Submission to the Productivity Commission Inquiry into Mental Health by Sleep Health Foundation Emeritus Professor Dorothy Bruck

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by
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This submission is made in my capacity as Chair of the Sleep Health Foundation, a national not-for-profit organization. I am an Emeritus Professor in Psychology at Victoria University with a research career specialising in sleep research, including has over 95 peer-reviewed international journal publications, 1700+ citations and significant success in obtaining and completing research projects funded from international bodies, ARC, NHMRC and industry. I have worked part-time as a psychologist specializing in sleep over the last decade and am a founding Director of the Sleep Health Foundation.

This *PC Inquiry into Mental Health* has already heard a number of presentations arguing it is critically important to consider sleep health in any review about how we can improve the mental health of Australians.

In short, there is a strong evidence base that ongoing inadequate sleep and untreated sleep disorders is very likely to

- increase the risk of subsequent mental illness
- exacerbate mental illness symptoms
- decrease mental health treatment effectiveness
- decrease mental health remission rates and remission durations.

1. If sleep is so important to help mental health why not just use sleeping tablets?

Over the last 2-3 decades we have developed highly effective and low cost non-pharmacological treatment options to improve

- insomnia (specifically Cognitive Behavioural Therapy for Insomnia, known as CBT-I) and
- sleep apnea (notably Continuous Positive Airway Pressure).

With regard to treatment of insomnia many academic studies have demonstrated the efficacy of CBT-I, and its advantages over sleeping medication in the medium and long term. [1]

In addition, behavioural interventions that improve sleep have been demonstrated to have a large effect in reducing mental illness such as depression[2] and parasomnias (nightmares etc),[3] as may be seen in PTSD.

Sedatives are normally recommended only as a short-term solution within the medical profession (e.g. three weeks use for acute conditions). **Problems with sedatives** include addiction, tolerance, increased rate of falls (especially in the elderly), unrefreshing sleep, side effects, interactions with other medications and daytime hang-over effects.

Studies show that people in the community are aware of the limitations of 'sleeping tablets' and are often wary of using them.[4] The problems with sleeping medication exist whether the sedatives are prescribed for insomnia that is **co-morbid or not co-morbid** with mental illness such as depression, anxiety, schizophrenia or PTSD.

There is conflicting evidence about the benefits of SSRIs for sleeping problems in those with depression, anxiety or PTSD and large individual variations in response exist. Sleep problems often remain even for those with a good daytime response to SSRIs.[5] In some cases SSRIs can be a useful adjunct to behavioural therapies for poor sleep.

2. We have a big 'Sleep Health Care Gap'.

We know that there is a big gap between the **extent** of sleep problems and disorders in the community and the **delivery of** effective diagnosis and treatment. We argue this sleep health care gap contributes DIRECTLY to the high rate of mental illness in Australia.

The sleep health care gap has been well set out in the Parliamentary Inquiry Report into Sleep Health Awareness entitled *Bedtime Reading.* We ask that this Inquiry endorses the relevant recommendations.

However, one important area not addressed in the *Bedtime Reading* recommendations, and particularly related to the two way relationship between sleep and mood, is the treatment of insomnia. As foreshadowed above, CBT-I has been well-documented to produce rapid and substantial improvements in depression and sleep disturbance including those refractory to pharmacotherapy.[6,7,8] Nonetheless, despite sufficient high-grade studies these approaches have not been broadly adopted into clinical practice. Indeed, cognitive/behavioural therapies pose a number of implementation barriers that include the requirement for motivated subjects, access to clinical expertise, resources and service funding in order for their potential benefits to be realised. Importantly, more **research is urgently required to develop, implement and evaluate health care models in Australia that deliver insomnia treatment,** both to those with and without co-morbid depression. The argument for this has been developed in some detail in a submission to the *Bedtime Reading* Inquiry.[9] Such health care models might include stepped care involving practice nurses, on-line therapy (with or without therapist support), expanded delivery via telehealth, brief (e.g. sleep restriction) interventions delivered by GPs and expansion of psychologists trained in CBT-I.

3. Solution focus

In the tables below I focus mostly on possible solutions. That is, **sleep health solutions that will assist with mental health solutions.**

For context, I commence with a short summary of the economic costs of inadequate sleep and juxtapose these with the economic costs of mental health. I also include prevalence data.

The main table below takes the first three "Reform Areas" in your *Draft Report Overview and Recommendations* and adapts them, suggesting possible reforms to help Australia's

sleep health. The rationale is that we can improve mental health through the evidence-based bidirectional relationships that exist with sleep health.

Extracts from PC Draft "Overview"

- The cost to the Australian economy of mental ill-health and suicide is, conservatively, in the order of $43 to $51 billion per year. Additional to this is an approximately $130 billion cost associated with diminished health and reduced life expectancy for those living with mental ill-health.

