

Sleep hygiene as part of effective stress management: some points to consider

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Abstract

With reference to the literature reviewing behaviours and processes that are shared by both the sleep hygiene and stress management research, this paper summarises key elements for consideration when including sleep hygiene as part of stress management intervention.

Keywords: *Stress management – Sleep hygiene*

Abstrait

En référence à la littérature l'examen de comportements et processus qui sont partagés à la fois par l'hygiène du sommeil et la gestion du stress de la recherche, ce document résume les principaux éléments à prendre en considération lors de l'inclusion de l'hygiène du sommeil dans le cadre d'une intervention de gestion du stress.

Mots clés: *La gestion du stress – l'hygiène du sommeil*

Stress

Using the accessible definition of being a state of mind that “occurs when pressure exceeds your perceived ability to cope” (Palmer and Cooper, 2007), stress is experienced by most people at various times in their lives and in a variety of contexts. In other words, it is a normal experience which only becomes problematic when it starts to disrupt physical and psychological health. Signs that stress is not being well-managed include compromised: decision-making; emotion management; interpersonal relationships; eating habits; and substance use (Schneiderman, Ironson

and Siegel, 2005). Negative physiological consequences of long-term stress also include greater risk of disease (Cohen et al., 2012) and poor sleep (Greubel and Keckland, 2011).

Research into the psychological and physiological signs and consequences of poor sleep hygiene share some similarities with those described in the stress-related research. These include depression and anxiety, as well as a greater risk of cardiovascular disease and diabetes (Prather, Bogdan and Hariri, 2013).

The cost and deleterious impacts of stress and fatigue in the workplace are also well-documented (Barber, Grawitch and Munz,

2013). As a consequence, government departments responsible for national health and safety at work have become increasingly proactive in encouraging organisations to take more responsibility for these issues. In New Zealand, the Health and Safety at Work Act (Worksafe, 2015) specifically refers to “the psychological work environment, including overcrowding, deadlines, work arrangements (e.g. the effects of shift-work and overtime arrangements), and impairments that affect a person’s behaviour, such as work-related stress and fatigue, and drugs and alcohol.” (3.1 Primary duty of care, Section 36, 2015).

Work-related fatigue is becoming increasingly relevant when considering the causes and management of stress. Indeed, Prather, Bogdan and Hariri (2013) suggest that good quality sleep increases the chances of better mood management and less sensitivity to stress. So, what is sleep hygiene and how might it contribute to a reduction in stress, particularly in the workplace?

Sleep hygiene

Sleep hygiene has been described as “practising sleep promoting behaviours and avoiding sleep inhibiting behaviours” (Mastin, Bryson and Corwyn, 2006). In addition, the extent to which healthy sleep is experienced and/or reported can also be influenced by age and personality type (Duggan, Friedman, McDevitt and Mednick, 2014). Duggan and associates suggest that personality can influence the readiness or propensity with which some individuals engage in positive sleep hygiene behaviours. For instance, they suggest that those who tend toward neuroticism might try to compensate poor quality night time sleep and day time tiredness by drinking more coffee and alcohol in a way that further disrupts their effective awake-sleep cycle. In contrast, Barber et al (2013) found that workers who had a good self-regulatory capacity tended to report better sleep hygiene and greater engagement at work.

Notwithstanding the above, there is some ambivalence about the role of sleep hygiene in promoting public health (Irish, Kline, Gunn, Buysse and Hall, 2015). This is perhaps because sleep hygiene as a concept and intervention was originally developed for the treatment of mild to moderate insomnia (Hauri, 1977). Indeed, Irish et al noted that “the extent to which sleep hygiene principles and strategies apply outside of clinical settings is not well known” (p23, *ibid*). As a result, Irish and her colleagues conducted a review of the research evidence relating to a number of behaviours commonly associated with sleep hygiene. Whilst the list was not exhaustive and was confined to clinical data, they included: regular exercise, stress management, noise reduction,

sleep timing regularity, and the avoidance of caffeine, nicotine, alcohol and daytime napping. They tentatively suggested that sleep hygiene might be appropriate to promote sleep and considered that “epidemiologic and experimental research generally supported an association between recommendations and nocturnal sleep” (p23, *ibid*). However, they urged the need for more, and better, research to evaluate the impact of sleep hygiene strategies that could be developed for the general, non-clinical, population.

