Obstructive sleep apnoea syndrome

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Gander et al should be commended for the two informative studies on the obstructive sleep apnoea syndrome (OSAS) published in this edition of the *New Zealand Medical Journal*.1,2 Utilising a conservatively applied health economics analysis, they estimated a total annual societal cost of NZ$40 million for untreated OSAS in the 30–60 year old age group. Acknowledging the imprecision of the measurement they have estimated the range to be $33–90 million.

The findings are in keeping with previous international analyses,3,4 although more conservative than the *Wake Up Australia* study which estimated that sleep disorders affect 6% of Australians at a cost of AU$10.3b/year.5

Gander and her team estimate that it costs NZ$419 for not treating a patient versus $389 incremental cost for the treatment of a patient. This makes OSAS treatment one of the most cost-effective therapies available within the health system. Indeed the estimated direct medical cost per Quality of Life Year (QALY) was $94 compared with the average QALY cost of $6865 for drug therapy paid by PHARMAC for all disorders.

Despite a large number of publications on OSAS by Gander and her team6–11 and which should have been sufficient to provide the basis for informing a national strategy on OSAS no such strategy exists. There remains no systematic approach to the investigation and management of sleep disorders and no public health funding allocated. What services are available, are fragmented and incomplete.

Funding is patchy and at the whim of an individual district health board (DHB). Consequently funding is often sought from other sources such as Work and Income NZ (WINZ) and Accident Compensation Corporation (ACC) by practitioners desperate to provide treatment for patients with a range of sleep disorders.

Consequently there is no site on the Ministry of Health (MoH) website to inform either health professionals or the public on OSAS or on any of the large range of other sleep disorders. Even the MoH website publication on obesity10 makes no mention of OSAS despite the strong correlation between obesity and OSAS.11 Indeed 70% of patients diagnosed with OSAS are obese.

The lack of a National Health Strategy for OSAS, has therefore led to a substantial variation in standards of healthcare delivery in New Zealand. In 2006, a review of all respiratory disorders in New Zealand revealed 5-fold variation in both the investigation and treatment of OSAS.12

The estimated number of sleep studies performed per year in New Zealand in 2006 totalled 50/100,000 compared with 282/100,000 in Australia and 427/100,000 in the US. The publication of these results in 2009 drew widespread interest from the media and an outcry from the respiratory community.
The incumbent Minister of Health, Tony Ryall, when interviewed, stated that he was concerned by the results and that he wished to meet with members of the Thoracic Society of Australia and New Zealand (TSANZ). However despite a number of subsequent requests to his office, no meeting has ever eventuated and no change in either the structure or delivery of New Zealand respiratory health services including OSAS has occurred.

It is therefore of no surprise that Gander’s team found a lack of knowledge about the causes of sleepiness and OSAS among a cohort of taxi drivers selected for being at high risk of OSAS. Of equal concern was the apparent lack of knowledge amongst the taxi drivers’ GPs about sleep-related disorders. Worse, those charged with making our roads safer (Accident Compensation Commission, National Road Safety Commission and The New Zealand Land Transport Agency) have inadequate structures in place to either screen or educate drivers working in high-risk industries.

Whilst the airline industry has invested heavily in the investigation and management of fatigue amongst its pilots and has adopted strategies impacted upon by researchers including Gander, this has not been the case on our roads as no effective educational or occupational screening programmes exist for drivers of heavy trucks and buses.

Excessive sleepiness contributes significantly to accidents both within vehicles and at work, and certain professional groups are at particular risk—e.g. truck drivers and public passenger service drivers (bus, taxi). Further, Māori and Pacific people are more likely to suffer from insomnia and OSAS than Europeans.6–8

Disparities in sleep problems between Māori and Europeans may impact on disparities in other health outcomes, acknowledging the increased risk of hypertension, ischaemic heart disease, stroke and possibly diabetes.15 The MoH and the DHBs both have the stated aim of reducing disparities in health outcomes between Māori and Europeans, yet substantially underfund a treatment that is not only cost-effective but which could contribute to reducing disparities in health outcomes.

It is important that New Zealand develops a National Strategy for the management of Sleep Disorders. Its time for New Zealanders and Health Authorities to wake up!

Competing interests: None.

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References: