

Australasian Sleep Association

Response to “Australia the Healthiest Country by 2020” document

The Australasian Sleep Association, the peak body of Australasian sleep physicians, sleep psychologists and sleep scientists, has recently reviewed the “Australia the Healthiest Country by 2020” paper and believes that its failure to include healthy sleep as one of the pillars of national health and well being is a serious deficiency which requires correction. Healthy sleep is integral to a healthy life: failure to obtain sleep of sufficient *duration or quality* is associated with impairment of cognitive and psychomotor function adversely affecting safety, productivity, intellectual capacity, learning and social interactions. Inadequate sleep *duration* is often a lifestyle choice and public education is required to remind the community of the ill effects we suffer as a result, with fatigue and inattention related motor vehicle crashes being a striking example. On the other hand poor sleep *quality* is usually the consequence of a physical or psychological ailment requiring specific attention.

We note the aim of this document is to “outline the case for reform in our approach to the prevention of illness and the promotion of health. Major changes in the way we behave as individuals, as families, as communities, as industries as states and as a nation will be required”. Our concerns regarding the failure of the community to understand and respect the need for adequate sleep and the requirement to address this deficiency is totally consistent with this aim.

Sleep disorders impact significantly on the health of our nation. A recent Access Economics Document (Wake up Australia) estimated the cost to the Australian community of sleep disorders to be \$10 billion per year. [1] The prevalence of most common of these disorders, Obstructive Sleep Apnea (OSA) can be significantly decreased by weight reduction, reduction in alcohol consumption and a reduction in smoking. Hence the priorities of the current document will have some impact in reducing the prevalence of this common and disabling condition.

However the message to the community that sleep of adequate quality and quantity is essential for well-being is not addressed specifically in the current document or the amendments proposed by the Royal Australian College of Physicians. Indeed the importance of healthy sleep is **almost entirely ignored**. This is foolish and shortsighted. A very recent paper published in the Journal of the American Medical Association demonstrates the sleep restriction is associated with increased risk of coronary artery disease. [2] This adds to the well understood adverse effects of sleep deprivation on cognitive and psychomotor function.[3]

Sleep is under pressure from other “priorities” and there is an increasing prevalence of chronic sleep restriction. Television, computers and the internet, shift work and other work and family pressures all impact on the amount of sleep we get. A study of normal Australian adolescents has demonstrated that their sleep duration has decreased by 30 minutes between 1985 and

2004. [4] Midnight used to mean the middle of the night, now for many it represents bedtime,

Large scale, controlled laboratory experiments on healthy young adults have shown that the adverse effects of restricting sleep by 1 to 2 hours can rapidly accumulate, matching the levels of functional impairment typically seen after 1 or 2 nights of acute total sleep deprivation within a week. [3] Sleep deprivation impairs memory, response times (resulting in greater collisions and work place accidents), personality, judgement, glucose handling and accelerates the development of type 2 diabetes. Shift work is an often forgotten risk factor for myocardial infarction.[5] Moreover, sleep deprived youth are often unaware of their neuropsychological impairment following sleep deprivation. Thus, their performance quickly degraded to levels well below their optimal performance capability.

This can impact very significantly on the individual but impact greatly on society. Environmental disasters such as Exxon Valdez and Chernobyl have been linked to human errors as a result of sleep deprivation. Every day our society faces the impact of insufficient sleep which may lead to

1. Increased risk of motor vehicle accidents, often serious single car accidents that occur at high speed with a high mortality rate.
2. Decreased workplace performance, perhaps most graphically described in recent New England Journal of Medicine papers showing

increases in medical workforce errors amongst sleep deprived doctors.

[6, 7]

3. Increased risk of obesity (increased 50% in those sleeping less than 5 hours/night) [8]
4. Significantly increased risk of moderate-severe depression in those not getting enough sleep. [9]
5. Increased mortality seen in large population cohorts sleeping less than 6 hours/night. [10]

Our 24/7 culture is simply not conducive to good health and as a society we need to change this culture. The flow on effects of sleep deprivation may snowball and lead to daytime sleepiness, lack of exercise, obesity and a vicious cycle geared towards ill health. It is no longer socially acceptable to drink drive yet to drive a car, or engage in work where lives could be at risk whilst sleep restricted attracts little attention. It has been demonstrated that 17 hours of sleep deprivation is association with psychomotor impairment equivalent to a blood alcohol level of 0.05% and 24 hours with 0.08%. [11]

We need to change community attitudes to make adequate sleep a priority. As no pharmacological or surgical cures are available for most sleep conditions, altered lifestyle through public education is the main and most cost effective approach. This message must be considered and supported by the Australian Government in every way as we strive towards a healthy Australia by 2020

Nick Antic, Chairman Clinical Committee

Matthew Naughton, Past President

David Hillman, President

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