## Sleepwalking: causes, treatment, and prevalence in the population research paper ...

Psychology, Behaviorism



Sleep is one of the most mysterious actions the human brain undertakes. Science has been studying the sleeping brain for many years using a vast array of different methods, and while it has come to some conclusions about the nature of sleep, by and large, sleep remains a mystery. One of the more puzzling types of sleep phenomena is the phenomenon of sleepwalking. Sleepwalking is certainly fascinating for the general public, and many different myths have sprung up around sleepwalking and sleepwalkers. Sleepwalking is clinically known as somnambulism or noctambulism, and it affects people during a very specific type of sleep (Ohayon et al.). It is a sleep disorder in the parasomnia family, and sufferers are affected during the slow-wave sleep cycle. During slow-wave sleep, the individual is in a very deep type of sleep that is characterized by non-rapid eye movement (Crisp et al.). For the most part, the activities that people participate in while sleepwalking are generally normal, routine activities that the person may participate in on a regular basis, such as cleaning, walking from room to room, or even turning on the computer (Crisp et al.). The National Sleep Foundation says that there are many complex behaviors often associated with sleepwalking, although walking is the most commonly-noticed and most obvious of these symptoms. According to the National Sleep Foundation: " Symptoms of sleepwalking disorder range from simply sitting up in bed and looking around, to walking around the room or house, to leaving the house and even driving long distances. It is a common misconception that a sleepwalker should not be awakened. In fact, it can be guite dangerous not to wake a sleepwalker" (National Sleep Foundation). The myth of not waking a sleepwalker can be dangerous for both the sleepwalker and the people

around the sleepwalker, especially if the sleepwalker is participating in risky behavior.

There have been cases where the sleepwalker participates in more risky behavior, however; for instance, there have been reports of sleepwalkers driving, cooking, or even participating in sexual activity during their sleepwalking episodes (Crisp et al.). This is problematic because while any of these things may be acceptable for an autonomous adult, a sleepwalker is in no position to entirely consent to such behavior, or to take responsibility for the consequences of their actions while they are sleeping (Crisp et al.). There has even been a case of a man stabbing his wife 26 times while in a sleepwalking episode and being acquitted of it by the court because the court found that he could not be responsible for his actions during such an episode (Martin).

Unlike many sleep disorders, sleepwalking is not a disorder that is limited to childhood or adulthood. Many individuals who present with the disorder have developed it in their adult lives, although children can be prone to the disorder as well (National Sleep Foundation). According to the National Sleep Foundation, anywhere from one percent to fifteen percent of the population presents with sleepwalking at any given time; the numbers are not solid because the individual often has no idea that he or she is participating in sleepwalking behavior, and the behavior requires reporting from a third party to be recognized (National Sleep Foundation).

However, sleepwalking is much more likely to be found in children than adults, and children are likely to outgrow the behavior as they grow older. Scientists and researchers who study sleep disorders suggest that this is

because sleepwalking can be caused by restless sleep. According to the National Sleep Foundation: "The prevalence of sleepwalking is much higher for children, especially those between the ages of three and seven, and occurs more often in children with obstructive sleep apnea. There is also a higher instance of sleepwalking among children who wet the bed. Sleep terrors are a related disorder and both tend to run in families" (National Sleep Foundation). In short, sleepwalking seems to be comorbid with a number of other sleep disorders in children, although it is unclear why. Similarly, sleepwalking seems to have some aspect of a genetic component, as twins are more likely to share the disorder (Hublin et al.). Most studies have found that children have a higher onset level for sleepwalking, but that their likelihood of suffering from the disorder is much higher if they have another parasomnia disorder (Hublin et al.). Generally, children present with any number of a variety of symptoms, such as sitting up in bed, walking around guietly, talking, or even moving around the room in a highly agitated manner (Hublin et al.). According to Hublin et al., a child is far more likely to present with sleepwalking symptoms if a twin or other close relative also presents with these symptoms (Hublin et al.). Hublin et al. suggest that this is partially a genetic inheritance factor, but could also be a combination of genetics and the sleep environment.

Researchers are unsure of what causes sleepwalking in its entirety, but they are relatively certain that certain environmental factors can play a large role in the presentation of symptoms, particularly in adults (Kales et al.). Alcohol, hallucinogenic drug, or even prescription sleeping pill usage can trigger the presentation of sleepwalking symptoms in adults without these adults even having had an episode before (Kales et al.). Similarly, in times of great stress, adults are more likely to present with sleepwalking symptoms, and sleepwalking symptoms are more likely to be present in adults with disorders on the schizoid spectrum (Kales et al.). This comorbidity indicates that a restless mind or inability to fully relax, even while sleeping, may play a large role in the presentation of sleepwalking symptoms (Kales et al.). Treating sleepwalking symptoms first requires the recognition of sleepwalking behavior in the individual. After that, treatment depends on the sleep expert's opinion as to why the individual is sleepwalking. If he or she is sleepwalking due to some potentially comorbid condition like obstructive sleep apnea or bed-wetting, the sleep researcher may choose to treat that condition first, in the hopes that the sleepwalking episodes may lessen or

subside over time (Frank et al.).

In children, Frank et al. suggest that the use of scheduled awakenings throughout the course of the night may help prevent sleepwalking episodes in children who present with heavily active sleepwalking episodes. These scheduled awakenings help to disrupt the sleep cycle just enough so that the children do not fall into the type of sleep that they will sleepwalk during (Frank et al.). Frank et al. suggest that parents wake their children a few hours after bedtime, and then again around the time that the children usually sleepwalk-- the researchers found this to be a very effective method for treating sleepwalking episodes in children.

Sleepwalking is one of the more confusing actions that the brain takes while sleeping, but fortunately, it is not necessarily a dangerous or destructive disorder. The treatment of sleepwalking is necessary only in the most extreme cases; for the average person, sleepwalking can be cured by merely practicing better sleep habits and providing oneself with a better sleep environment. In children, sleepwalking can be scary for a parent, but understanding the routine of the child's behavior can help to alleviate the problem in the long term.

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