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MONOGRAPH
“SLEEP DISORDERS TODAY”

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Gratitude

I would like to thank my classmates, teachers, my school and my family for always encouraging me to give my best, teach me everything I know and want to always give the best for myself and others, for being a support day by day. To my school that welcomed me since I was little and it is where I have the best memories, learning's and values that instilled me and gave me a beautiful family.

Summary

As we know the sleep disorders are problems, related to sleeping and it's not very well known in the world, this monograph is an investigation of the impacts disorders makes in our body and the daily life, the types of disorders, how they appear, how they can be detected or if they have a cure, only a few persons suffer this types of disorders there is no age or . The sleep has an architecture that is conformed by different phases that help us to fall asleep, these phases are: Phase I also called sleep stage, Phase II or light sleep stage, Phase III or transition stage, Phase IV Delta sleep stage, REM sleep phase, when these phases are affected is when you detect sleep disorders.

As time goes by, the number of sleep disorders increases, or being discovered through the technology advances, may be related to problems falling asleep, falling asleep at inappropriate times or abnormal acts at the time of sleep. These disorders, can affect as much to children as to adults, they have serious and minor effects in the health of those who suffer it, the one that is mainly affected is the memory, since to the absence of sleep it is difficult to remember the things because the brain is not working correctly, the absence of sleep takes away also energy and many times it affects the emotional and psychological health, many people have hallucinations or blurred vision, even food and metabolism of the person are affected by lack of sleep, This investigation has included in-depth information about the origins of the sleep disorders.

It is supported by the scientific documentations that confirms the significance of correct sleeping

behavior. In addition, there may be additional facts that show how high the degrees of stress and and anxiety can lead to this syndrome.

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Introduction

The following monograph is an investigation of *sleep disorders today*, which has the purpose of recognizing the effects of these events and the relevance that they have in our society to be considered as an illness. This topic is very important because many people have sleeping disorders and do not know why they are produced, the effects they cause to health and how they must should be treated, this is an issue that has been treated for several years.

There is some research by medical institutes, including doctor's books that deal with this topic, showing more than 100 different types of disorders. This is an issue that should be made aware and their research is extremely important because they cause problems in the health of the person or people who suffer from it, is common in people, and has no specific age to suffer from this. It can occur at some stage of life, some are witness in old age, others as children or adults, but at some point in life we will present one, the most common is insomnia, which according to studies can be controlled by pills to be able to sleep. Since 1999 we have been seeing books and documents that try to explain the types of disorders and to what they are due.

This monograph is divided into three chapters in which: The first chapter deals with sleep disorders, the stages of sleep, the general relationship between sleep and behavior and sleep psychology, this chapter wants to give basic and necessary information to those who resort to it. The following chapter deals with the types, treatments and origins of these disorders, the third chapter talks about the benefits that come from having a good sleep and on the contrary the damages that this brings when not having it.

Chapter I

Sleep disorders today

As the years go by, we have seen an increasing number of sleep disorders. What do they consist of? These disorders consist in events that occur before, during or after sleep, they may affect all kinds of people, but are often seen in children and adolescents, given by emotional problems; some have greater affectations than others. You must have knowledge of the normal dreams in order to be able to make a diagnostic and provide the treatments for these disorders. "Knowing the physiology of sleep disorders is crucial to making a good assessment along with collecting a careful history of the child's current sleeps habits including: where he sleeps, when he sleeps, and the parents' response"

(Hernandez,2010.p.3)

1.1 Sleep architecture

In order to be diagnosed, a polysomnography must be performed, which is divided into three phases, the electroencephalogram (EEG), the electro-oculogram (EOG) and the electromyogram. (EMG), it takes a period of 8 to 10 hours for the identification of the following stages.

The first stage is the vigil, Hernandez (2010) says: "before starting the dream, the person is awake, relaxed and with his eyes closed."(p.88) With electroencephalogram it is possible to record the alpha activity mixed with the beta activity. The eyes movements are present and it can be evidenced that the muscle tone is quite high.