Furthermore, they pointed out that such research would need to consider the interactive effects of different sleep hygiene behaviours upon stress. For instance, caffeine withdrawal has been associated with increased stress. They pointed out that habituated caffeine or alcohol drinkers may be less sleep-disrupted by coffee, or alcohol, nearer bed time – and in fact may find it a good stress-management technique – compared to those who are less habituated. However, whilst the short-term impact may be negligible, the long-term consequences for both psychological and physiological health may be significant, and so their suggestion for further research is well-made.

Assessing sleep hygiene

One of the tools that is used to gain a comprehensive understanding of sleep quality is the Pittsburgh Sleep Quality Index (PSQI: Buysse, Reynolds, Monk, Berman and Kupfer, 1989). However, the PSQI was developed some years ago and, as its name suggests, focuses solely upon the respondent’s sleep experience and does not encompass stress-related thoughts or behaviours. Sleep hygiene encompasses a broad range of thinking and behaviours including those related to stress. As a result, Mastin and associates (2006) developed the Sleep Hygiene Index (SHI) from research conducted with a non-clinical (American university student) population. Compared to the PSQI, the SHI provides a brief, wider-range assessment of what contributes to an individual’s inadequate sleep hygiene – defined as a “sleep disorder due to the performance of daily living activities that are inconsistent with the maintenance of good quality sleep and full daytime alertness” (American Sleep Disorders Association, p73: 1990).

Apart from those experiences pertinent to sleep duration and behaviour, the SHI includes behavioural items relating to exercise and substance use, as well as psychological factors such as worrying, and the experience of stress and work-related pre-occupation – all of which researchers have also linked with stress (e.g. Stults-Kolehmainen and Sinha, 2014; Barber et al., 2012; Windle and Windle, 2015).

Applying Sleep Hygiene within Stress Management

In addition to careful assessment and, given that there is a degree of equivocation about the reliability of some of the principles of sleep hygiene, strategies to manage it require careful consideration. Therefore, intervention plans, particularly in association with those for stress management, need to consider:

- The relevant circumstances of the person asking for support to sleep better – including an assessment of what might be preventing their sleep
- The costs and benefits of possible behaviour change, including a shared understanding that changing more than one behaviour is likely to have interactive affects, both physiologically and psychologically
- And emphasise the recipient's choice and control over what they do; and reassure them that experimentation, with possible minor setbacks, is a normal part of the process of discovering what works best for oneself

In reflecting upon the literature cited above, there are behavioural, physiological and psychological elements that are found in common to both sleep hygiene and stress management. In addition, in some cases, stress and poor sleep appear to be reciprocally causative (Greubel and Kecklund, 2011). Consequently, whilst remaining cognisant to the need for careful assessment, it is reasonable to expect that the flexible application of techniques to manage sleep hygiene is also likely to support stress management intervention. The most likely target behaviours that would respond positively to careful assessment and implementation seem to be: exercise; monitoring of use of caffeine, alcohol and other drugs; and cognitive and emotional management strategies, such as mindfulness (Myers et al, 2012). In addition, it is important to remember that knowledge per se is insufficient for change. As part of the process of developing a relevant assessment and effective intervention plan, clinician-client collaboration is essential. Support to inspire, galvanise and sustain clients' (and sometimes clinicians') motivation to change, is essential. Both Cain's study (2012) with high school students and Nishinque and associates (2012) with white collar workers, point to the importance of practice and identifying what sustains motivation over time.

Conclusion

There appear to be good grounds to consider sleep hygiene within the context of stress management as part of the process of restoring a sustainable lifestyle balance. However, as with much of the psychological literature, there remains room for greater research into the application of this element of stress management across a wider population. At the same time, the difficulty of controlling for the multiple times and contexts in which humans find themselves makes definitive generalisation extremely difficult. As a result, whilst being aware of the available research, it is incumbent upon clinicians to make careful and individualised intervention plans that are responsive to the time and psychosocial context of the person seeking support to manage their sleep hygiene and stress. ■

Citation

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Biography

Sam Farmer is Director of Enhance Facilitation Limited and a coaching psychologist. Based in Auckland, New Zealand, his areas of specialism are in leadership coaching, professional supervision and psychosocial support – particularly in high emotional impact contexts. His practice is influenced by Acceptance and Commitment Training and other strength-based approaches.

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