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Mental health and the coronavirus research bite #4: Sleep hygiene during the pandemic

About this series

We are aware that parents, carers and those working with young people might have many questions about how to support children and young people's mental health and wellbeing during the coronavirus pandemic. We know that it can be hard to find evidence about the best ways to tackle some of these challenges. The Evidence Based Practice Unit (a collaboration between the Anna Freud Centre and UCL) is producing a series of 'research bites' based on rapid reviews of existing research. These are not thorough or extensive reviews, rather they aim to offer concise and timely insights on some topical issues.

The question: Why is sleep hygiene important during the pandemic, and what can we do to improve it?

Sleep hygiene refers to changes in behaviour (habits) and to our environment that we can make to promote good sleep quality and duration.¹ During the coronavirus pandemic many children, young people and their carers will have experienced huge changes to their everyday routines, including changes to their schooling, work and social world more generally, all things which may have an impact on their sleep. Evidence also highlights that a higher number of children and young people are experiencing worries and anxiety as a result of the pandemic, which can have a negative impact on their sleep.2

Some children may be finding it more difficult to fall asleep or stay asleep since the pandemic. Given that sleep is important for our biological, psychological and emotional wellbeing,3 it is important to look after our sleep and maintain good sleep hygiene.

This research bite therefore focuses on the importance of sleep hygiene for children, young people and their families, how this might have been affected during the coronavirus pandemic and what we can do to look after and improve our sleep hygiene at this time.

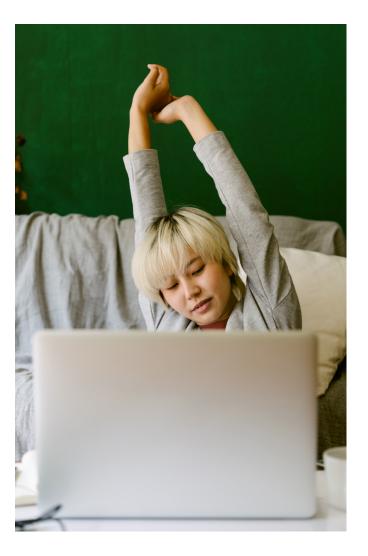


How did we answer this question?

We carried out a rapid review of the research literature, looking for published research on the importance of sleep hygiene for the mental health of children, young people and families. Conducting a literature search in this way is less rigorous than a systematic review but helps us find relevant evidence quickly.

When performing our searches, we discovered a wealth of existing evidence on the impact of sleep on health and wellbeing. There were, however, fewer studies investigating the influence of sleep hygiene interventions in the general public. Nevertheless, we did identify a number of reviews and individual papers on sleep hygiene which are cited in this research bite.

Limitations included the variation in definitions of sleep hygiene. Additionally, it is worth noting that there is a lot of variation in the amount of sleep that individuals need, which makes universal recommendations a challenge. It is important that parents and carers consider the recommendations outlined in this review in light of their individual needs or those of their children.



What did we find out?

Sleep during the pandemic

Evidence is emerging regarding the potential consequences of the pandemic on our mental health and sleep, with research mainly focusing on adults as opposed to children and young people.

In a survey of 2,250 18-75 year old UK residents, conducted in April of this year during the height of the coronavirus pandemic, it was reported that 50% of adults said they felt more anxious or depressed than normal as a result of coronavirus, and 38% have slept less or less well than normal during this period.4 In addition, results from a survey of more than 1,850 parents indicated that a higher number of children and young people are experiencing worries and anxiety as a result of the pandemic.² Prior to the pandemic, research had indicated a high co-occurrence between anxiety and sleep problems in children and young people,5 and that adolescents with depression experience more sleep problems such as wakefulness in bed and sleep disturbances.⁶ It is therefore essential that we are aware of the potential impact that the current pandemic may be having on the overall mental health and wellbeing of children and young people, and its potential impact on sleep.

In another study of over 45,000 UK adults during the coronavirus pandemic it was found that worries about catching the coronavirus, personal safety and security, finances and job losses were associated with poorer quality of sleep. Furthermore, adverse experiences such as domestic abuse, inability to pay bills, access food or medication, and catching the coronavirus were also associated with poorer sleep. International studies too have found changes to sleep during the pandemic. In a study of 662 adults in India, it was reported that 12.5% of adults had difficulty sleeping due to being worried about the pandemic in the past week.

