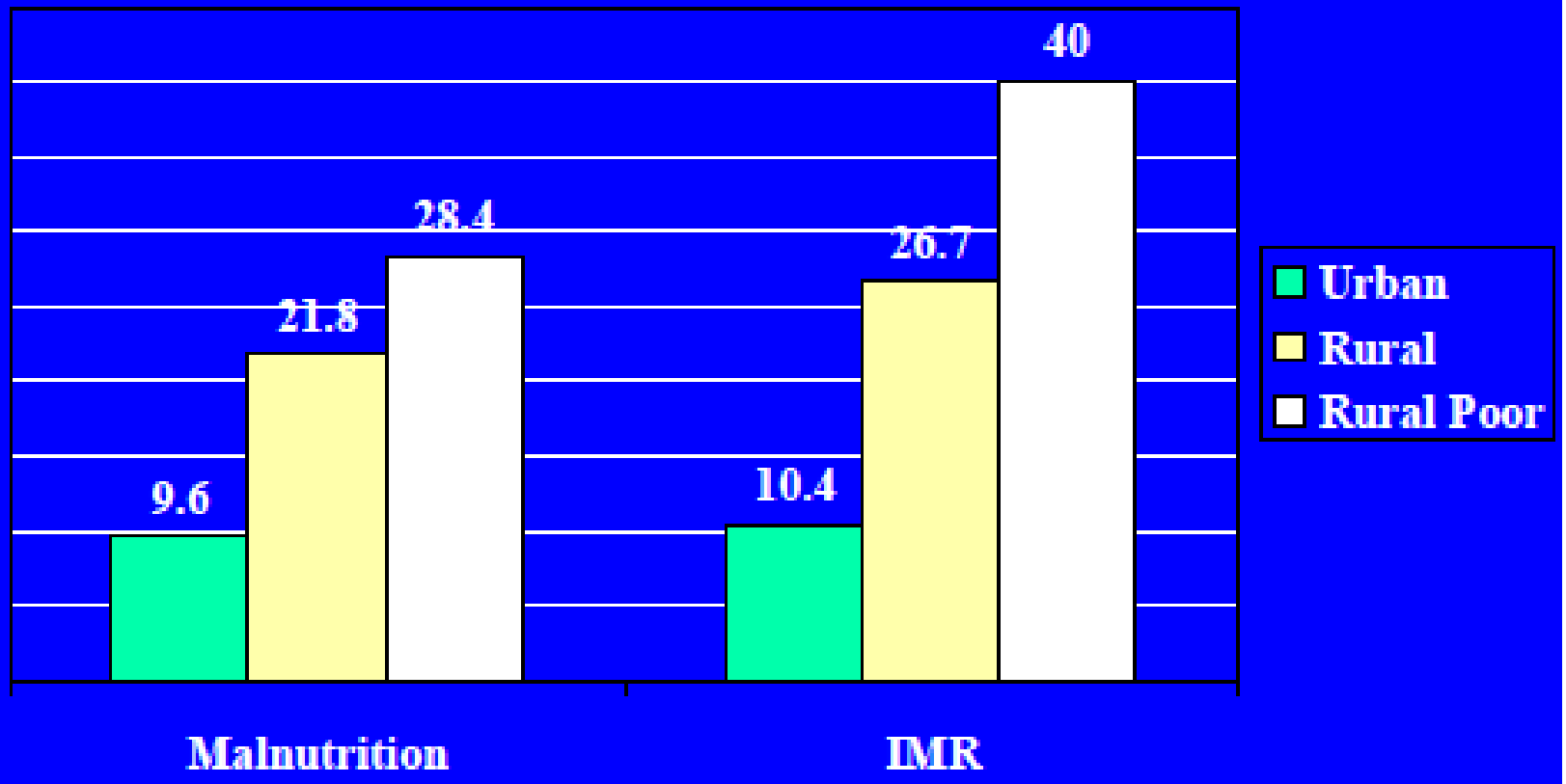
- Poor people often live in unhealthy environments
- They do very hard physical work
- They live far from health facilities,
- If they get sick, they buy ineffective medicines, or delay effective treatment until illness becomes more serious.

Because of various access barriers, in low-income countries public health facilities are underutilized. The most frequently used providers are shops or market medicine sellers.

There are three main reasons for this. First is that many market medicines may be ineffeictive or poor quality, but cost less than a visit to a clinic or hospital. Second is that there is usually no waiting needed so less time is lost from work. Finally, there is less ‘‘social distance’’ between a villager and a market seller than for government health staff.