Sleep Health ↔ Mental Health

- The direct financial cost to the Australian economy of inadequate sleep is $26.2 billion annually (2016-2017 data). Additional to this is an approximately $40.1 billion associated with diminished health and well-being, increased disability and reduced life expectancy for those with inadequate sleep.[10]
- Sleep problems are widespread
    - 15% of Australian adults have chronic symptoms meeting the criteria for insomnia[11]
    - 9% have sleep apnea requiring treatment[1,12]
    - a further 20% frequently have inadequate sleep due to a variety of factors such as pressures of work, irregular shifts or lifestyle[1,3]
    - sleep problems in Australian school-aged children are reported by parents in 31% of 6-12 year olds and 33% of 13-18 year olds.[13]
    - over 70% of South Australian teenagers experience insufficient sleep on EVERY school night.[14]

Reform area 1: prevention and early intervention for mental illness and suicide attempts

- Consistent screening of social and emotional development should be included in existing early childhood physical development checks to enable early intervention.
- Much is already expected of schools in supporting children's social and emotional wellbeing, and they should be adequately equipped for this task through: inclusion of training on child social and emotional development in professional requirements for all teachers; proactive outreach services for students disengaged with school because of mental illness; and provision in all schools of an additional senior teacher dedicated to the mental health and wellbeing of students and maintaining links to mental health support services in the local community.
- There is no single measure that would prevent suicides but reducing known risks (for example, through follow-up of people after a suicide attempt) and becoming more systematic in prevention activity are ways forward.

Reform area 1: prevention and early intervention for sleep health (with flow-on effects for mental health)

- Early childhood screening, checks and assistance programs must ensure parents have adequate knowledge and skills for prioritising sleep health from infancy.
- All training and support for children's social and emotional wellbeing in schools must recognise the important role of sleep health, and personnel involved must have professional training in this area.
- Given that inadequate sleep on school nights is ubiquitous in our schools, special programs targeting this problem should be further developed, evaluated and implemented widely (beginning with targeted research).
- As sleep disturbance has been linked with completed suicide in adolescents,[15] sleep management should be part of a suite of considerations for preventing suicide.
- Implementation of Recommendation 8 from the Parliamentary Inquiry Report into Sleep Health Awareness *Bedtime Reading*[16] will assist with prevention and potential minimisation of mental illness, i.e….

"The Committee recommends that the Australian Government, in partnership with the states, territories and key stakeholder groups, work to develop and implement a national sleep health awareness campaign. The campaign should:

  - Promote sleep as the foundation of ensuring positive health and wellbeing outcomes in combination with nutrition and exercise;
  - Provide practical information in relation to sleep hygiene and measures an individual can use to improve their sleep;
  - Provide information on the symptoms, causes, and health impacts of sleep disorders and available medical support for sleep disorders; and
  - Communicate that improved sleep health can reduce the risk of: developing a serious health condition, impaired judgement and mental functioning, and decreased productivity and performance.
  - Consider the proposed education campaign developed by the Australasian Sleep Association and the Sleep Health Foundation as part of their 2019 budget submission as a solid basis and estimate of costs for such a campaign."

Reform area 2: close critical gaps in healthcare services

- The availability and delivery of healthcare should be reformed to allow timely access by people with mental ill-health to the right treatment for their condition. Governments should work together to ensure ongoing funded provision of:
- services for people experiencing a mental health crisis that operate for extended hours and which, subject to the individual's needs and circumstances, provide an alternative to hospital emergency departments
- acute inpatient beds and specialised community mental health bed-based care sufficient to meet assessed regional needs
- access to moderate intensity care, face-to-face and through videoconference, for a duration commensurate with effective treatment for the mental illness
- expanded low intensity clinician-supported on-line treatment and self-help resources, ensuring this is consistently available when people need it, regardless of the time of day, their locality, or the locality choices of providers.

Reform area 2: close critical gaps in healthcare services for those with sleep disorders that may precede or co-exist with poor mental health

- Fund research to develop, implement and evaluate different models of care to improve and expand insomnia treatment in those with and without depression
- Develop effective training mechanisms to improve the knowledge of primary healthcare practitioners in diagnosing and managing sleep health problems. (Extract from Recommendation 9 of *Bedtime Reading* Report)
- Increase access to evidence-based treatments for sleep disturbances, such as Cognitive Behavioural Therapy for Insomnia (CBT-I), as a way to reduce risk of mental health conditions and to improve outcomes for those currently experiencing mental health conditions with sleep disturbances.
- Such increased access would involve up-skilling more psychologists to provide CBT for Insomnia treatment, and consider training for practice nurses to provide this therapy (as happens in the UK).
- Review barriers to accessing Cognitive Behavioural Therapy for Insomnia via telehealth for patients in regional, rural, and remote areas. (Extract from Recommendation 4 of *Bedtime Reading* Report)
- Ensure that all Pensioner or Health Care Card holders with moderate to severe obstructive sleep apnoea, regardless of their location, have access to a free trial of Continuous Positive Airway Pressure (CPAP) therapy and if the trial is successful free ongoing CPAP treatment; (Extract from Recommendation 5 of *Bedtime Reading* Report)
- Undertake a review to assess the potential mental health benefits of providing subsidised CPAP therapy to those with moderate or severe sleep apnoea across the broader Australian community. (Adaptation from Recommendation 5 of *Bedtime Reading* Report)

Reform area 3: investment in services beyond health

- Investment is needed across Australia in long-term housing solutions for those people with severe mental illness who lack stable housing. Stable housing for this group would not only improve their mental health and inclusion within the community, but reduce their future need for higher cost mental health inpatient services.

Reform area 3: investment in services beyond health

- Investment is needed across Australia in long-term housing solutions for those people whose housing is overcrowded, unsafe or transitory – factors which can preclude adequate sleep health. Overcrowding in indigenous homes, for example, creates poor sleep conditions which can discourage school attendance with resultant lifelong disadvantage and high risk for mental illness.[17]

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