

Sleep Disorders

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SLEEP DISORDERS AND THE EFFECTS ON THE BODY

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I picked the topic of sleep disorders and what they do to the body because I am really interested in this and would like to obtain a better understanding of how they affect the human body and the mind. I will be doing research on seven different sleep disorders and their effects. Sleep walking otherwise known as somnambulism. It usually happens when you're going from a deep stage of sleep to a lighter stage of sleep or coming awake. (Fast Company, 2015.) You can't respond normally and don't remember doing it.

Insomnia is the second disorder I will be researching. It usually happens because high levels of stress, certain medications, anxiety or depression. (Fast Company, 2015.) A common sleep disorder that can make it hard to fall asleep, hard to stay asleep, or cause you to not be able to go back to sleep when waking up. It can affect your energy level and mood but may also affect your health and work or school performance and quality of life. (Mayo Clinic. (2020). *Insomnia*) Most adults require seven to eight hours of sleep a night. There are two types of insomnia: short-term or acute insomnia which can last days to weeks. This can be brought on from stress or a traumatic event. Long-term insomnia or chronic insomnia can last for months or more. This is usually associated with other medical conditions or medications. Some symptoms of insomnia can include difficulty falling asleep at night, waking up at night, waking up too early, not feeling well rested after a night's sleep, daytime tiredness, irritability, depression, or anxiety, a hard time focusing on a task and remembering, and an increase in errors or accidents. (Mayo Clinic. (2020). *Insomnia*) Some of the common causes for insomnia are stress, travel or floating work schedule, poor sleep habits, and eating too much before going to bed. Medical conditions such as chronic pain, cancer, diabetes, heart disease, asthma, acid reflux, overactive thyroid, and Parkinson's can also cause insomnia. There can be complications to chronic insomnia as well; these can include lowered performance on the job or at school, slower reaction time while

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driving, mental health disorders and the elevated risk for long term diseases or conditions, elevated blood pressure and risk of heart disease.

Sleep apnea is a disorder where a person stops breathing for a short time period.

It usually is a complete or partial blockage of the throat. (Fast Company. (2015).) The common treatment is the use of a cap machine. Sleep apnea does more than make you sleepy. When left untreated it can lead to heart disease, diabetes, long term health risk. (Healthline. (2020). *The Effects of Sleep Apnea on the Body.*) Depression, memory loss, mental confusion, weakened immune system, high blood pressure, breathing problems, adult asthma, acid reflux, liver problems, abnormal cholesterol, fatigue, and elevated blood sugars. People with sleep apnea are more likely to develop insulin resistance. (Healthline. (2020). *The Effects of Sleep Apnea on the Body.*) sleep apnea can affect the digestive system, respiratory system, circulatory system, and the cardiovascular system. It can cause dry mouth in the mornings, sore throat, trouble paying attention, and irritability. One important thing to remember with sleep apnea is that the c-pap machine that used to prevent the episodes must be cleaned daily . If it is not properly cleaned it can grow harmful bacteria that can cause further problems to a patient.

Restless leg syndrome is a common disorder however other than me knowing that people get the urge to make their legs when trying to fall asleep. Restless leg syndrome is a nervous system disorder that causes an overpowering urge to move your legs. It is also called Willis-Ekbom disease. (WebMD. (2020). *Restless Legs Syndrome (RLS)*) It happens or gets worse while you are resting or sitting for a long period of time. Restless leg syndrome affects ten percent of the people in the united states. Anyone can get it, but it is more common in woman and middle-aged people are more likely to have severe symptoms. (WebMD. (2020). *Restless*

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Legs Syndrome (RLS)) Symptoms can include an unusual feeling in the legs such as itching, crawling, pulling, aching, throbbing, or pins and needles. This causes people to move the legs to get it to go away. (WebMD. (2020). *Restless Legs Syndrome (RLS)*). It can happen in both legs at once or both legs. It can also happen in the arms and chest starting on one side of the body and move to the other side of the body. It comes and goes and can be mild to unbearable at times. Doctors don't know what causes it, but genes may play a roll in it. They think it might be tied to chronic disease including iron deficiency, diabetes, kidney failure, renal disease, and peripheral neuropathy. Medications such as anti-nausea medications, antipsychotics, and some anti-depressants. Pregnancy especially in the last trimester, alcohol, tobacco, and caffeine use. Lifestyle such as lack of sleep and sleep apnea. I have restless leg syndrome but it affects only my left leg and my left arm. I thought this was odd until I did the research and learned that it is common. It does prevent me from being able to fall asleep easy. When it acts up I have to take my prescription medication to help relax the arm and leg.

