Managing Sleep Problems

Some Issues and Solutions

Mary Mountstephen MA (SEN)
How much do you sleep?

- If you live to the age of 90, how long might the average person sleep?

16 years
24 years
36 years

(Source: Ted Talk)
Background

• Parent concerns
• Media
• Upcoming book
• Resources
Overview

- Age range
- Typical sleep difficulties
- Simple practical strategies
- Sleep Master Class Programme
A good night’s sleep is …..
How much sleep?

Changes in Children's Sleep Need with Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Hours of Sleep Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newborns</td>
<td>Maximum: 18, Minimum: 12</td>
</tr>
<tr>
<td>Infants</td>
<td>Maximum: 15, Minimum: 13</td>
</tr>
<tr>
<td>Toddlers</td>
<td>Maximum: 14, Minimum: 12</td>
</tr>
<tr>
<td>Preschoolers</td>
<td>Maximum: 13, Minimum: 11</td>
</tr>
<tr>
<td>School-Age and Teens</td>
<td>Maximum: 11, Minimum: 9</td>
</tr>
</tbody>
</table>

*National Sleep Foundation*
Broken sleep....
What is a sleep problem?

- Range from 8-14 types of identifiable difficulties
- Settling, night waking, early waking
- Nightmares, nocturnal enuresis
- Sleep apnoea
- Restless leg syndrome
- Circadian rhythm sleep disorders
What should ‘normal’ sleep look like?

During the course of a night, a sleeper passes through the different stages of sleep on a roughly 90-minute cycle.
Sleep Patterns

- **Types of Sleep Patterns**

Sleep is broadly classified into two types: REM (rapid-eye-movement) sleep and non-REM sleep (NREM). By studying brain wave patterns we know that NREM sleep consists of several stages, ranging from drowsiness through deep sleep. In the early stages (Stages I and II) you awake easily and may not even realize that you have been sleeping. In the deeper stages (Stages III and IV) it is very difficult to wake up, and if you are aroused you are likely to find yourself disoriented and confused. In NREM sleep your muscles are more relaxed than when you are awake but you are able to move (although you do not because the brain is not sending signals to the muscles to move).

- REM sleep is more active. Breathing and heart rate become irregular, your eyes move rapidly back and forth under your eyelids, and control of your body temperature is impaired so that you do not sweat when you are hot or shiver when you are cold. Below the neck, however, you are inactive because the nerve impulses that travel down the spinal cord to body muscles are blocked. Your body is essentially paralyzed. It is during this sleep stage that you dream.
Sleep Diary

- Evidence of patterns over one week
- Standard format
- Provides a baseline
- Provides evidence
- Use to inform sleep hygiene programme
Young Children

- Sleep and Preschoolers (3-5 years)
  - Pre-schoolers typically sleep 11-13 hours each night and most do not nap after five years of age.
  - As with toddlers, difficulty falling asleep and waking up during the night are common. With further development of imagination, preschoolers commonly experience night-time fears and nightmares. In addition, sleepwalking and sleep terrors peak during preschool years.
Teenagers

- Changes in melatonin

- The onset of sleep is triggered by the release of melatonin, a natural body hormone. Toward dawn, melatonin shuts off as another hormone, cortisol, increases, signaling the youngster to wake up. Research shows that the pattern of melatonin secretion makes it hard for teenagers to fall asleep early in the evening and to wake up early in the morning. Schools with early start times (any time before 8:30 a.m.) place students at a disadvantage in terms of arousal and alertness—not only for early morning classes but throughout the day because the adolescent’s biological rhythms are out of sync with typical school routines.
Family Impact

How does lack of sleep affect family life?
How many hours sleep do you need?
How do you cope with lack of sleep?
How do you get to sleep?
Room Hygiene: Light

- **Light**
  Melatonin is the master body clock regulator, and helps us move into sleep. Dropping light levels provide the signal to our brains to produce more Melatonin. Set up a *dark* sleep space – you should have difficulty seeing your hand when the door is closed.

