

17 Economic costs

"The art of economics consists in looking not merely at the immediate but at the longer effects of any act or policy; it consists in tracing the consequences of that policy not merely for one group but for all groups."
Henry Hazlitt, USA (1894-1993)

The costs of cardiovascular disease are diverse: the cost to the individual and to the family of health care and time off work; the cost to government of health care; and the cost to the country of lost productivity.

We attempt here to quantify some of these costs. However, the value of a human life is beyond our analysis.

Global costs of smoking

Health care costs associated with smoking-related illnesses result in a global net loss of US\$200 billion per year, with one third of those losses occurring in developing countries. Estimated 1994.

USA, Australia and Europe

2002 reports indicate that up to 10% of health budgets are spent on diabetes-related illnesses.

USA

"If just 10% of adults began walking regularly, Americans could save US\$5.6 billion in costs related to heart disease."
- President George W. Bush, 2002.

The direct costs of physical inactivity accounted for an estimated US\$24 billion in health care costs in 1995.

Health problems related to obesity, such as heart disease and type 2 diabetes, cost the USA an estimated US\$177 billion a year.

Cholesterol reducers were the top-selling medications in 2003, generating US\$13.9 billion in sales.

The American Heart Association estimates that stroke will cost a total of US\$53.6 billion in 2004. Direct costs for medical care and therapy will average US\$33 billion and indirect costs from lost productivity will be US\$20.6 billion.

In 2001, the National Stroke Association estimated that the average cost per patient for the first 90 days after a stroke was US\$15 000, although 10% of cases cost more than US\$35 000.

Latin America and the Caribbean

Permanent disabilities resulting from diabetes cost US\$50 billion in 2000, while costs associated with insulin, hospitalization, consultations and care totalled US\$10.6 billion.

Global costs of diabetes

Between 4% and 5% of health budgets are spent on diabetes-related illnesses. WHO, 2003

The economics of CVD

- physical exercise
- stroke
- diabetes
- obesity
- CVD
- cholesterol
- tobacco

Global costs of heart disease medication

The number of people who die or are disabled by coronary heart disease and stroke could be halved with wider use of a combination of drugs that costs just US\$14 a year. WHO, 2002

Singapore

Average hospital costs for stroke were reported in 2000 as US\$5000 per patient. Ward charges accounted for 38%, radiology 15%, doctors' fees 10%, medications 8%, therapy 7%.

United Kingdom

"The direct cost of obesity to the National Health Service is £0.5 billion [about US\$0.9 billion] per year, while the indirect cost to the UK economy is at least £2 billion [about US\$3.5 billion]."
- Liam Donaldson, Chief Medical Officer, 2003

More than 4% of National Health Service spending was on stroke services in 2000.

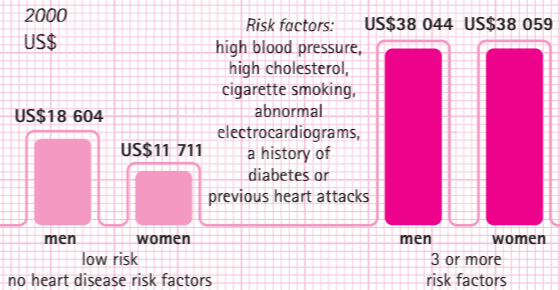
Netherlands

The average total costs of care per patient for six months following a stroke were estimated at €16 000 in 2003.

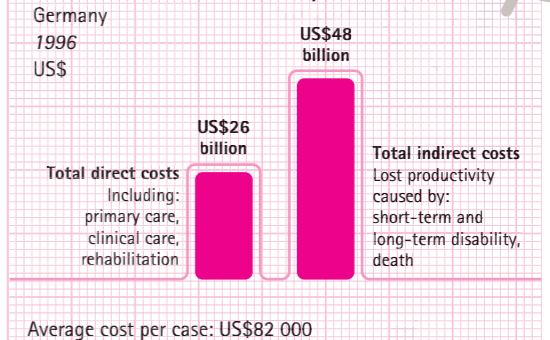
Stroke was estimated to be responsible for 3% of total health care costs in the Netherlands in 1994, and 7% of costs for the population aged 75 and over. Stroke ranked second on the list of most costly diseases for the elderly, after dementia, and these costs are expected to increase by 40% by 2015.

The cost of risk factors

Cumulative Medicare costs of treatment of cardiovascular disease in people aged 65 years to death, in the USA 2000

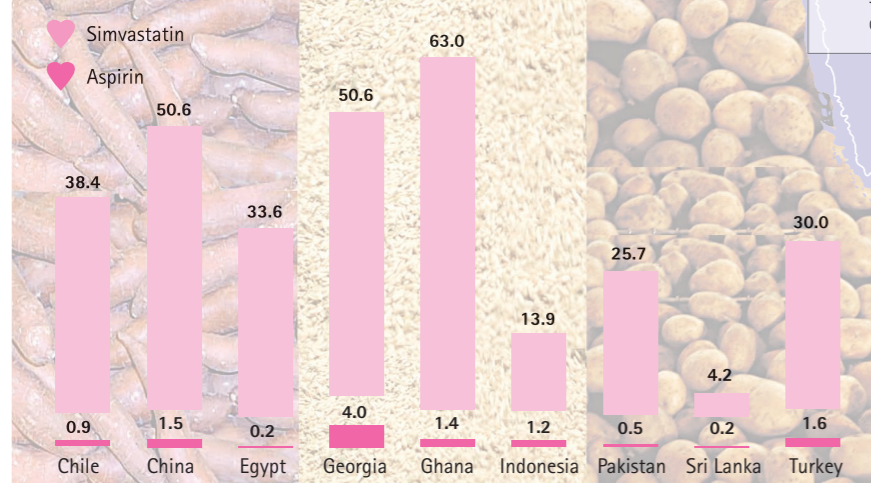


Lifetime costs of coronary heart disease



Price of weekly dose of medication

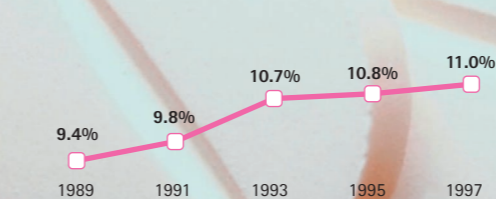
Expressed in kg of cheapest crop available (yam, rice or potato) 2003 selected countries



There is at least one intervention that can be afforded even by low-income countries.

Expenditure on cardiovascular medications

Percentage of total annual drug expenditure 1989-1997 OECD countries



Aspirin remains the least expensive drug for secondary prevention.