

PRODUCTIVITY COMMISSION INQUIRY INTO MENTAL HEALTH

Perth Hearing, Thursday 20 November 2019 at 3 pm

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BACKGROUND

- I present in my capacity as a sleep physician and researcher.
- Among other things, I am a past president of the Australasian Sleep Association, the peak national professional body for sleep clinicians and scientists, and founding chair of the Sleep Health Foundation, the leading national advocate for sleep health.
- I appear because of my concern about missing information and insights in the draft report regarding the close links that exist between sleep health and both mental health and productivity.
- This concern is highlighted by the observation that while the draft report concerns itself with mental health, the word “sleep” does not appear at all in its 34,000 word overview or in any meaningful mechanistic sense in its other 457,000 words.

SUBSTANTIAL COMMON GROUND

- A considerable literature attests to the links between poor sleep and mental disorders
 - **Insomnia**¹
 - 40% of people with insomnia have a comorbid psychiatric condition.^{2,3}
 - Insomnia is associated with depression, anxiety, substance abuse, and suicide.^{4,5}
 - There is a strong relationship between insomnia and subsequent onset of depression within 1-3 years.⁶
 - Individuals with insomnia and no previous psychiatric history are at increased risk of new onset major depression, panic disorder, and alcohol abuse.⁷
 - In adolescents in 69% of cases of comorbid insomnia and depression, insomnia occurred first, while in 73% of cases of comorbid insomnia and anxiety, anxiety occurred first.⁸
 - Adolescents who commit suicide have higher rates of insomnia in week preceding death.⁹
 - **Depression**
 - The links between depression and disturbed sleep are bidirectional.¹⁰
 - Depression disturbs sleep, disturbed sleep aggravates depression
 - Clinical depression and common sleep disorders share symptoms*
 - e.g. Obstructive sleep apnoea (OSA) and depression¹¹

* e.g. Patient Health Questionnaire (PHQ-9) for depression asks about:
 little interest or pleasure in doing things, feeling down/depressed/hopeless, trouble staying or falling asleep or sleeping too much, feeling tired or having little energy, poor appetite or overeating, feeling bad about yourself/a failure, trouble concentrating, moving/speaking slowly or excessively restless, thoughts better off dead or of self-harm

- Potential for misdiagnosis
 - 52% of our sleep clinic patients present on antidepressants vs ~9% use in adults generally
 - OSA is particularly underdiagnosed in depressed people¹²
 - Treatment of OSA relieves depressive symptoms¹¹
 - **Suicidal behaviour**
 - Sleep disorders (particularly nightmares and insomnia) are associated with suicidal behaviour in depressed patients¹³⁻¹⁵
 - **Psychotic illness**
 - The links between psychotic illness and disturbed sleep are bidirectional
 - Sleep disturbance is common in schizophrenia and is associated with increased symptom severity, neurocognitive deficits, and reduced quality of life.^{16,17}
 - Psychotic illness and sleep disorders share symptoms
 - Parasomnias, narcolepsy and schizophrenia
 - Potential for misdiagnosis
 - **Drug effects**
 - Antidepressant and antipsychotic drugs commonly interfere with sleep – commonly sedation, occasionally insomnia
- The links between disturbed sleep and behavioural issues are biologically plausible
 - The frontal lobe centres responsible for emotional modulation are sensitive to disturbed sleep.¹⁸
 - The potential links are reflected in the common experience of us all: poor sleep is associated with irritability and impaired decision-making.
 - The associations are strong
 - Cause or effect? More longitudinal studies are proposed but it already appears clear that:
 - Poor sleep is a symptom of mental ill health
 - Poor sleep is prodromal to mental ill health
 - Poor sleep is a causative factor in mental ill health
 - Diagnostic confusion and mismanagement may occur where these associations are not understood
 - Adolescents and young adults of particular concern
 - Disengagement
 - Lost learning opportunities
 - Behavioural problems
 - Can these issues be safely ignored?
 - I think not. Inadequate evidence is not the issue here, but inadequate examination of the evidence could be.

SUGGESTED ACTIONS

- Factor sleep health into the preventative and therapeutic advice offered by the report
- Use the report to reinforce the recommendations of the national parliamentary inquiry into sleep health awareness report* tabled in April 2019, which among other things recommended:
 - A national sleep health awareness campaign (with mental health and productivity mentioned among its specific objectives) (Recommendation 8)
 - Develop effective training mechanisms to improve the knowledge of primary healthcare practitioners in diagnosing and managing sleep health problems (Recommendation 9)

*https://www.aph.gov.au/Parliamentary_Business/Committees/House/Health_Aged_Care_and_Sport/Sleep_HealthAwareness/Report

CONCLUSION

- The inquiry has the opportunity to highlight these links between poor sleep health and poor mental health and, in so doing, increase community awareness of them and help promote actions to address sleep health issues related to them. This will have substantial benefits for communal health, well-being and productivity.

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