The poor have greater health care needs

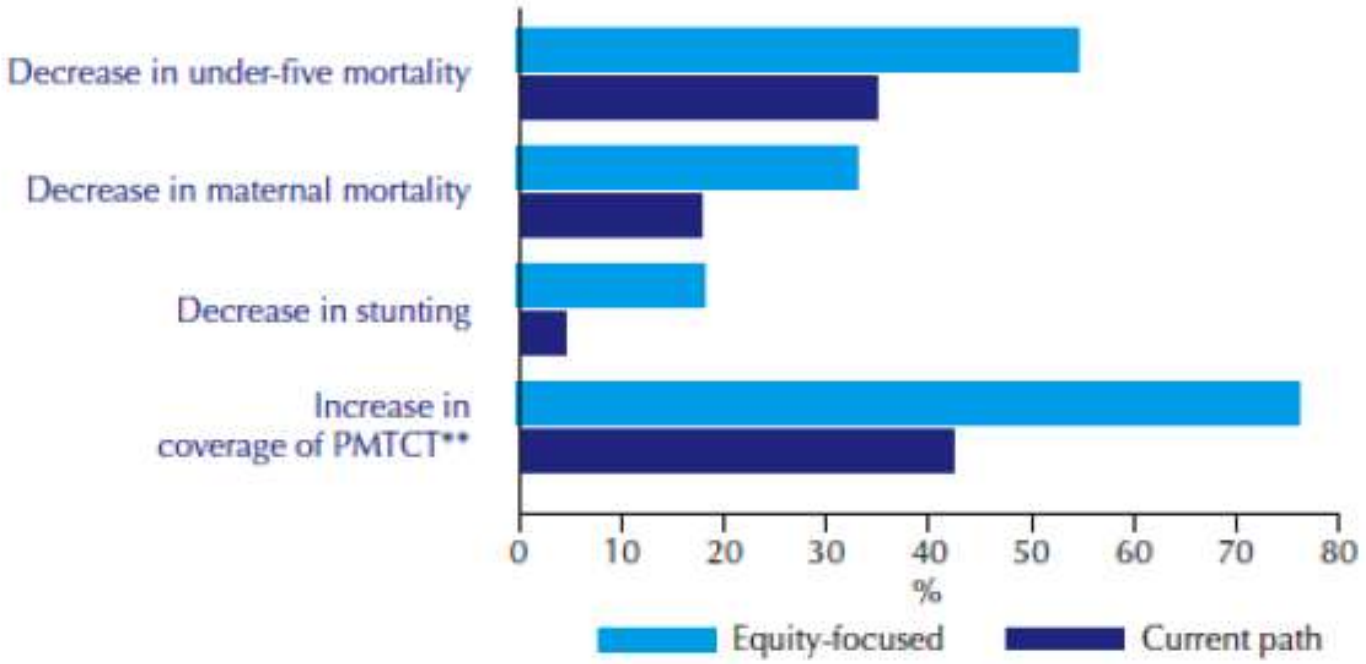
Health Status and Poverty: Viet Nam



Source: ADB

UNICEF and others now believe that fastest progress to MDGs will be made by focusing on the poor