Others have investigated the negative effects of children and young people being out of school and confined to the home during lockdown by comparing this to other periods when children are absent from school, for example at weekends and during the summer holidays. It is understood that when children are out of school they increase the amount of time they spend on screens, experience more irregular sleep and

often have less healthy diets. Such changes to children's routines could therefore negatively impact both their mental and physical health.

Sleep hygiene interventions

Given that sleeping patterns may have changed for some due to the drastic changes to our everyday routines during the pandemic, it is important to think about the ways in which sleep can be improved. Sleep hygiene interventions usually involve addressing, adapting or maintaining bedtime routines. the sleeping environment and our lifestyle (food and exercise)³ and have been found to contribute to better sleep for children, young people and families. 10 Research suggests that in order to experience significant changes in sleep quality and duration, effective interventions may require the adjustment of more than one aspect of sleep hygiene; for example room temperature and regular exercise rather than one or the other.3

Sleep hygiene interventions are easily accessible to the general population as they do not require clinical or medical guidance and can be relatively inexpensive, which makes them simple and attractive ways of improving health and wellbeing. 11 Although there are existing recommendations for the amount of sleep that an individual needs depending on their age group, 12 there is also a great deal of variability as to the amount of sleep that individuals need and it is important to maintain or change your sleep hygiene in a way that works for you and your children.



What are the implications?

For children, optimal sleep is a key contributor to development.³ Poor sleep quality and duration may contribute (along with other risk factors) to the development of emotional and behavioural difficulties.¹³ A lack of sleep can impact on children's daytime functioning including performance at school,¹⁴ behaviour¹⁵ and cognitive development,¹⁶ and can increase their risk of injury.¹⁷ Additionally, regular poor sleep is associated with increased risk of physical health problems like obesity and diabetes.¹⁸

Overall, the implications of poor sleep quality and duration can be profound and can negatively impact the emotional and physical health of children, young people and families. It is therefore important to adopt and maintain sleep hygiene practices that promote good sleep, some of which are outlined below.

Strategies to improve sleep hygiene

During our rapid review of the literature we found a number of simple, evidence-based recommendations that parents, carers and their children could try to improve sleep. 10,19,20,21 Everyone's situation is different, and it may therefore be helpful to try out different approaches and see what fits for you and your family. It is also important to keep in mind that it may take some time before you start seeing improvements in your or your child's sleep after implementing some of these strategies.

If you or your child are experiencing persistent difficulties with sleep you should talk to your GP, who will be able to help assess your or your child's needs, and will ensure that appropriate referrals are made if necessary.

Avoid napping^{19,20}

Although napping is recommended for children younger than five and may be a common cultural practice for some families, for older children and young people, sleeping during the day can hinder a good night's sleep. For children who feel tired during the day, taking a stroll and getting some fresh air might help. If you cannot go out, you could also try short physical activities or "brain breaks" you can do at home, with lots of videos to choose from online.

Adopt a relaxing, age-appropriate, bedtime routine¹⁰

Adopting a familiar bedtime routine can help children and young people to relax, wind down and get to sleep. Relaxing activities that could be incorporated into a bedtime routine include reading a book, taking a bath, listening to gentle music and doing a short mindfulness exercise. Activities which are exciting or frustrating should be avoided before bed.

It is also important to help children learn how to settle down and fall asleep in their own beds, without parents or carers, so that they do not become dependent on parental presence to fall asleep at bedtime or after waking up in the night.

Keep to a consistent wake time and bedtime^{10,21}

Maintaining a consistent bedtime and wake time, both during the week and at weekends, will help create a sleep routine. Waking up at a regular time helps to reset the body's sleepwake cycle every morning and will make it easier to go to sleep at a regular time in the evenings. Although this may prove difficult where the boundaries between work, school and home have become less clear, it will help to bring structure and routine to the day and can also help with sleep.