- Use black out blinds on the windows

- Tape up a vinyl table cloth over existing blinds to cut out any light leaking through

- Cover lights from electronic devices in the room

- Eliminate night lights, or use a red bulb in the night light (blue or white lights can interfere with Melatonin production)
Room Hygiene: Sensory

- Pictures
- Mobiles or crib toys
- Patterned wallpaper
- Patterned sheets or blankets
- General toy clutter – gather up toys into bins that can be covered or stored out of sight
- Television, computer or other electronic media.
Massage and Physical Approaches

- **RMT: Rhythmic Movement Therapy**: Dr Blomberg: Training in Hong Kong
- **Quigong Massage**: Da Silva
- **Bal-A-Vis-X**: visual tracking training
Essential Oils

- **http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1513142/**

- **Cedarwood**: This oil helps to stimulate pituitary and pineal glands. It can also aid in increasing melatonin levels naturally. It also can help with good sleep at night and focus during the day.

- **Lavender**: Lavender oil: for bath time when the children are tired, stressed, or sick. Putting a few drops of lavender in the water can substantially help a child with autism calm down and get a good night’s sleep.
Weighted Blankets

Research: weighted versus regular blanket

‘The use of the weighted blanket did not help children with ASD sleep for a longer period of time, fall asleep significantly faster or wakeless often…’

BUT: Subjectively was preferred by parents and children
Weighted Blankets

Parents judged that the weighted blanket made their child calmer (35% vs 14%) than the unweighted blanket.
White Noise

http://www.sleeplikethedeadd.com/sound-machine-lecrofan.html
Sound Therapy

- Links to enuresis
- Passive
- Non-invasive
- Adaptable
- Research based

http://www.johansenias.com/
Sound Therapy
Sound Therapy
DreamPad

- [https://www.youtube.com/watch?v=uXVDOhYp7iA](https://www.youtube.com/watch?v=uXVDOhYp7iA)

- **RESULTS/LIMITATIONS/CONCLUSIONS**: Improvements were noted in sleep initiation, duration of sleep, reduction in night waking and improved daytime behavior. All 15 children showed a decrease in sleep problems as noted in response to the sleep diary or the CSHQ. Similarly all 15 families had improved scores on the PedsQL, some of which persisted beyond the time they were actively using the Dreampad. Changes were most notable in emotional, social and school functioning.

- All of the parents reported a positive reaction to using the Dreampad and were interested in continuing its use. Many said their children were going to bed/sleep more quickly, sleeping more soundly, waking up more easily and generally seemed more relaxed.
Dream Pad

- $2,400 approximately

- The Dreampad and Dreampad Mini combine iLs’ psychoacoustic expertise with Intrasound Technology™, which is based on the natural conductivity of the human body. Our bones are natural conductors; in fact, every time you speak the vibration caused by your voice is carried by bone to your inner ear. In the same way, music from the Dreampad travels internally to your ear.
RESULTS/LIMITATIONS/CONCLUSIONS: Improvements were noted in sleep initiation, duration of sleep, reduction in night waking and improved daytime behavior. All 15 children showed a decrease in sleep problems as noted in response to the sleep diary or the CSHQ. Similarly all 15 families had improved scores on the PedsQL, some of which persisted beyond the time they were actively using the Dreampad. Changes were most notable in emotional, social and school functioning.

All of the parents reported a positive reaction to using the Dreampad and were interested in continuing its use. Many said their children were going to bed/sleep more quickly, sleeping more soundly, waking up more easily and generally seemed more relaxed.
Social Story

- A Story About Sleeping in My Own Bed/Crib

- My name is Emilea.  
  I am getting so big!  I can get ready for bed.  
  I have my bath.  I help brush my teeth.  
  I put on my PJ’s.  
  I like to snuggle.  
  I sleep in my big-girl bed, now.  
  “Night-night, Mommy.  See you in the morning!”  
  “Night-night, Daddy.  See you in the morning!”  
  I sleep all night in my big-girl bed.  
  Yay, Emilea!
Emilea
Sleep Master Class Programme

- Structured training for helpers
- Research based
- Consistent
- Enables monitoring
- Complements existing interventions
Sleep Master Class Programme

• Where and why kids should sleep
• Technology: deprivation
• Separation anxiety
• Social pressures
• Consistency
• Sleep diary for parents
Conclusions

- Clean room
- Begin at the beginning
- Minimize
- Be consistent
- Take advice
A good night’s sleep is ….