The other stage is slow sleep or also known as non-REM sleep: there are no rapid eye movements here. This is known as deep sleep, in which it is difficult to wake up a person, if

you can do so it appears bradypsychic which is the disorientation of the person. It can also be characterized by a decrease in the body movements, muscle tone in the extremities and the predominance of heart and respiratory frequencies, blood pressure and temperature. It is comprised of 4 stages of progressive deepening:

- Stage I: onset of drowsiness. The alpha activity is decreased and mixed with an unsynchronized activity which is composed of beta and theta waves. The person progresses to a deeper sleep.
- Stage II: It is a phase of light sleep where Theta is present.
- Stage III: It is the medium sleep. It predominates delta.
- Stage IV: Phase where deep sleep occurs. There are only high amplitude delta waves so it is monomorphic.

The last stage is the REM Sleep or also known as paradoxical sleep there are rapid eye movements, the electroencephalogram looks similar to how they occur in stage I and II, but in the electromyogram there is a decrease in submental muscle tone, and in the electrooculogram the eye movements are fast, it is here where dreams occur. If the person is awakened in this state there is a sense of alertness, there is an increase in cerebral blood flow, changes in the nervous system, oxygen consumption and body temperature. In men, erections can be detected. There are deregulations in breathing and heart rate and blood pressure.

1.1.1 General relationship between sleep and behavior.

Sleep is a physiological process which is extremely necessary, the person is not completely in contact with the environment, at a conscious level. "Adequate sleep plays a critical role in early brain development, learning and memory consolidation, and on the other hand, sleep disorders are directly related to behavioural problems and poor emotional regulation" (Medwave,2003,pp. 587-597).

Waking up during the night creates an alteration in the architecture of sleep and a decrease in performance the next day, the activities that require concentration and dexterity are which are most affected by sleep disorders.

1.1.1.1 Sleep physiology.

Sleep physiology can be divided into REM and non-REM.

The stage of REM is very active, the cardiac and respiratory frequency is irregular, the oxygen increases and the person becomes poikilothermic, it gets cold, because it adjusts his temperature to that of the environment, this is where dreams appear since there is a lot of cerebral activity. This stage occupies a fundamental role in memory and learning which are consolidated in the non-REM stage.

The non-REM stage is divided into four in which sleep is deep and slow, breathing and heart rate, blood pressure and muscle tone remain constant, and body temperature remains stable. Its function is to restore the neuronal protein structure, so that there is an increase in the production of neuroendocrine factors, which is responsible for producing more growth hormone, and neurotransmitters and also immunological factors.

Madewave (2003) confirm that : The REM and non-REM stages are interspersed, and there are about four to five cycles during the 8 or 9 hours of night time resting. The typical sleep histogram in an adult is different than in a child.

The physiology of sleep is related to its contents, Hobson has established a model, which is based on that:

- Visual hallucinations are caused by the activation of the visual brain, by the process of activation of the pontine which affects the visual cortex.
- Intense emotions are produced especially anxiety, anger and rejoicing due to the self-activation of the amygdala and various structures of the limbic system.
- There are illusions that one is awake, loss of reflective consciousness, loss of logic and impossible sleep, is given by the combination and effects related to aminergic demodulation and selective deactivation of the frontal cortex.

“Today we know that the dream fulfills various functions according to age and individual; in

children small neurological growth and maturation are carried out during sleep; throughout life the immune system is repaired during the hours of dream, as well as the consolidation of the dream.

Memory, regulation of body temperature and the metabolism; among other functions” (Lira, 2010, p.33).

According to the age of the person, the hours of sleep vary, due to a complex system of genetic influence in which diverse patterns of sleep exist in the adult, several studies recommend that the patterns have a genetic base and that determine the average number of hours that each person must sleep (Custodian, 2010). People who have a short or long pattern have a greater risk of long-term mortality, compared to those who have a pattern of hours of intermediate sleep which are 14. Many times we fall asleep because we postpone sleep, the circadian rhythm is a type of internal clock developed by the brain itself, which

has an influence with the light that enters through the eyes to be regularized and allow us to have a regular way throughout our lives. (1,072)

Chapter II

Types, treatments and origins

2.1 Types of disorder

Aside from the ones caused by medical or psychiatric situations (i.e. Including melancholy, psychosis, and so forth.) and certain dozing illness, there exist huge forms of sleep problems: Parasomnias and Dyssomnias.

2.1.1 Parasomnias.

Parasomnias are a class of sleep disorders that contain ordinary and unnatural movements, behaviors, feelings, perceptions, and desires that occur while falling asleep, drowsing, among sleep stages, or in the course of arousal from sleep.

