Part 1 Slide

Have you noticed that your child with ADHD has trouble sleeping? Sleep disturbances caused by ADHD have been overlooked for several reasons, including the late age of onset. There is a well established scientific link between ADHD and sleep disturbances.

Older children with ADHD rarely fall asleep quickly, sleep soundly through the night, and wake up feeling refreshed.

But, as with most of our knowledge about ADHD in adults, we're only

beginning to understand the more vital link between ADHD and sleep,

which creates difficulties:

- Falling asleep
- Staying asleep
- Waking up

On average, sleep disturbances associated with ADHD generally appear later in life, at around age 12.



Sleeping problems are often overlooked and attributed to coexisting ADHD problems and incorrectly using stimulant medication to treat ADHD.

Slide

1. Difficulty Falling Asleep with ADHD

Before puberty, 10 to 15 per cent of children with ADHD have trouble getting to sleep. This is twice the rate found in children and adolescents who do not have ADHD. This number dramatically increases with age: 50 per cent of children with ADHD have difficulty falling asleep almost every night by age 12 ¹/₂ by age 30, more than 70 per cent of adults with ADHD report that they spend more than one hour trying to fall asleep at night.

Slide

2. Restless Sleep with ADHD

When individuals with ADHD finally fall asleep, their sleep is restSleep is not refreshing, and they awaken as tired as when they went to bed. Less. They toss and turn. They awaken at any noise in the house. They are so fitful that bed partners often choose to sleep in another bed. They often awake to find the bed torn apart and covers kicked onto the o bed.



Slide

3. Difficulty Waking Up with ADHD

More than 80 per cent of older children with ADHD in my practice report multiple awakenings until about 4 a.m. Then they fall into "the sleep of the dead," from which they have extreme difficulty rousing themselves.

They sleep through two or three alarms, as well as the attempts of family members to get them out of bed. ADHD sleepers are commonly irritable, even combative when roused before they are ready. Many of them say they are not fully alert until noon.

Slide

4. Intrusive Sleep with ADHD

As long as persons with ADHD were interested in or challenged by what they were doing, they did not demonstrate symptoms of the disorder. (This phenomenon is called hyperfocus by some and is often considered an ADHD pattern.) On the other hand, if an individual with ADHD loses interest in an activity, his nervous system disengages in search of something more interesting. Sometimes this disengagement is so abrupt as to induce sudden extreme drowsiness, even to the point of falling asleep.



We now recognise that sleep difficulties are associated with ADHD, and stimulant-class medications are often the best treatment for sleep problems rather than their cause.

Part 2 Slide

Why Do People with ADHD Have Problems Sleeping?

There are several theories about the causes of sleep disturbance in people with ADHD, with a telling range of viewpoints. Physicians base their responses to their patients' complaints of sleep problems on how they interpret the cause of the disturbances.

A physician who looks first for disturbances resulting from disorganised life patterns will treat problems differently than a physician who thinks of them as a manifestation of ADHD.

Thomas Brown, PhD, a longtime researcher in ADHD and developer of the Brown Scales, was one of the first to give serious attention to the problem of sleep in children and adolescents with ADHD. He sees sleep disturbances as indicative of issues of arousal and alertness in ADHD itself. Two of the five symptom clusters that emerge from the Brown Scales involve activation and arousal:

- Organising and activating to begin work activities.
- Sustaining alertness, energy, and effort.



Brown views problems with sleep as a developmentally-based impairment of management functions of the brain —

notably, an impairment of the ability to sustain and regulate arousal and alertness. Interestingly, he does not recommend treatments common to ADHD but instead suggests a two-pronged approach that stresses better sleep hygiene and the suppression of unwanted and inconvenient arousal states by using medications with sedative properties.

One hypothesis is that the lack of an accurate circadian clock may also account for the difficulty many with ADHD have in judging the passage of time. Many of my adult patients do not wear watches. Their internal clocks are not "set." Consequently, they experience only two times: "now" and "not now." Many of my adult patients do not wear watches. They experience time as an abstract concept, important to other people, but they don't understand. It will take many more studies to establish the links between circadian rhythms and ADHD.

Slide

How to Get to Sleep with ADHD

No matter how a doctor explains sleep problems, the remedy usually involves something called "sleep hygiene," which considers all the things that foster the initiation and maintenance of sleep. This set of conditions is highly individualised. Some people need absolute silence. Others



We Guide Little Minds to Unlock BIG Potential

) +27 31 100 0474

need white noise, such as a fan or radio, to mask disturbances to sleep. Some people need a snack before bed, while others can't eat anything right before bedtime. A few rules of sleep hygiene are universal:

- Use the bed only for sleep, not as a place to confront problems or argue.
- Have a set bedtime and a bedtime routine and stick to it rigorously.
- Avoid naps during the day.

