Global burden of disease in young people aged 10—24 years: a systematic analysis

Background

Young people aged 10—24 years represent 27% of the world's population. Although important health problems and risk factors for disease in later life emerge in these years, the contribution to the global burden of disease is unknown. We describe the global burden of disease arising in young people and the contribution of risk factors to that burden.

Methods

We used data from WHO's 2004 Global Burden of Disease study. Cause-specific disability-adjusted life-years (DALYs) for young people aged 10—24 years were estimated by WHO region on the basis of available data for incidence, prevalence, severity, and mortality. WHO member states were classified into low-income, middle-income, and high-income countries, and into WHO regions. We estimated DALYs attributable to specific global health risk factors using the comparative risk assessment method. DALYs were divided into years of life lost because of premature mortality (YLLs) and years lost because of disability (YLDs), and are presented for regions by sex and by 5-year age groups.

Findings

The total number of incident DALYs in those aged 10—24 years was about 236 million, representing 15.5% of total DALYs for all age groups. Africa had the highest rate of DALYs for this age group, which was 2.5 times greater than in high-income countries (208 vs 82 DALYs per 1000 population). Across regions, DALY rates were 12% higher in girls than in boys between 15 and 19 years (137 vs 153). Worldwide, the three main causes of YLDs for 10—24-year-olds were neuropsychiatric disorders (45%), unintentional injuries (12%), and infectious and parasitic diseases (10%). The main risk factors for incident DALYs in 10—24-year-olds were alcohol (7% of DALYs), unsafe sex (4%), iron deficiency (3%), lack of contraception (2%), and illicit drug use (2%).

Interpretation

The health of young people has been largely neglected in global public health because this age group is perceived as healthy. However, opportunities for prevention of disease and injury in this age group are not fully exploited. The findings from this study suggest that adolescent health would benefit from increased public health attention.