Rapid eye motion behavior disease is a parasomnia that involves strange conduct throughout the sleep section with fast eye movement (REM sleep). The main and arguably only atypical characteristic of RBD is loss of muscle atonia (paralysis) for the duration of in any other case intact REM sleep, which is the stage while greater dreaming occurs.

A night time terror, sleep terror or pavor nocturnus is a parasomnia ailment, inflicting feelings of terror or dread, and typically going on within the first few hours of sleep in the course of stage 3 or four non-speedy eye motion (NREM) sleep. Night terrors start among ages 3 and 12 years and then generally use up all through adolescence. In adults, they maximum generally arise among occur between the ages of 20 to 30. Though the frequency and severity vary between individuals, the episodes can occur in periods of days or weeks, but also can arise over consecutive nights or more than one instances in one night.

Though the frequency and severity vary between individuals, the episodes can occur in intervals of days or weeks, but can also occur over consecutive nights or multiple times in one night. Night terrors are largely unknown to most people, creating the notion that any type of nocturnal attack or nightmare can be confused with and reported as a night terror. (Hockenbury & Hockenbury, 2010, párr.8)

Sleepwalking, additionally referred to as somnambulism or noctambulism, is a sleep disorder belonging to the parasomnia own family. It essentially causes humans to arise and walk whilst sound asleep. Sleepwalkers stand up from the slow wave sleep stage in a kingdom of low focus and carry out activities which might be commonly done at some point of a kingdom of full attention. These activities may be as benign as sitting up in bed, taking walks to the bathroom, and cleaning, or as risky as cooking, using, violent gestures, grabbing at hallucinated objects, or even homicide.

2.1.2 Dyssomnias.

Dyssomnias are a broad classification of snoozing disorders that make it difficult to get to sleep, or to remain sleeping. They are number one disorders of starting up or preserving sleep or of immoderate sleepiness and are characterized by means of a disturbance in the quantity, great, and/or timing of sleep. Patients might also whinge of difficulty attending to sleep or staying asleep, intermittent wakefulness all through the night time, early morning awakening, or combos of any of those.

An instance of this sickness is narcolepsy or hypersomnia, which is a neurological sleep problem because of the brain's incapability to regulate sleep-wake cycles normally. People with narcolepsy revel in excessive daylight sleepiness and intermittent, uncontrollable episodes of falling asleep at some point of the daytime. Narcoleptics, while falling asleep, generally revel in the REM degree of sleep within 5 minutes, even as most people do no longer enjoy REM sleep until an hour or so later.

As defined through The Endocrine Society (2018), having excessive sunlight hours sleepiness (EDS) is the most common symptom of a patient experiencing any sleep disorder. And it makes experience whilst you reflect on consideration on it, if you aren't napping properly at night time it's far most probably that you will be very sleepy all through sunlight hours. Sleep apnea, narcolepsy, and idiopathic hypersomnia are the 3 maximum common sleep problems related to EDS.

2.2 Treatments

In a widespread idea, the simplest way to get assist for any sort of sleep problem that you'll be experiencing is to are searching for medical advice as soon as you can. It is the first-class manner to ensure what type of issues you are having and if it's far risky in your fitness. It is likewise essential to understand that sometimes a treatment does now not guarantee you a full recuperation.

For example, an affected person with narcolepsy can be significantly helped, however now not cured. Treatment is adapted to the man or woman, primarily based on signs and therapeutic reaction. The time required to gain most efficient manage of signs is relatively variable, and might take numerous months or longer. Medication changes are often important, and entire manage of signs is seldom feasible. While oral medications are the mainstay of formal narcolepsy remedy, way of life adjustments are also crucial. Madewave (2003) confirms that parasomnias are a class of sleep issues that contain unnatural actions, behaviors, emotions, perceptions, and desires that happen at the same time as falling asleep, napping, between sleep degrees, or throughout arousal from sleep.

In addition to drug remedy, an essential part of remedy is scheduling short naps (10 to fifteen minutes) two to a few instances per day to assist manipulate immoderate daytime sleepiness and assist the man or woman stay as alert as viable. Daytime naps are not a substitute for middle of the night sleep, particularly if someone's body is clearly inclined towards a nocturnal existence cycle. Ongoing communication between the fitness care issuer, affected person, and the patient's family participants is critical for premier management of narcolepsy.