Two more elements of good sleep hygiene seem apparent, but they should be emphasised for people with ADHD.

- Get in bed to go to sleep. Many people with ADHD are at their best at night. They are most energetic, thinking clearest, and most stable after the sun goes down. The house is quiet, and distractions are low. This is their most productive time. Unfortunately, they have jobs and families to attend the following day. Tasks are made more complicated by inadequate sleep.
- Avoid caffeine late at night. Caffeine can cause a racing ADHD brain to grow more excitable and alert. Caffeine is also a diuretic, although not as potent as experts once thought; caffeine is also a diuretic and may cause sleep disruptions brought on by needing to go to the bathroom. It is an excellent strategy to avoid consuming any liquids shortly before bedtime.
- Role of exercise.
- Screens and blue light emissions decrease internal melatonin rhythms
- Bedtime and ADHD your child.



We Guide Little Minds to Unlock BIG Potential

) +27 31 100 0474

- No TV is allowed at least one hour before bedtime.
- One hour before bedtime, spend time doing "winding down activities."
- Reading
- Calming games.
- Talking and discussing the day.
- Listening to music.
- Understand ADHD kid's don't choose to be hyperactive. Restlessness is inherently ADHD.
- Best to listen and understand your child with ADHD.
- Vigilance about the possibility of anxiety.
- •
- Dr Rosemery Tannock, the world expert on ADHD, provides these tips.
- Avoid snacks and drinks with caffeine.
- Have a set bedtime. Routine is essential for kids with ADHD.
- Give a 10-minute bedtime warning and engage in a pleasant activity with your child. Make going to bed peaceful and fun.
- •
- Treat bedtime separation anxiety with cognitive behavioural skills like deep breathing and calming thoughts.
- Provide a relaxed environment for your child at night. Singing, reading and soothing music will go a long way.



- If you think your child has sleep problems, keep a daily log of when he falls asleep and when he wakes. Talk to your doctor about your concerns, and ask whether they feel asleep evaluation is necessary.

Part 4 Slide

Treatment Options for ADHD-Related Sleep Problems

If the patient spends hours a night with thoughts bouncing and his body tossing, this is probably a result of ADHD. The best treatment is a dose of stimulant-class medication 45 minutes before bedtime. However, this course of action is a hard sell to patients who suffer from difficulty sleeping.

The next step up the treatment ladder is prescription medications. Most clinicians avoid sleeping pills because they are potentially habit-forming. People quickly develop tolerance to them and require ever-increasing doses. So, the following drugs of choice tend to be non-habit-forming, with significant sedation as a side effect. They are:

Melatonin. The brain releases this naturally occurring peptide in response to the sun's setting functions in setting the circadian clock. It is available without a prescription at most pharmacies and health food stores. Typically the dosage sizes sold are too large. Almost all of the published research on Melatonin is on doses of 1 mg or less, but the doses available on the shelves are either 3 or 6 mg. Nothing is gained by using doses more



significant than one milligram. Melatonin may not be effective the first night, so several nights' use may be necessary for effectiveness.

• **Clonidine.** This medication is used for high blood pressure, and it is the drug of choice for the hyperactivity component of ADHD. It exerts significant sedative effects for about four hours. Some practitioners recommend a 0.05 to 0.1 mg dose one hour before bedtime. Some practitioners recommend a 0.05 to 0.1 mg dose one hour before bedtime.

Slide

Problems Waking Up with ADHD

Problems in waking and feeling fully alert can be approached in two ways.

The simpler is a two-alarm system.

The patient sets the first dose of stimulant-class medication and a glass of water by the bedside. An alarm is set to go off one hour before the person plans to rise. When the alarm rings, the patient rouses himself enough to take the medication and goes back to sleep. When a second alarm goes off, the medicine is approaching peak blood level an hour later, giving the individual a fighting chance to get out of bed and start his day.





A second approach is more high-tech, based on evidence that difficulty waking in the morning is a circadian rhythm problem.

The use of sunset/sunrise-simulating lights can set people's internal clocks with Delayed Sleep Phase Syndrome. As an added benefit, many people report that they sharpen their sense of time and time management once their internal clock is set correctly. The Sun is, fortunately, a natural resource in South Africa.

Disturbances of sleep in people with ADHD are common but almost entirely ignored by our current diagnostic system and ADHD research. These patterns become progressively worse with age. Recognition of sleep disturbance in ADHD has been hampered by the misattribution of the difficulty falling asleep to the effects of stimulant-class medications. We now recognise that sleep difficulties are associated with ADHD, and stimulant-class medications are often the best treatment for sleep problems rather than their cause.