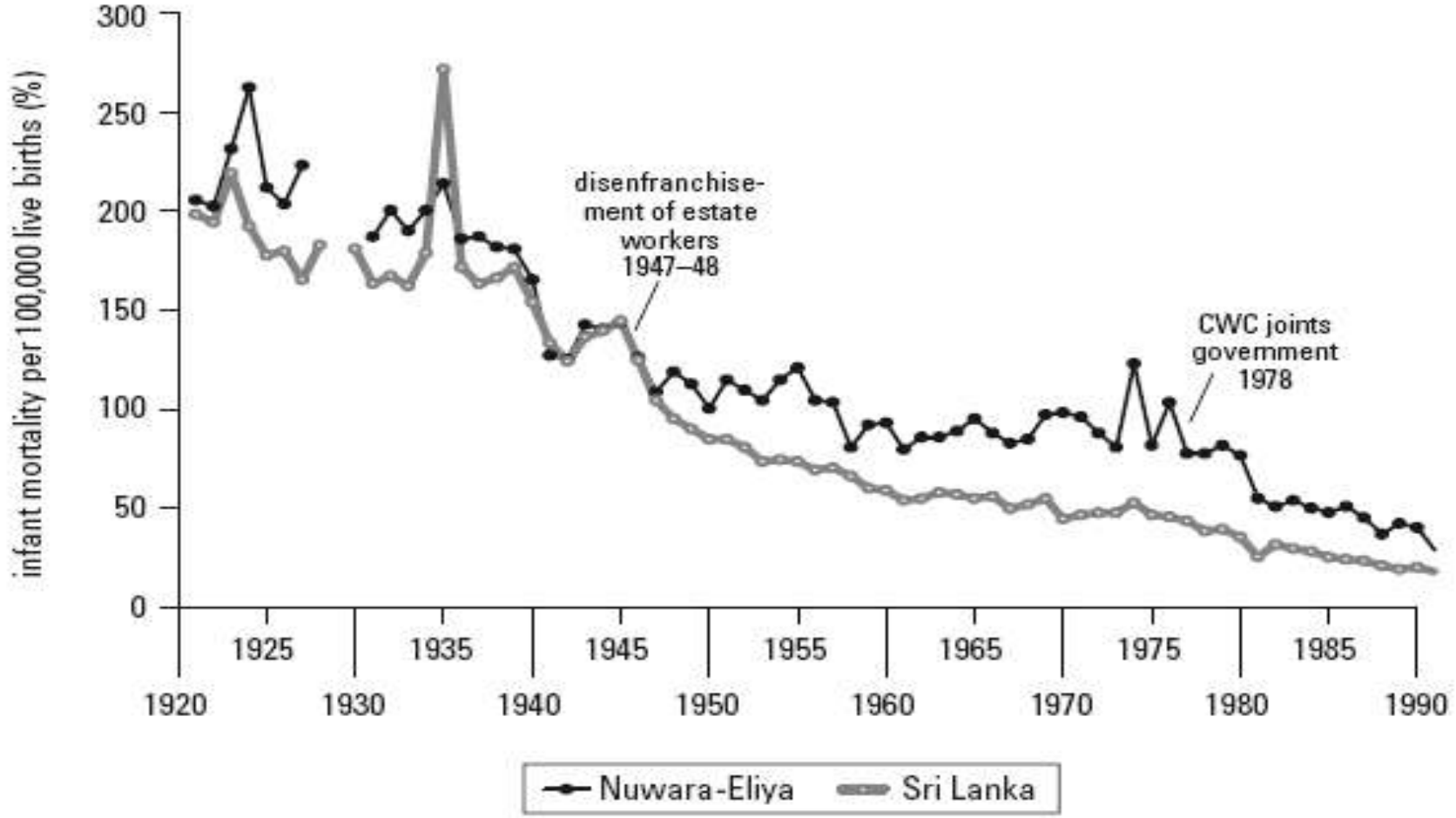
Key contributions of the equity-focused approach to the health MDGs



Source: UNICEF 2010, based on analysis of 15 countries. Bangladesh, Benin, Ghana, Honduras, Kenya, Mali, Niger, Nigeria, Pakistan, Philippines, Rwanda, South Africa, Uganda, Viet Nam and Zimbabwe.
PMTCT: prevention of mother-to-child transmission of HIV.