When it comes to treatment there are some capsules that can be prescribed. As an example, for sleepwalkers a low dose of benzodiazepines, inclusive of clonazepam, and tricyclic antidepressants are quite effective. Many experts endorse setting away dangerous items and locking doorways and windows earlier than sleep to lessen dangers of harmful pastime even as sleepwalking. Good sleep hygiene and heading off sleep deprivation is also endorsed.

2.3 Explanation and origins

Along the years, human beings have emerge as referred to as a sure call in accordance to what 12 months they have been born into. By definition, generation is a collection of those who had been born around the equal time frame. For instance, the Baby Boomers is a term used to explain the people who have been born at some point of the infant increase, an event that took place in lots of Anglo-Saxons countries after the second international warfare, among the years 1946 and 1965.

The subsequent technology, born after the Baby Boomers, is understood by way of the call of Generation X and it's far fashioned by using the people who had been born among 1965 and 1980. Also, this era is the only that noticed the autumn of the Berlin Wall.

“Growing up, they heard presidential sound bites to tear down this wall and read my lips, and have witnessed the initiation of impeachment proceedings against a sitting President. They felt the steady support of protective parents” (Elam, Stratton & Gibson, 2007, párr.13).

One of the main traits of Millennials is their righteous capability of multitasking. Which has led them to earn the identity of the most enterprising technology. Now, they constitute the new work force within the international market and feature high aspirations. Half of them have already got or plan to open their very own agencies. Because in their virtual information and collective mind-set, they'll trade the way we produce and paintings within the future. By older generations this organization is keep in mind to be narcissistic, self-interested, unfocused, even lazy. This manner of considering the Millennials happens because they do no longer bear in mind the way in which they have got grown up. For this technology, it does no longer exist a fact without technology. (1,285)

Chapter III

Health benefits

3.1 Sleep deprivation

This procedure prevents an individual from sleeping for several hours or several days. This procedure has been performed since the last century with both animals and humans. The effects of sleep deprivation in humans are as follows:

- After 24 hours of deprivation an imprescriptibly need to sleep appears. The symptoms that stand out the most are fatigue, burning and dry eyes.
 - After three to five days without sleep there are alterations in vision such as blurred vision, dreams in vigil, hypnological images, illegible writing and difficult reading.
- Zimmer (1984) quotes that a Californian student managed to be on watch for 11 days and 12 minutes. To recover he only needed 15 hours of sleep. According to the cycles of wakefulness-sleep and temperature, it is unlikely that anyone spends more than 16 hours

sleeping without waking up. During sleep deprivation experiments, no lasting and serious psychopathological alterations have been observed experimentally. The symptoms produced by sleep deprivation, although in some cases they may be apparent, disappear after the first hours of sleep.

At the cognitive level the maximum essential changes are the subsequent:

- Arithmetic tasks. Decrease within the velocity at which operations are completed.
- Attention. The tasks that require non-stop vigilance are those who become worse most because of lack of sleep, particularly those obligations wherein selective attention is required to discard beside the point facts. The sluggish negative capability that precedes the ability evoked by means of an predicted stimulus (that's considered the neurophysiologic index of interest) decreases after one night of deprivation and disappears after two nights.
- Memory. Immediate memory is the only that suffers most from the results of sleep deprivation.
- Reaction time. In comparison with topics not disadvantaged of sleep, in the ones deprived of sleep the response time will increase, in particular while there are numerous signs and as time progresses.
- Deficit in psychomotor responsibilities

3.2 Emotional health

Having an exceptional sleep schedule can certainly not only give you more energy in your daily activities, but can also bring many health benefits to an individual and a family. Your daily life. It may not seem like it, but people in general are very aware of it, so even the

millenarians know how crucial it is to have a good night's sleep. As much as it has been treated which sleep impacts very favorably on your physical health on the opposite, lack of sleep can have many negative consequences on your emotional vigor which is as important as the physical. In fact, working all night can cause brain damage.

In addition, mood changes and temper tantrums also occur on a day when you don't sleep at all. In general idea, what this poll could analyze is that many Millennials seem to keep in mind that numerous the fitness troubles that they'll be having roots on their terrible slumbering habits but as plenty as they desire to trade this "lifestyles continues approaching their manner".