Note that the wake-sleep cycle naturally shifts during adolescence which is why young people tend to go to sleep later and wake up later compared to children and adults. This should not be a cause for concern, unless the young person wakes up so late that it prevents them from doing what they would usually enjoy doing or need to do.

A supportive bedroom environment^{3,10}

A noisy or bright bedroom may prevent children and adults from falling asleep or staying asleep. Where possible, ensuring bedrooms are dark and quiet at night-time can help fall asleep. Temperature is also important, with a cooler bedroom (around 18 degrees) and warm duvet or blanket being recommended.

Removing screens from the bedroom¹⁰

Limit access to screens in the bedroom, such as computers, phones, tablets and TVs, as they keep our minds active and stimulated and can distract children, young people and adults from going to sleep. It is also best to stop using electronics at least one hour before going to bed as the blue light emitted by screens can interfere with our sleep.



Letting worries go at the end of the day^{10,20}

A higher number of children and young people are experiencing worries and anxiety as a result of the pandemic, which may impact negatively on their sleep.² It is therefore important to provide a space where your child can express worries and concerns during the day so that they do not go to bed with worries on their mind.

Older children and young people could also write down their concerns or their to-do list for the next day, and visualise how they are "taking thoughts out of their head", putting them down onto the page and "letting them go until tomorrow morning", remembering that they do not have to hold onto them during the night.

Limiting the amount of time reading the news throughout the day (and particularly in the evening) may also help reduce worries related to the pandemic.

Keeping a healthy lifestyle^{3,10}

Support children and young people to exercise regularly, preferably in the morning and early afternoon, avoiding physical activities in the evening as this will make it more difficult for the body to go to sleep. The circadian rhythm is highly influenced by daylight, and so exercising early in the day provides exposure to daylight which can help maintain a good wake-sleep cycle.²³ Although the coronavirus pandemic may mean that exercising outdoors is more difficult, particularly for families who do not have access to a garden, even a short local walk would increase exposure to daylight whilst also contributing to daily exercise.

Different foods and drinks can also impact on sleep. Parents and carers should encourage children and young people to avoid caffeine (chocolate, tea, coffee, energy drinks etc) in the evening, and should try to make sure children are not too full or hungry when they go to bed.

If you can't fall asleep19,24

If your (younger) child is finding it hard to fall asleep, they might call for you. When this happens, wait progressively longer before checking on them, and only stay in the room for a couple of minutes. If your child gets out of bed to find you, put them back to bed, ask them to lie down and to go to sleep; try being consistent, avoiding prolonged interactions

and avoid stimulating interest or excitement.

If you or your teen are unable to fall asleep after 20-30 minutes of going to bed, staying in bed and worrying about it is likely to make falling asleep harder. It is best to get up and do a simple, relaxing activity such as making a warm drink (without caffeine), reading a book (ideally one that won't generate excitement) or listening to music using a dim light until you feel sleepy again. Screens should be avoided during the night.

Take-away message

This rapid review suggests that sleep is an important contributor to our health and wellbeing. Given that the current pandemic has the potential to increase stress and anxiety for children and their families, with negative consequences for sleep, it is vital that we consider the strategies that can help improve and maintain good sleep.

The evidence summarised in this rapid review suggests that maintaining good sleep hygiene by adopting simple strategies is key to supporting adequate sleep for children, young people and their families.

Key resources

- » The NHS provides a list of sleep apps that might help you and your child: https://www.nhs.uk/apps-library/category/sleep/
- » The Anna Freud Centre provides guidance on sleep in infants and toddlers: https://www.annafreud.org/early-years/ early-years-in-mind/common-difficulties/ sleep/
- » The Anna Freud Centre offers guidance on sleep as a self-care strategy to improve wellbeing for young people: https://www.annafreud.org/on-my-mind/self-care/sleep/

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About EBPU

The Evidence Based Practice Unit is a child and youth mental health research and innovation unit based at UCL Faculty of Brain Sciences and the Anna Freud Centre. Founded in 2006, this collaboration bridges cutting-edge research and innovative practice in children's mental health. We conduct research, develop tools, provide training, evaluate interventions and disseminate evidence across four themes:

Risk | Resilience | Change | Choice

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