

(Continued)

The GBD study was repeated in 2010 and figures were prepared by age, sex and region for changes that had occurred between 1990 and 2010. Global figures for life expectancy show increases for all age groups (Figure 1.3).

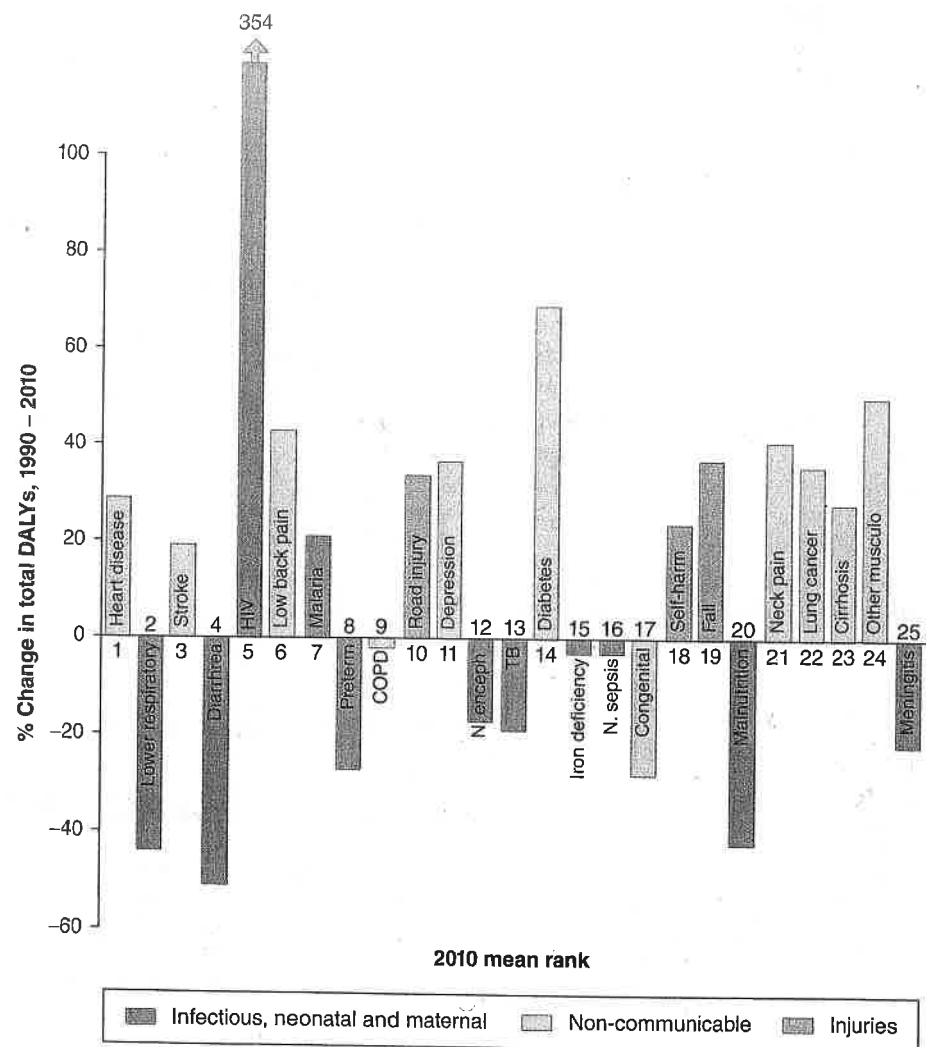


Figure 1.3 Percent change in total DALYs, 1990–2010.

Source: Institute for Health Metrics and Evaluation (2014), www.healthdata.org/infographic/percent-change-total-dalys-1990-2010

The GBD uses the **disability-adjusted life year (DALY)** as a quantitative indicator of burden of disease that reflects the total amount of healthy life lost that is attributed to all causes, whether from premature mortality or from some degree of disablement during a period of time. The DALY is the sum of years of life lost from premature mortality plus years of life with disablement, adjusted for severity of disablement from all causes, both physical and mental (Murray and Lopez, 1997).

Source: Murray and Lopez (1997)

The data in Table 1.4 indicate that nearly 30% of the total global burden of disease is attributable to five risk factors. The largest risk factor (underweight) is associated with poverty (see Chapters 2 and 3). The remaining four risk factors are discussed in Part 2 of this book (see Chapters 6–10).

There were changes in the total DALYs attributable to different causes between 1990 and 2010 as shown in Figure 1.3. Good progress is evident in DALYs for the lower respiratory tract and diarrhoea but a huge increase of 354% occurred in DALYs for HIV patients. Moderate but significant increases in DALYs occurred for heart disease, stroke, low back pain, depression and diabetes.

The statistics on death and disablement indicate the significant involvement of behaviour and therefore provide a strong rationale for the discipline of health psychology in all three of its key elements: theory, research and practice. If the major risk factors are to be addressed, there is a pressing need for effective programmes of environmental and behaviour change. This requires a sea change in policy. The dominant ideology that makes individuals responsible for their own health may not be the most helpful approach. The environment is a hugely important factor. In our opinion, a psychological approach in the absence of environmental change is like whistling in the wind.

Table 1.4 The five leading risk factors for global disease burden computed in DALYs

Risk factor	Number of DALYs (millions)	Percentage of DALYs
Childhood and maternal underweight	138	9.5
Unprotected sex	92	6.3
High blood pressure	64	4.4
Tobacco	59	4.1
Alcohol	58	4.0
Totals	411	28.3

Source: Ezzati et al. (2002)