"Sleep Squad: The Movie" Facilitator Toolkit

"Sleep Squad: The Movie" seeks to educate children, families, and communities about the benefits of getting proper sleep.

WHY IS SLEEP IMPORTANT?

Busy schedules and misaligned priorities have resulted in an estimated 20-40% of young children being sleep deprived, and the effects of this trend are evident in children's daily functioning. The ability to sleep well on a regular basis has a major impact on the academic and social success of children. It affects memory, learning, academic success, and emotional and physical well-being.

Sleep affects attention memory and learning

Sleep is associated with developing new cognitive abilities and consolidating memories. When individuals are deprived of sleep, their abilities to retain what they have learned may diminish by as much as 20-30%. (Drummond et al., 2000; Plihal & Born, 1997). In addition, the ability to stay attentive and to make balanced decisions is impaired. Even small deficits in sleep may result in significant impairment of cognitive performance (Sadeh, Gruber, & Raviv, 2003).

Sleep affects academic success

Sleep impacts the functions essential to academic success. Shorter sleep durations are also associated with lower scores on certain IQ tests (Touchette et al., 2007).

One study has shown that as many as 23% of adolescents reported that their grades dropped because of sleepiness (Gibson et al., 2002). Additionally, students sleeping an extra 45 minutes per night experienced increased motivation (Owens, Belon, & Moss, 2010). Accordingly, another study found that students who had grades of C, D, or F averaged 25 min less sleep per weeknight than did their peers with better grades (Wolfson & Carskadon, 1998). Yet another found that extending children's sleep by 30 minutes improved children's mood and decreased their impulsivity and sleepiness in school, while decreasing children's sleep by 1 hour was related to detectable deterioration of children's school mood and behaviour as well as increased sleepiness (Gruber, Cassoff, Frenette, Wiebe, & Carrier, In Press).

Sleep affects emotional well-being

Sleep deprivation leads to impaired emotional control and this in turn leads to increased stress and arousal, further interfering with sleep (Dahl & Lewin, 2002). Youths with

sleep problems have higher rates of behavioral disorders and depression (Gruber & Brouillette, 2006).

Sleep affects physical well-being

Reduced sleep duration has been associated with obesity (Taheri, 2006; Taheri et al., 2004) diabetes (Spiegel, Leproult & Van Cauter, 1999), cardiovascular disease (Appels, et al., 1987; Ayas et al., 2003; Eaker, Pinsky, & Castelli, 1992; Kripke et al., 2002; Liu, Tanaka, & Group, 2002; Newman et al., 2000; Schwartz et al., 1998), and osteoporosis (Vgontzas et al., 2000) as well as with increases in cardiovascular events and cardiovascular morbidity. Additionally, reduced sleep duration has been associated with larger body mass index (BMI) (Gangwisch et al., 2005; Taheri et al., 2004).

It is evident that sleep has a large impact on an individual's memory, learning, academic success, and emotional and physical well-being. So the next question is are children getting the required amount of sleep?

WHAT IS THE CURRENT SITUATION?

Research has shown that sleep is necessary for a healthy and successful lifestyle, academic performance, and emotional well-being yet many children and adolescents are getting less sleep than they need and, as a result, are chronically sleep-deprived.

A considerable number of elementary school children sleep for less than the recommended nine hours per night. For example, a recent study found that 43% of boys aged 10-11 years slept for less than 9 hours per night (Spilsbury et al., 2004). Another survey found that 64% of school-aged children went to bed later than 9:00pm (Mindel et al., 2009).

Only one in five adolescents obtain nine hours of sleep on school nights, and nearly one-half (45%) sleep for less than eight hours on these nights. About two-thirds of students report being very sleepy between 8 and 10am (National Sleep Foundation, 2006).

A decrease in sleep duration along with increasingly later bedtimes suggest that sleep deprivation is becoming a problem in school-age children.

WHAT CAN YOU DO ABOUT IT?

You can help to increase the priority given to sleep in establishing a healthy, wellbalanced lifestyle. Children and their families need to be made aware of the critical importance of sleep and its impact on their day to day lives.

The actual amount of sleep that is needed varies between different people. Many factors can get in the way of a child's ability to obtain the amount of quality sleep they need for their best daytime performance. Poor sleep habits are modifiable; several programs exist that have proven to be effective in increasing general sleep knowledge and in treating sleep disorders. There are also several easy tips that can be followed to improve children's sleep hygiene. A few of them are listed below:

- Creating a quiet and comfortable sleeping environment is critically important if children are to fall asleep in a timely manner and to sleep adequately during the night.
- A consistent, calm, bedtime routine that includes relaxing activities over about 20-30 minutes in the room where the child sleeps is recommended.
- A good bedtime routine might include a light snack, bath time, put on pajamas, brush teeth, read a story or have a brief prayer time, put the child in bed, say "Good night" and leave.
- The ideal sleeping environment is quiet, dark, and cool in the evening, and well-lit in the morning. If a child expresses fear of the dark, use of a nightlight is acceptable. It is important that the sleeping environment IS associated with positive experiences and emotions, so parents should not use banishment to the bedroom or early bedtime as punishment.
- It is important that a child does not go to bed hungry. Heavy meals within the two hours prior to bedtime should be avoided, but a small snack close to bedtime is acceptable.
- Children should avoid caffeine for at least 3-4 hours before bedtime, so caffeinated beverages should be avoided, as should (solid) chocolate.
- Parents should keep electronic devices, such as television, computers and cell phones, out of the bedroom and limit internet use in the evening.

HOW CAN THIS MOVIE BE USED TO HELP SOLVE THE CURRENT SITUATION?

Despite the importance of sleep in many areas relevant to child health, learning, and well-being, sleep is still not a social priority. This video can be used to trigger important conversations about the importance of sleep which will help increase awareness of the importance of sleep.

Moreover, the movie, at the individual level, can be used to trigger self-evaluation of sleep habits. It will help children and adults reflect on their current sleep habits and re-evaluate the priority that they give to sleep in their daily lives, eventually changing their habits and making healthy night time habits an essential part of their lifestyle.

In addition, this movie can be used to help initiate and inspire changes in policy associated with children's lifestyle. The movie can be used as a means to trigger the discussion about the topic, and, at the same time, to demonstrate that such change can be obtained. Ideal audiences for this use of the movie are key stakeholders and decision makers such as school administrators, teachers, and policy makers in ministries of health or education.

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