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Sleep Issues: Can EPs Do More?

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Abstract

Sleep problems can have a significant impact on young people's wellbeing. This article will focus specifically on sleep difficulties for adolescents, an age group for which sleep issues can receive much less professional attention. Evidence will be considered for sleep hygiene interventions whereby sleep routines and environments are considered key for good quality sleep and duration. This evidence base will then be critiqued for its applicability to young people with additional social, emotional and mental health needs. The aim is to highlight the importance of sleep for young people and to encourage Educational Psychologists to consider the issues for their practice.

Introduction

During my Educational Psychology training I developed a particular interest in sleep. I found that once I started asking parents and young people if they are sleeping well, to which the answer is often, 'no'; new hypotheses needed to be considered, due to the significant impact that sleep can have on all areas of wellbeing.

This article will consider the impact of sleep, specifically for adolescents, the evidence base for so-called 'sleep hygiene' interventions and a critical engagement with this evidence base. Sleep 'problems' will be referred to throughout. This includes difficulties falling asleep, disturbed sleep and reduced sleep duration. Throughout the article, I will attempt to argue for the role of the Educational Psychologist (EP) in providing support in this area.

My own experience as a trainee EP of delivering training for staff around sleep difficulties for young people and possible interventions in a specialist provision for young people with additional social, emotional and mental health needs will also be discussed with reference to the critique of the evidence base.

The Impact of Sleep

We all need sleep, and some suggest that adolescents need it more than most. Studies differ, as do individuals, but it is commonly accepted that young people between 10 and 23 years old need between eight and ten hours sleep (Bartel, Gradisar, & Williamson, 2015).

Small changes in the brain during development have a big impact on sleep, due to the complex homeostatic nature of sleep (Kelley, Lockley, Foster, & Kelley, 2015). Recent research suggests that the teenage brain undergoes a sensitive period of brain development (Fuhrmann, Knoll, & Blakemore, 2015); therefore, the impact of this on sleep for adolescents is likely to be significant.

Sleep timing is controlled by our biological circadian clock and by social time. The conflict between our biological timing and social time is greater in adolescence than at any other time in our lives (Kelley et al. 2015). During the teenage years, the timing of the circadian clock shifts later, delaying the phase at which sleep can be initiated (Kelley et al., 2015). The common urge to tell teenagers to

go to bed earlier, therefore, appears to be somewhat futile. These circadian differences conflict with school start times, so much so that it is estimated that older teenagers lose between two and three hours of sleep a day when they are required to start school between 08:00 and 08:30 (Kelley et al., 2015). It is estimated that only around fifteen per cent of teenagers get enough sleep (National Sleep Foundation, 2016).

The impact of a reduced amount of sleep or disturbed sleep is significant on young people. Insufficient sleep is associated with adverse physical, behavioural and psychosocial consequences among adolescents (Hildenbrand, Daly, & Nicholls, 2013). Sleep deprivation is associated with impaired emotional recognition, increased emotional reactivity and diminished emotional expressivity (Beattie, Kyle, Espie, & Biello, 2015). The impact of severe sleep disruption is associated with reduced memory consolidation, decision-making capability and immunity, and increased risk of metabolic abnormalities and hypertension (Kelley et al. 2015). Having more sleep is also associated with a reduction in depressive symptoms (Dewald-Kaufmann, Oort, & Meijer, 2014).

The negative impact of sleep problems has been found to affect young people's engagement at school. In addition to sufficient sleep being associated with the ability to concentrate, insufficient sleep is associated with 'school-violence-related behaviours' and absenteeism (Hildenbrand et al., 2013). However, to my knowledge, sleep is not widely discussed in Educational Psychology circles. I am familiar with some psychologists working with very young children and their parents to establish sleep regimes, and medical practitioners being consulted with regards to sleep disorders such as sleep apnea (apnoea); however, there does not typically appear to be a role for the EP in providing sleep advice or support.

Indeed, although I have encountered several cases during my training in which sleep was a significant factor, it was always missing from referral information. Perhaps because teachers were not aware of the issues or perhaps because sleep was not considered an area of specialism for the EP, or even not considered relevant. As a keen trainee, this motivated me to explore further into what I had previously considered a very straightforward issue.

Sleep Hygiene

At first glance sleep is simple. So-called sleep hygiene interventions have relatively good effectiveness. A meta-analytic review of protective and risk factors for adolescent sleep found that sleep hygiene advice helped to improve the quality of sleep and total sleep time, and to reduce the time it takes to transition from full wakefulness to sleep (sleep latency) (Bartel et al., 2015). Such hygiene advice typically involved reducing technology use overall, especially before bedtime; increasing physical activity; reducing the amount of sunlight before bedtime; using the bed only for sleep and having a set bedtime (Bartel et al., 2015).

A randomised control trial with 55 adolescents (mean age 15.5 years), using an intervention whereby their bedtimes were gradually extended and they also received sleep hygiene advice, had greater sleep quality, longer sleep duration and improved circadian rhythms when compared with the control group who received no intervention (Dewald-Kaufmann et al., 2014). Hysing, Pallesen, and Stormark (2015) conducted a large cross-sectional population-based survey (9846 young people aged 16 to 19) into time spent with electronic devices and sleep. Daytime and bedtime use of devices were related to an increased risk of shorter sleep duration, longer sleep onset latency and increased sleep deficiency, issues that may have been reduced with some sleep hygiene advice.

Sleep hygiene, therefore, is the answer. A relatively simple behavioural intervention with well-evidenced effectiveness. During my training, I developed a 'top tips for sleep hygiene' handout which I could present to parents at any consultation in which sleep was raised as an issue. However, when I was asked to present some training on sleep problems and effective interventions at a

specialist provision for young people with social, emotional and mental health difficulties, I needed to reconsider this evidence base.