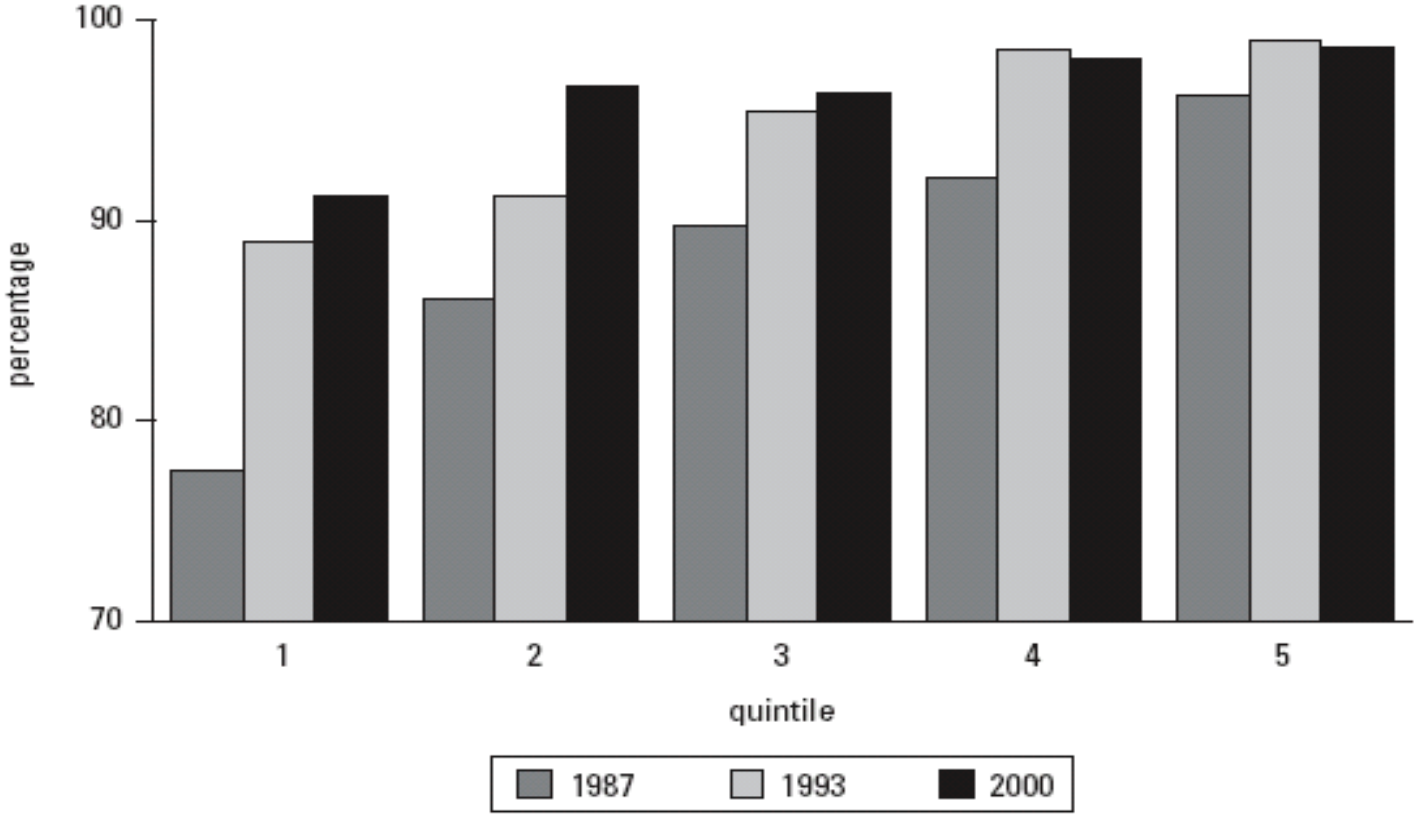
But Sri Lanka reduced Infant Mortality...

Figure 11.6 Sri Lanka: Trends in Infant Mortality Rates, Country and Nuwara Eliya District, 1920–2003



...by improving access for all income groups

Figure 11.4 Sri Lanka: Differentials in Medical Attendance at Childbirth, by Asset Quintile, 1987–2000



