

The economic cost of inadequate sleep

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Abstract

Study Objectives

To estimate the economic cost (financial and nonfinancial) of inadequate sleep in Australia for the 2016–2017 financial year and relate this to likely costs in similar economies.

Methods

Analysis was undertaken using prevalence, financial, and nonfinancial cost data derived from national surveys and databases. Costs considered included the following: (1) financial costs associated with health care, informal care provided outside healthcare sector, productivity losses, nonmedical work and vehicle accident costs, deadweight loss through inefficiencies relating to lost taxation revenue and welfare payments; and (2) nonfinancial costs of loss of well-being. They were expressed in US dollars (\$).

Results

The estimated overall cost of inadequate sleep in Australia in 2016–2017 (population: 24.8 million) was \$45.21 billion. The financial cost component was \$17.88 billion, comprised of as follows: direct health costs of \$160 million for sleep disorders and \$1.08 billion for associated conditions; productivity losses of \$12.19 billion (\$5.22 billion reduced employment, \$0.61 billion premature death, \$1.73 billion absenteeism, and \$4.63 billion presenteeism); nonmedical accident costs of \$2.48 billion; informal care costs of \$0.41 billion; and deadweight loss of \$1.56 billion. The nonfinancial cost of reduced well-being was \$27.33 billion.

Conclusions

The financial and nonfinancial costs associated with inadequate sleep are substantial. The estimated total financial cost of \$17.88 billion represents 1.55 per cent of Australian gross domestic product. The estimated nonfinancial cost of \$27.33 billion represents 4.6 per cent of the total Australian burden of disease for the year. These costs warrant substantial

investment in preventive health measures to address the issue through education and regulation.

[inadequate sleep](#), [sleep disorders](#), [sleep deprivation](#), [medical economics](#), [public health](#)

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