Sleep paralysis, researchers conclude that in most cases sleep paralysis is simply a sign that your body is not moving through the stages of sleep. Rarely is it linked to psychiatric problem, (WebMD. (2020). *Sleep Paralysis*) It is the feeling of being conscious but not able to move or speak. It occurs when a person passes between stages of wakefulness and sleep. Sleep paralysis may accompany other sleep disorders such as narcolepsy. It occurs at one of two times. When falling asleep called hypnagogic or preorbital sleep paralysis or when you are awake called hypnopompic or postdormital sleep paralysis. (WebMD. (2020). *Sleep Paralysis*) In hypnagogic sleep paralysis as you fall asleep the body relaxes. You become less aware, so you don't notice the changes. If you remain aware falling asleep you might notice that you can not move or speak. In hypnopompic sleep paralysis the body moves between REM sleep and NREM

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sleep. During NREM sleep the body relaxes and restores itself. At the end of NREM your body moves to REM sleep. The eyes move quickly, and dreams happen, but the rest of the body is relaxed. If you become aware before the end REM cycles finishes you may notice that you cannot move or talk. (WebMD. (2020). *Sleep Paralysis*) People who are experience factors such as lack of sleep, sleep schedule that change, mental conditions such as stress or bipolar disorder, sleep on their backs, narcolepsy, night leg cramps, certain medications such as medications for ADHD and substance abuse(5) may be at higher risk for sleep paralysis.

Rem sleep behavior disorder, all I know about this is that a patient can act out what is happening in their dreams. It is when the mechanism in the brain that prevents motor movement while asleep doesn't function properly (Fast Company. (2015).) REM sleep behavior disorder is a disorder in which you physically act out vivid, often unpleasant dreams with vocal sounds and sudden often violent arm and leg movement during REM sleep. It is also called dream-enacting behavior. (Mayo Clinic. (2020). *REM sleep behavior disorder*) The onset of REM sleep behavior disorder is usually gradual and can get worse over time. It may be associated with other neurological conditions such as Lewy body dementia, Parkinson's disease, or multiple system atrophy. (Mayo Clinic. (2020). *REM sleep behavior disorder*) Symptoms of REM sleep behavior disorder may include kicking, punching, arms flailing, or jumping out of bed, in response to action filled or violent dreams. (Mayo Clinic. (2020). *REM sleep behavior disorder*) Noises such as talking, laughing, shouting, and emotional outcries, cursing and being able to recall the dream if awaking during the episode. (Mayo Clinic. (2020). *REM sleep behavior disorder*) The cause, nerve pathways in the brain that prevent the muscles from moving are active during REM or dreaming sleep, resulting in temporary paralysis of the body. In Rem sleep behavior disorder these pathways no longer work and you may physically act out your

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dreams. (Mayo Clinic. (2020). *REM sleep behavior disorder*) Factors associated with the development of REM sleep behavior are being a male over 50 years old, a female under age 50, young adult or children with narcolepsy, antidepressant use, or brain tumor.(Mayo Clinic. (2020). *REM sleep behavior disorder*) People who have Parkinson's disease, multiple system atrophy, stroke, or dementia with Lewy body. Medications such as antidepressants, or withdrawals from drug or alcohol use. Complications from REM sleep behavior may include distress to your sleep partner or others that live in the house, social isolation for the fear that others may become aware of your sleep disruption and injury to yourself or sleeping partner.

Night terrors is caused from sleep deprivation, illness and or some medications. (Fast Company. 2015) My son had them when he was younger. Night terrors are episodes of intense screaming, crying, thrashing, or fear during sleep that happen again and again, usually in children ages 3 to 12. New cases peak at age 3 1/2. (WebMD. (2020). *Night Terrors*) There are two different types of sleep, REM sleep or rapid eye movement and NREM non rapid eye movement. Rem sleep usually happens about ninety minutes after a child falls asleep. About 1 to 6 in 100 children have night terrors, also known as sleep terrors. They happen to both boys and girls, and to children of all races. (WebMD. (2020). *Night Terrors*) There is a difference between a night mare and a night terror. The difference being that a child will usually not remember a night terror after it happens. They may not remember it till the next day. It can be really hard to wake a child up during an event of a night terror. Children with night terrors may have an increased heart rate, fast breathing, sweating or dilated pupils. (WebMD. (2020). *Night Terrors*) During a night terror a child may sit up in bed, flail around, scream, seem like they do not know their parent, not talk or not respond when a parent is trying to comfort them. (WebMD. (2020). *Night Terrors*) This can last a few minutes or up to a half hour before the child will relax and go back to sleep. Night terrors are