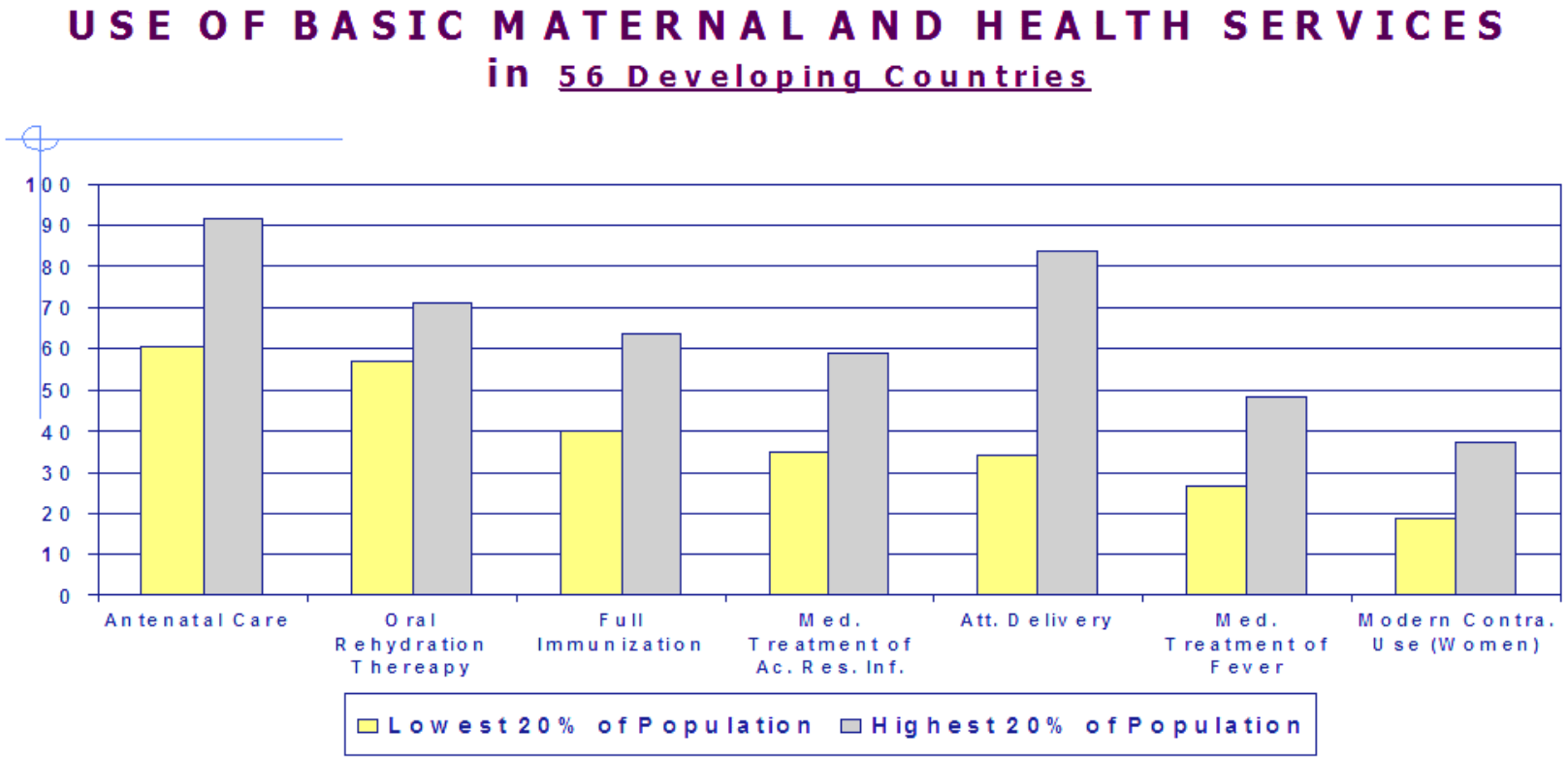
Source: IHP estimates from the Sri Lanka Demographic and Health Surveys for relevant years.

Equity of health outcomes

(2006 data)	**U5MR (Child Mortality) *in Poorest 20%***	**Child Mortality *in Richest 20%***	
Bangladesh	**121**	72	
Kenya	**149**	91	
Ghana	**128**	88	
Nepal	98	47	
Vietnam	53	16	
Philippines	66	21	

Inequality of health outcome can be measured by absolute difference, or by ratio. There is disagreement about which is a better indicator of inequality. What do you think??

Equity of utilization: wealthier people often benefit more from Government health expenditures



Even though they usually need more healthcare, the poor often use government health services less than the better-off. This slide shows examples of how the poor have worse ‘‘equity of access’’. Wealthier and urban populations have the knowledge and the money to use publicly-provided health services. This inequal “benefit uptake” is really an unfair subsidy to better-off people.

Health is considered a **good public investment** because of proven links between improved health and national income

