Australasian Sleep Association submission to the 2009 Senate Select Committee on men's health

The Australasian Sleep Association, the peak body of Australasian sleep physicians, sleep psychologists and sleep scientists would like the Senate Committee in men's health to consider the importance of healthy sleep and particular a disease very relevant to men's health, obstructive sleep apnea (OSA)

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

Obstructive sleep apnea (OSA) is characterised by snoring, repetitive upper airway obstructions, oxygen desaturation episodes, arousals from sleep and by excessive daytime sleepiness. It is seen 2-4 more commonly in men than women. There is increasing evidence that OSA increases the risk of motor vehicle accidents, hypertension, and possibly stroke and heart failure and almost certainly premature death from cardiovascular disease.[1-4]

In 1995 Bearpark et al reported a prevalence of symptomatic obstructive sleep apnea in Busselton to be 3.1%.[5] Given the marked increase in obesity in Australia since that study the current prevalence is almost certainly higher.[6]

The overall cost of sleep disorders to the Australian community is large. It was estimated at \$7,494 million in Australia in 2004 and OSA was the largest disease contributor to these costs.[7]

There is a very cost effective therapy for moderate-severe OSA, nasal continuous positive airway pressure (nCPAP). The cost effectiveness of therapies is usually assessed by the incremental cost effectiveness ratio, which is the ratio of incremental costs associated with therapy divided by the incremental quality adjusted life years gained (QALYs). A ratio of less than US\$50,000 is usually considered cost effective. Mar *et al* conducted a study in the Basque Country, Spain to analyse the long-term cost-effectiveness of nasal continuous positive airway pressure (CPAP) treatment in comparison to conventional null treatment. A Markov model was used to represent the natural history of OSA based upon published evidence. Utility values came from a survey of OSA patients. Data on health costs were collected from hospitals. The incremental cost-effectiveness ratio of CPAP treatment was <6,000 Euros (equivalent to \$US 5,000) per quality-adjusted life year.[8]

OSA remains considerably under recognised in our society. A study by Young et all estimated 93% of males with OSA are unaware of they have OSA.[9] Similar trends were recently reported for the over 15,000 subjects enrolled in the Sleep Heart Health Study where it was found that only 40% of subjects found to have OSA were previously diagnosed with sleep apnea, and only 30% of these patients were being currently treated. This assertion was borne out by a later survey of people attending primary care practices, which showed that less than 3% of the cases of severe OSA identified in the study had been previously diagnosed. There are no comparable statistics for Australian populations but it is likely the situation would be similar to that in the USA. Improved health literacy in the adult male population with regard to the

symptoms of OSA and the benefits of treatment that can be gained by the patient are much needed.

Given the high prevalence of OSA, its marked economic burden on the community, probable widespread under-recognition of the condition and the strong evidence, at least for moderate-severe OSA, for a cost-effective treatment there appears to be a strong economic rationale for increasing sleep medicine services for OSA.

In Australia, 68,000 PSG's were performed in 2004. If one assumes that 2/3 of these studies were for diagnosis, and that conservatively 3% of the adult population have symptomatic OSA requiring medical intervention, then diagnostic services in Australia are capable of investigating fewer than 10% of current cases in any one year.[10] It is perhaps not surprising therefore that waiting times in Australia to review a newly referred sleep apnea patient in public and private facilities vary from approximately 2 to 6 months. With further delay for diagnostic and treatment PSG's it can take up to 1 or 2 years in some centres from initial referral to the successful establishment of treatment.[11]

We thus consider the diagnosis and management of OSA to be a crucial area of priority for men's health as

- It is a disease seen 2-4 times more commonly in males than females.
 Importantly many of these patients are of working age and as a result OSA can impact on workplace productivity, accident risk etc
- 2. It is undiagnosed on our community, more so in men than women
- 3. It is a disease with a significant economic burden in Australia
- 4. There is a very cost effective therapy, nCPAP

 There are long delays in diagnosis and management of OSA in our community. Many rural and remote areas have no access to diagnostic services at all

We note the intent of the Senate in establishing a Select Committee on Men's Health to inquire into general issues related to the availability and effectiveness of education, supports and services for men's health, including but not limited to the numbered issues below and comment specifically around each issue

 level of Commonwealth, state and other funding addressing men's health, particularly prostate cancer, testicular cancer, and depression,

There is a variable funding model for sleep medicine services in Australia specifically for PSG, Sleep physician consults, technician and nursing time and most importantly CPAP provision from state to state. In most states CPAP is provided via State Government schemes that only provide CPAP pumps and accessories to those with pension or health care cards. This leaves a large number of patients forced to fund their own CPAP equipment with costs running into the thousands of dollars. Given the relative cost effectiveness of CPAP therapy for moderate-severe OSA this is false economy. It is ludicrous for example that home oxygen therapy has no cap, yet provision of CPAP, a far more cost effective therapy is provided to only a few patients through Government schemes. Thus many patients are unable to afford CPAP therapy and a potentially treatable disease is left untreated

Access to other therapeutic options for OSA such as mandibular advancement splints or surgical therapies for OSA are almost certainly even more limited.

 Adequacy of existing education and awareness campaigns regarding men's health for both men and the wider community,

Given the under recognition of OSA in lour community there are almost certainly gains in education, awareness campaigns and health literacy that can be made with regard to OSA. Some education is also needed for primary health care providers as well as improved access to simple diagnostic options. Given the relatively recent emergence of the recognition of OSA there is much to be done educating these professionals

Prevailing attitudes of men towards their own health and sense of wellbeing and how these are affecting men's health in general.

As discussed above there is much to be done in this area.

4. The extent, funding and adequacy for treatment services and general support programs for men's health in metropolitan, rural, regional and remote areas.

Given the complexity and relative scarcity of diagnostic and therapeutic sleep medicine services, many metropolitan, rural and remote areas have limited or no access to sleep medical services. These shortfalls are best appreciated by examination of the long waiting times for sleep medicine services quoted earlier. For example Darwin and the surrounding areas have only the funding and capacity to perform 150 PSGs per year. If the population serviced in Darwin and surrounds is 150,000 people, there may be as many as 10,000 adults in Darwin have OSA, thus facilities exist to diagnose 1.5% of those in 1 year. The situation is often worse in

other rural and remote services with many having no access to sleep medicine services at all. Given the prevalence of the condition, the important adverse health outcomes that may result and the cost effectiveness of therapy, this lack of access is unacceptable and needs immediate Government attention. We would very much like to work with the Senate enquiry on these issues and respectfully ask that consideration is given towards including obstructive sleep apnea as a priority disease target in this enquiry

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