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not dangerous, but they can lead to sleep problems. About half the children with night terrors end up having sleep a disorder that requires them to see a provider for. There are many different things that can trigger a night terror some of them are, stress, depression, anxiety, fever, too much caffeine, sleeping in a different place or away from home, lack of sleep, medications that affect the central nervous system, restless leg syndrome, sleep apnea, and recent anesthesia from surgery. (WebMD. (2020). *Night Terrors*) Night terrors can usually be diagnosed by a provider based on their medical history and a physical exam. (WebMD. (2020). *Night Terrors*) Most children outgrow night terrors as they get older. In rare cases, if the episodes are affecting your child's daily activities (for example, how they're doing in school or their relationships with friends and family), their doctor might prescribe low-dose benzodiazepines (such as clonazepam) or tricyclic antidepressants (such as imipramine). (WebMD. (2020). *Night Terrors*) There are some things a parent can do to help reduce the night terror episodes such as make the bedroom safe so the child will not get hurt during a night terror, get rid of any thing that may disrupt the child's sleep such as electronic screens or noises, try to lower the child's stress level, Make sure your child gets enough rest. Don't let them become too tired or stay up too late, create a relaxing bedtime routine, and stick to it, Keep the same wake-up time every day. (WebMD. (2020). *Night Terrors*) Don't wake your child during an episode. It can make them even more confused, and they might take longer to go back to sleep. Try to wait it out, and make sure they don't get hurt by thrashing around or tripping on something in their room. (WebMD. (2020). *Night Terrors*) If the child has night terrors there are some things you can do that might help. First, note how many minutes after bedtime the night terrors start, wake your child 15 minutes before the expected night terror, and keep them awake and out of bed for 5 minutes. you may want to see if they'll use the bathroom, continue this routine for a week. (WebMD. (2020). *Night Terrors*) Night terrors are usually short cycles and most children outgrow them by the time they are

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teenagers. My son suffered from night terrors for about a year when he was six years old. It was very hard to watch him go through the episodes and not be able to really help him at the time. I did a lot of the recommended things I wrote about. They lasted about a year and have gone away.

In America, about seventy percent of adults report they obtain insufficient sleep at least one night a month, and 11% report insufficient sleep every night. (SleepHealth. (2020)) It is estimated that sleep disorders affect about 50 to 70 million Americans of all ages and socioeconomic classes. Sleep disorders are common in both men and women; however, important disparities in prevalence and severity of certain sleep disorders have been identified in minorities and underserved populations. (SleepHealth. (2020)) Lack of sleep has been identified as a growing involvement in on-the-job incidents, car accidents and more. The National Institutes of Health predicts that America's sleep debt is on the rise and that by the middle of the 21st century more than 100 million Americans will have difficulty falling asleep. (SleepHealth. (2020)) Over 50 million people suffer from over 80 different sleep disorders and 20 to 30 million suffer from intermittent sleep problems. The impact on American life and economy is enormous as sleep deprivation and untreated sleep disorders are estimated to cost over \$100 billion annually in lost productivity, medical expenses, sick leave, property, and environmental damage. (SleepHealth. (2020))

As I did the research for this paper, I was shocked to learn that there were so many different types of sleep disorders. Sleep deprivation can affect not only the mind but also how someone functions during the day. They can feel tired, have a hard time focusing, be less attentive, have poor job performances, suffer in their school life as well as home life. A lot of the symptoms are the same for many of the disorders. Not being able to focus, feeling tired or worn down, impact on the home life as well as work or school, and cause accidents. Many people suffer from a sleep disorder and

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never know it and receive no treatment for it. I suffer from insomnia and use over the counter medication to help me fall asleep. The big thing I have noticed with this is that the longer I use them the more I must take for them to work. I think this is a growing problem in todays world. So many people don't have health insurance they can not afford to go to the doctors so they self-treat at home. Not knowing the risks, it involves. In doing this paper I have taken in so much new information about something that is a huge problem. I now have a better understanding for just a small portion of such a huge problem.

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