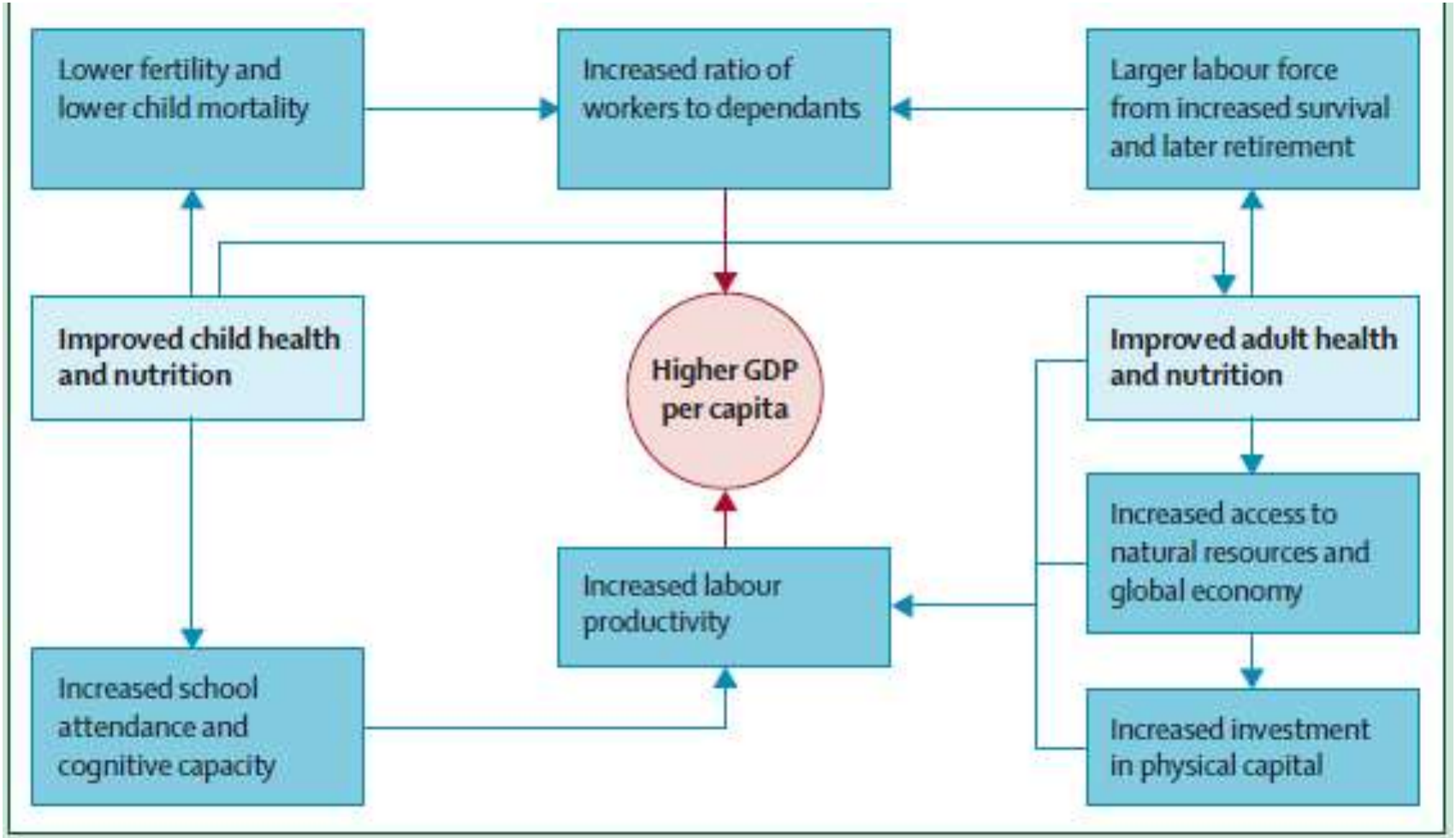


Figure 8: Links between health and GDP per person

Source: Lancet, Global Health 2035

How much do countries spend on health? 2006 data.

	Cambodia	Thailand	South Korea
Per capita Total Health Expenditure (public plus private)	$30	$136	$1168
% private health spending	74%	36% (very high insurance coverage)	45%
Percent of GDP spent on health (total)	6.4%	3.5%	5.9%