Disseminating Research to the Wrong Crowd?

During the Educational Psychology doctorate training, one is required to demonstrate that one can meet certain proficiencies. One of these proficiencies is the ability to disseminate research. My sleep hygiene knowledge and the request for training gave me the perfect opportunity to demonstrate this proficiency. However, as with all EP issues, the request was much messier once I fully engaged with it.

An issue with much of the sleep research was that social and cultural factors were not explored by authors. Bartel et al. (2015) found that a 'negative family environment' could delay adolescents' sleep. However, the authors did not define further what a 'negative family environment' was or the complexity within a families' social situation which might lead to such a 'negative environment'. It may be that the factors leading to the 'negative environment' also impact upon sleep, rather than the environment itself. The study also found that a consistent approach to bedtime supported adolescents' sleep duration and quality. Again, one could hypothesise that different adolescents are living in different situations that might impact on their access to a consistent bedtime. Young carers, for example, might have to wake in the night for caring duties, or adolescents with parents who have substance misuse problems are likely to have less access to a parental figure setting a consistent bedtime. Bartel et al. (2015) also list a 'regular schedule' as a protective factor for having sufficient sleep. Parents who are able to provide a regular schedule for their children possibly have regular schedules themselves, such as those working in 'professional' occupations rather than unpredictable shift work.

Whilst the handout which I created is based on research evidence, I found that there are many complex and nuanced situations in which a simple sleep hygiene approach is insufficient. Much of the research around sleep hygiene stresses the importance of environmental factors. I was aware that many of the young people who attend the specialist provision where I delivered the training live in chaotic environments, in which they have little or no real or perceived control. Hildenbrand et al. (2013) found an association between insufficient sleep and 'violence-related behaviours' in school. Many of the young people who attend the specialist provision had been previously excluded from their mainstream settings due to incidents of aggressive or violent behaviour, and this was the reason for them currently attending the specialist provision. Similarly to research previously discussed, Hildenbrand et al. (2013) reported on a relationship between factors that could be explained by mediating variables.

It was, therefore, not sufficient to present the sleep hygiene evidence in isolation as part of the training; careful consideration of the needs of the specific clients was required. Staff did not consider that techniques such as having a regular bedtime set by parents or having a noise-free bedroom would be necessarily achievable for all young people. Some also thought that a technology-free bedroom was unrealistic, until one staff member suggested turning the Wi-Fi off after a certain time or parents regularly changing the Wi-Fi password.

However, once we had critiqued many of the sleep hygiene techniques, we were left with many achievable measures which staff realised they were working on with young people in other domains. For example, the importance of having a regular schedule (Bartel et al., 2015). Staff at the provision reported that many of the young people were required to attend different sessions throughout the week in different locations, examples of which being therapeutic group work in the specialist provision, some classes in their previous mainstream setting and some courses at local colleges. Staff reported that it can be difficult for young people to keep track of these timetabling issues. However, once they can do this, they tend to increase their engagement in the sessions that they are

attending. It was, therefore, fortunate that a regular timetable is also beneficial for good quality sleep. Likewise, issues such as regular exercise and stress management, which are important for curriculum engagement, are also beneficial for a good night's sleep.

The cognitive behavioural framework for reducing insomnia advocated by NHS choices (2015) advises thought challenging before bedtime to reduce anxieties that may inhibit falling asleep. The therapeutic sessions that all of the young people attending the specialist provision were required to take part in were based on a cognitive behavioural framework. Therefore, thought challenging and relaxation practices that can aid sleep were regularly being practised by all young people.

This critical engagement with the sleep hygiene evidence base in collaboration with staff who knew the young people well led to achievable and realistic strategies that could support these young people with their sleep. Whilst researchers may not be holding this client group in mind when publishing their papers on the evidence base for sleep hygiene, it was still possible to use the evidence to support this group.

Similarly to how the tone of adolescent sleep research can focus on certain 'family environments', the tone of 'sleep discourse' can also be loaded with judgement. From birth, a baby and a parent's level of 'goodness' can relate to the amount of sleep that the baby (and therefore the parents) are getting. A primary school child who appears tired may also be talked about as not responding well to structure and boundaries. There can be an implicit level of judgment in our language directed towards parents and children around sleep. It may be that this affects parents' feelings of competence in setting bedtime routines.

By the time that a young person is attending secondary school it appears that professionals' awareness of the importance of sleep has disappeared and the discourse has shifted towards 'behaviour', 'responsibility' and 'consequences'. These discourses all have their own merit in certain contexts. However, it is my view that the question "How is your sleep?" promotes another much-needed discourse that fits within the wider social, emotional and mental health needs framework.

Conclusions

Sleep is an important factor for young people's wellbeing. However, by secondary school it tends to have less of a focus, particularly in the work of EPs. I have argued that EPs need to consider sleep issues within our practice and that we are competent to do so. It may not always be information that is volunteered within a consultation or on a referral form; however, it is an important question to ask.

Sleep hygiene interventions have a good evidence base. From a purely behavioural perspective, as psychologists we can offer support and advice with regards to how to establish a bedtime routine and a space conducive to sleep. From a cognitive behavioural position, thought challenging and relaxation are also beneficial for good sleep.

However, the evidence base for what works for sleep does not always consider social and environmental factors that can be harder to control. Critical engagement with the complexity of sleep issues needs to be considered, especially for those young people for whom simpler sleep hygiene routines are less manageable.

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