The problem is even more acute for those who suffer from insomnia chronic, since in them anxiety becomes a factor. especially relevant in the difficulty of falling asleep. Thus, the anxiety state, that is, the excessive anxiety reaction to a particular event. (Choris, 2009, p.56)

3.3 Sleep and activation

Excessive activation has been frequently used to explain the look of issues of conciliation and maintenance of the dream. We group under this heading both physiological and cognitive activation, on the grounds that each kinds of arousal have shown an instantaneous courting with the issues inside the conciliation and preservation of sleep. One of the maximum enormous conceptions about the traits of the insomniacs changed into that people who frequently suffer from this disease must have a higher diploma of autonomic activation than people who sleep with normalcy.

“This assertion is known as the "Monroe hypothesis" and is based on the author's research, which postulated that we can distinguish insomniacs from non-insomniacs on the basis that the former presented higher indicators of sympathetic activity” (Monroe, 1967, p.101).

Relaxation-primarily based treatments are more effective than placebo or untreated manage companies in intervening in insomnia.

- These results are corroborated with the aid of studies in which EEG interest became recorded.

- There aren't any large differences in the differential efficacy of rest-based totally strategies.

- The effects received are statistically significant, however clinically modest. More rigorous studies are wanted.

Espie (1991) gathers the results of 32 investigations in which the effectiveness of different procedures based on relaxation is compared, such as systematic desensitization, classic conditioning, biofeedback and techniques of progressive muscular relaxation and autogenous.

Either way, treatments based totally on rest in practice are constantly observed through other behavioral approaches. Designed to regulate habits and cognitions that have an effect on sleep, which makes which considerably increase their effectiveness. In fundamental research you can it'd be exciting to discover the differential effectiveness of the one-of-a-kind procedures used in the remedy of insomnia, however inside the remedy of insomnia. Clinical practice, professionals use a aggregate of techniques to attain most therapeutic advantages. The efficacy of these techniques in maximum instances is an awful lot more

than the only this is used. Produced with the aid of pharmacological treatment. McClusky, Milby, Switzer, and Williams as compared the effects of a behavioral treatment (stimulus manage and rest) with every other pharmacological remedy (triazolam). Although the triazolam organization received therapeutic results greater hastily than the behavioural institution, the results had been now not sustained after of entirety of remedy, at the same time as the behavioural group retained the therapeutic advantages for the duration of the follow-up period.

Sleep is considered a simple necessity for the survival of the organism and has traditionally been conceived as a number one purpose, within the same line as hunger or thirst. Although the characteristic of sleep remains the situation of controversy, the reality is that it represents an unavoidable need that becomes extra compelling even than other organic motives. Despite this, sleep is an pastime that can be critically tormented by more than one and various psychological, bodily or physiological variables unrelated to this can also disrupt it to a greater volume than different reasons or need. (1.026)

Conclusion

- Sleep disorders occur at any stage of a person's life, can occur one or several times as the case may be, each case has an appearance and effect different from the others.
- People can be classified according to the quality of sleep as bad sleepers, good sleepers.
- Is one of the most common disorders today, the most commonly seen are insomnia which can be treated with pills and the sleep paralysis which has no treatment.
- There are cases of very mild suicides due to sleep paralysis, because it is usually strong in some people, is that a part of your brain does not wake up and you keep dreaming, but you can not move and often see terrifying things, many people who suffer from this are afraid to sleep because they do not know that they will see or if this will be stronger.
- Sleeping well, helps us to grow and have a greater learning, and to be able to have a day to day more progressive and in our favor.

- Sleep fragmentation is determined by frequent awakenings during the night, which leads to an alteration in sleep architecture and a decrease in performance the next day; functions requiring concentration and dexterity are the most affected by sleep disorders.
- It is difficult to find any disease that does not alter nighttime sleep or the tendency to sleep during the day. For this reason, the classifications have sought to classify sleep disorders as their own illnesses and not only as symptoms.
- Among the sleep disorders we also find respiratory disorders and it is an alteration in the breathing at the time of sleeping, which is reduced due to a cardiac or central nervous system dysfunction.
- The sleep disorders, also included different types of syndromes. (302)

Recommendations

The recommendations after writing this monograph are that usually people, especially teenagers, don't realize the damage they cause by not having the necessary hours of sleep. Not sleeping well is the main door that opens disorders such as insomnia, sleep paralysis, sleepwalking and others. They must have a healthy diet as this also resorts to the mental health of sleep.

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