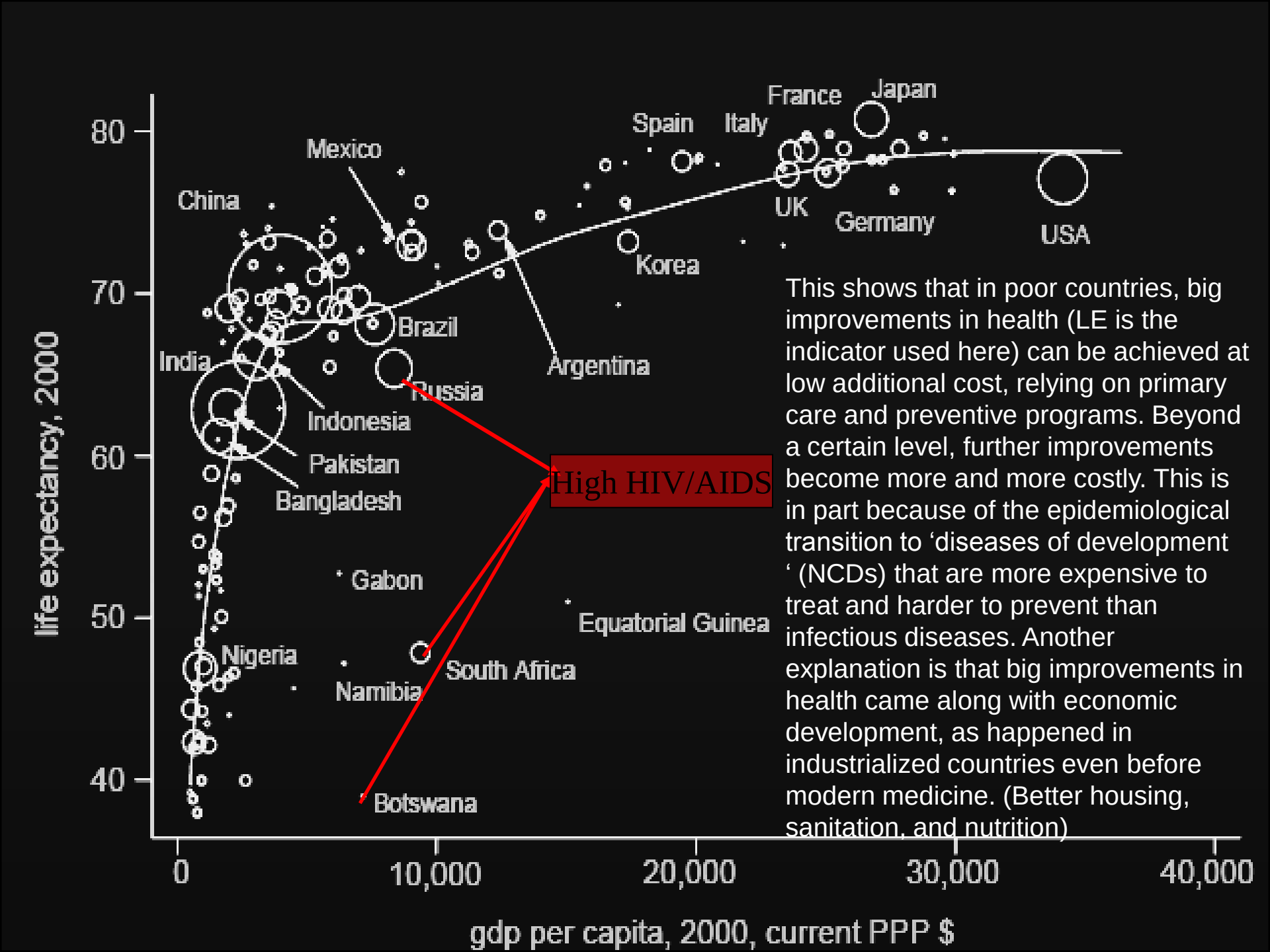
Why Money Matters

- Training health workers is expensive
- Paying for preventive healthcare
- Skilled planning and management of the entire health system
- Motivating health workers to:
  - work regular hours
  - treat patients politely
  - not demand unofficial payments
  - maintain skills
- Building and maintaining health facilities
- Supplying enough drugs and equipment
- Subsidizing treatment costs or insurance premiums for poorest patients

Health Outcomes and Total Health Expenditures

	Low- income **Cambodia**	Medium-income **Thailand**	Wealthy country **S. Korea**
Income per capita (in US$ at exchange rate)	**$360**	**$4,700**	**$25,000**
Amount per capita spent on health (private + government)	**$30**	**$136**	**$1168**
Healthy Life expectancy at birth	**55**	**69**	**76**
Under-5 mortality rate (per 1000 live births)	**109**	**28**	**7**

International comparisons show there is a relationship between wealth and health. The richer a country is, the more money is spent on health, from a combination of government and private funds. The more money is spent on health, usually the better the health outcomes, but not always. This table uses three Asian countries as examples. There are quite a few countries, in South Asia and sub-Saharan Africa, that have total health expenditures even less than Cambodia's. In Topic 3 we discuss how Universal Health Coverage has helped some countries with low health expenditures, to have very good health outcomes.



