

## **Inquiry into Sleep Health Awareness in Australia.**

I am a sleep physician and I see the costs of poor sleep everyday.

Sleep is an essential biologic need and is necessary for survival and good health. We do not understand all the biologic functions of sleep however it has major roles in recovery, energy conservation, and survival and is also important for vital functions such as neural development, learning, memory, emotional regulation, cardiovascular and metabolic function, and cellular toxin removal.

### **TOR 1**

**Problem:** The cost of poor sleep is overwhelming- this affects the individual, the family, work in terms of lost productivity and poor safety and the society in general. More detailed assessments of the estimated costs of poor sleep can be found in

*Public health implications of sleep loss: the community burden*

*David R Hillman and Leon C Lack*

*Med J Aust 2013; 199 (8 Suppl): S7-S10. || doi: 10.5694/mja13.10620*

AND

*The Economic Cost of Inadequate Sleep*

*Hillman et al, Accepted Sleep 2018      doi: 10.1093/sleep/zsy083*

### **Why is inadequate sleep an issue now?**

Our society has changed over the last 40 years– we are a 24/7 society and there are more demands on our time than ever before. Increased work hours, increased family time, the use of computers/tablets, need for exercise has all been at the expense of sleep.

**Sleep restriction is a major problem;** ie not allowing enough time for sleep. Sleep is not a high enough priority in adults and children's lives. Most adults require between 7-9 hours of sleep to function well and for good health. Children require much more sleep depending on their age. There has also been an increase in the prevalence of sleep disorders, **sleep apnoea and insomnia.**

**Solution:** A national sleep health awareness campaign is essential for the general public.

An education program in primary schools is essential emphasizing the importance of healthy sleep and recommending guidelines for how much sleep children and adolescents should achieve depending on their age. This should target parents as well as children.

### **TOR 2**

**Problem:** Access to treatment and expertise

Many individuals do not realise that their sleep problems may be causing their symptoms (tiredness/fatigue/sleepiness/snoring/poor concentration and memory/urinary frequency/chronic pain/headache). If they do talk to their general practitioner (GP) about tiredness/fatigue/sleepiness many GP's do not have appropriate skills (due to minimal training in sleep as part of the GP training program) to adequately address their needs. Some will be referred to a sleep physician but sleep disorders are overwhelmingly underrecognized in the community.

It is important to be aware that for good sleep to occur it is essential to have a safe, quiet, dark place to sleep. Many children and adults live in unsuitable sleep environments and this

impacts on their sleep quality and duration. There have been studies in the US on ethnic minorities and sleep environment which have confirmed this. I am not aware of any studies in Australia on Aboriginal and Torres Strait Islanders and their sleep.

**Solution:** A sleep education and training program for community-based primary health care professionals, including GPs, nurses, aboriginal health care workers, pharmacists and psychologists

### **TOR3**

**Problem:** Many health care workers have not received much training in sleep. For example most medical school curricula devote 1 to 2 hours to sleep health and sleep medicine. Yet in practice most GPs will see a large range of sleep related problems (see TOR 1). This is similar for other health care workers.

**Solution:** Better education for health care workers is essential  
Better education of the general public about the importance of healthy sleep is also essential

### **TOR 4**

**Problem:** Workplace education is essential both for workers and employers. I am often surprised at the rosters that many workers are expected to work with no concern or understanding of the circadian clock and biological rhythms. There is much data on shift work rostering and scheduling which the Australian workplace needs to take advantage of. High risk industries are the transport and mining industries where workplace accidents have the potential to be catastrophic.

**Solution:** Targeted educational programs to assist industry with rostering, shiftwork management, fatigue management to maximize safety and productivity

### **TOR 5**

**Problem:** More funding is needed for sleep health and sleep disorders. Sleep affects all aspects of life/health therefore there is a need for targeted research into sleep and falls, sleep and dementia, sleep and PTSD, sleep and chronic pain etc. since it is likely that improving sleep in individuals will lead to an improvement in their overall situation especially since these conditions are costly in terms of health expenditure. Other important areas for research include understanding the individual, biological, and behavioral factors, as well as ethnic, socioeconomic, and cultural characteristics that account for disparities in sleep habits, quality, and duration; research on effective interventions that could be implemented to reduce sleep disparities. Further work is needed to understand the ecology of sleep and sleeping areas and the systemic impact of public policy for housing and for health on human sleep. Are there particular public health interventions (e.g., driver education programs both for occupational and non-occupational drivers) that can reduce motor vehicle crash rates due to drowsy driving and which populations derive most benefit of these interventions.

- **Solution:** A targeted call for sleep research

**My recommendations:**

- A national sleep health awareness campaign is essential for the general public
- An education program in primary schools is essential emphasizing the importance of healthy sleep and recommending guidelines for how much sleep children and adolescents should achieve depending on their age. This should target parents as well as children.
- A sleep education and training program for community-based primary health care professionals, including GPs, nurses, aboriginal health care workers, pharmacists and psychologists
- Targeted educational programs to assist industry with rostering, shiftwork management, fatigue management to maximize safety and productivity
- A targeted call for sleep research