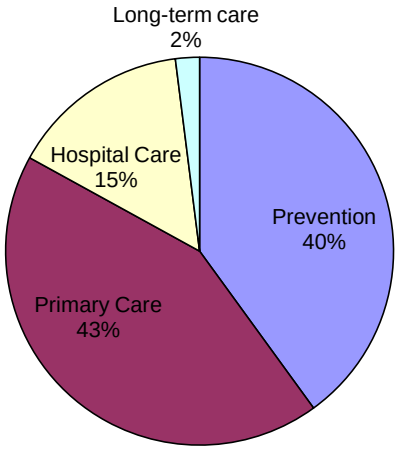
This shows that in poor countries, big improvements in health (LE is the indicator used here) can be achieved at low additional cost, relying on primary care and preventive programs. Beyond a certain level, further improvements become more and more costly. This is in part because of the epidemiological transition to ‘diseases of development ‘ (NCDs) that are more expensive to treat and harder to prevent than infectious diseases. Another explanation is that big improvements in health came along with economic development, as happened in industrialized countries even before modern medicine. (Better housing, sanitation, and nutrition)

How much <u>should</u> a country spend on health?

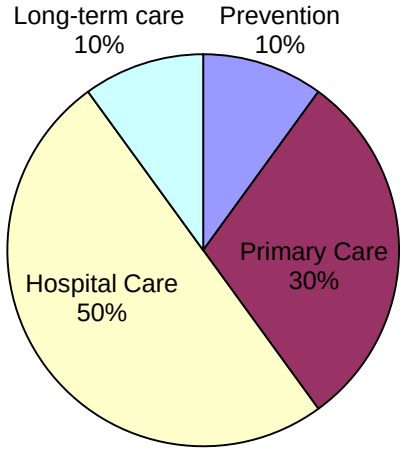
- Compared to Japan's health spending of $1,872 per capita (or the USA >$4,000), it seems impossible that very poor countries could afford good health. But experts estimate that a package of essential healthcare can be provided in developing countries for only $40 per capita (excluding AIDS treatment).
- Many countries still spend much less than this.
- This total includes private and government expenditures, but private spending is often spent on ineffective treatments, and can push households into poverty (catastrophic payments).
- How the health budget is ***allocated*** also is very important (next slide)
- WHO and World Bank recommend that **governments** should spend more on health. Poorer countries now spend 3-10%. Most industrialized countries spend 10-14% of total government expenditure on health.

Allocating a country's health budget to obtain maximum improvement in population health

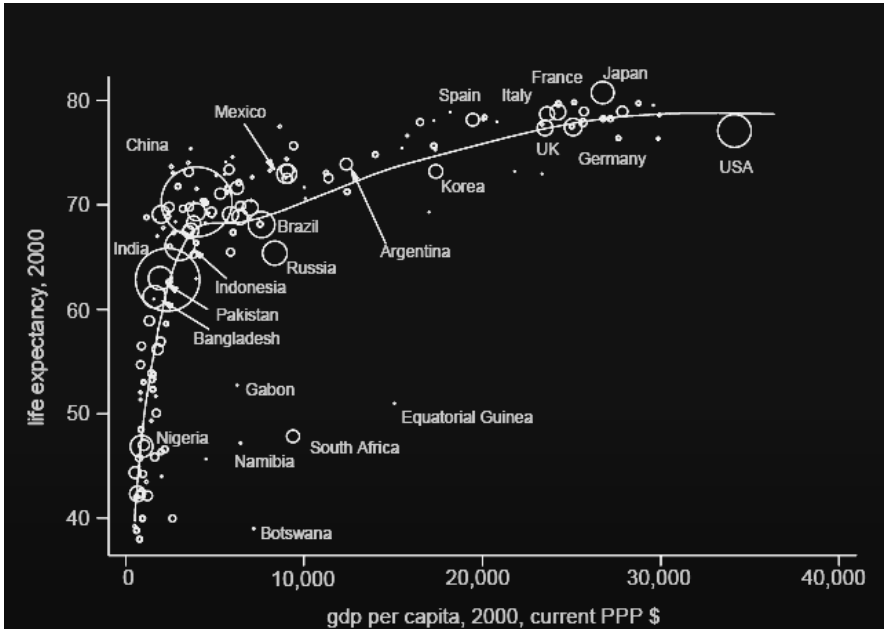
Good allocation for a developing country that has not made the transition to high NCDs



Good allocation for a developed country with high burden of NCDs



Why Some Countries Have Exceptional Performance



Below the trend line:

Inefficient use and/or allocation of resources

Weak governance

High rates of HIV/AIDS

Above the trend line:

Good use of resources: some low/middle-income countries have good health *(China, Cuba, Costa Rica, Vietnam, Sri Lanka, Mexico, parts of India.)*

PHC is the most important part of their health systems.