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Sleep Disturbances
&
Healthy Sleep

by

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Introduction

Sleep disturbances are a very common problem. In industrialized nations especially, many people suffer from some form of sleep disturbance. Data about the frequency varies between twenty-five and fifty percent of the population.

Sleep disturbances are not illnesses in the real sense of the word. They are symptoms of a variety of physical, mental, and spiritual impairments. Before we begin looking more closely at sleep disturbances, let us ask ourselves: What is sleep? Why do we need to sleep? Where are we when we sleep?

If we can get some insight into these questions, then we will be able to find answers as to why so many people today suffer from sleep disturbances. We must ask ourselves what the meaning is behind sleep disturbances, what are their causes, in order to finally understand how we can counteract them.

Basics about Sleep

What is Sleep?

People sleep the equivalent of one-third of their lifespan. About eight hours of sleep per night adds up to nearly three thousand hours per year. Calculating from an average life expectancy of seventy years, that adds up to about twenty-four years of sleep. The essential aspect, however, is the rhythmic alternation between waking and sleeping; everyday begins a new with approximately eight hours work, eight hours for ourselves, for free-time activities and family, and eight hours of sleep.

What Do I Do When I Sleep?

When we are tired in the evening we lie down. We go from the typical, upright human posture to a horizontal posture. As we fall asleep, what takes place? Consciousness vanishes. Everything around us remains as it was, but we do not perceive anything through the door of our senses. In contrast to comatose states or induced unconsciousness, we can still be awakened. During sleep, our perceptions of sorrow, delight, happiness, and worry are temporarily erased. Also pain is not felt. As long as I can feel pain I am awake. When I am able to fall asleep, the perception of pain disappears even though the cause is still present. We move during sleep, but it is involuntary, undirected movement. (During sleep-walking [somnambulism] the person moves without the participation of the consciousness.)

During sleep our conscious, mental activities such as thinking, feeling, and willing are dulled. We lay in bed without any conscious activity and when we awaken the next morning we are rested, refreshed, and strengthened. Our tissues have been supplied with more absorbent, watery-lively substance: We are rejuvenated. For example, our intervertebral discs have gained fluid and we are up to one centimeter taller in the mornings than in the evenings. We go to bed in the evening feeling tired and exhausted and we awaken in the morning feeling fresh and energetic. Is that not a miracle? These processes appear as a matter of course and we notice them only when something goes wrong.

During sleep the physical body lies in bed. However, the body does not disintegrate, as is the case after death; it lives. *The functions of building-up, growth, and regeneration are taking place more intensively during sleep than in our waking state.*

Where is the soul-spiritual part of us during sleep? A poem by Paul Ernst (1866–1933) about sleep gives us a beautiful answer to this question.

Sleep

You who release the limbs of all the living,
That man and beast may carefree rest,
Repose from every work is given,
Come near, oh sleep, at our behest.
God and angels hover, ever watchful, striven;
Their work like water flowing toward its valley quest,
While sleeping, we awaken to purposes grown high.
Our wider being must be awakened by the Sun grown nigh.
In sleep, throughout the Universe our soul is diffused
When first undisturbed by dreams it rests,
Because dreams are with reality still infused.
Softly beats the pulse, quiet comes the breath;
The soul, open still to worldly things, does not refuse,
As it does in blessed, silent death;
Oh sleep, impart to us the mercy to awake
And on a new day of divine, pious laughter partake.

In the night, human beings climb to the heights. Angels watch over them. We are closer to the divine/spiritual. The soul expands, lives in the surroundings, in nature, and the Universe. In a poem by Joseph von Eichendorff (1788–1857) we also hear that the soul spreads its wings “as if it were flying home.”

It was as though the sky
had silently kissed the earth,
so that it now had to dream of sky
in shimmers of flowers.

The air went through the fields,
the corn-ears leaned heavy down
the woods swished softly—
so clear with stars was the night

And my soul stretched
its wings out wide,
flew through the silent lands
as though it were flying home.

—Translation by J. Fogel

Rudolf Steiner described pictorially how our soul detaches itself from our body every night in order to strengthen itself within Divine substance. The source of the archetypical images which form and maintain the likeness of human beings is found in the cosmic, divine, spiritual. We cross the threshold into the spiritual world every night, but we do not enter consciously. The process of renewal that takes place in the physical body during sleep is only indirectly perceived in that we feel energized the next morning.

These nightly excursions are pictured by Johann Wolfgang von Goethe in an especially beautiful, description in the first act of part two of his play *Faust*.

Hovering around this head in circles airy,
Look that ye show the noble law of fairy:
Appease the furious conflict in his heart!
Draw out the burning arrows of remorse,
From suffered horrors cleanse his inmost part!
Four pauses makes the night upon its course:
Hasten to fill them with your kindly art!
His head upon a cooling pillow lay,
Then bathe him in the dew from Lethe's stream!
His limbs, cramp stiffened, soon will freely play,
When rest has made him strong for morn's new beam.
Perform the fairest elfin rite,
Restore him to the holy light!

—Translation by George Madison Priest

Fairies calm Faust; cleanse his inmost parts from “suffered horrors,” allow him to forget his sorrow, and strengthen his body so that when he finally awakens he is refreshed. The verse speaks of “four pauses makes the night upon its course.” In modern sleep research, sleep is divided also into four stages which occur in connection with the dream phases, the so-called REM phases (times of rapid eye movement behind closed lids).

Stage 1: Falling asleep
Stage 2: Light sleep
Stage 3: Middle-deep sleep
Stage 4: Deep sleep

Let us look once again at Goethe's poetic description. Do we not find described here in poetic images exactly what we know from today's modern sleep research? “Four pauses makes the night upon its course.”

Stage 1: “His head upon a cooling pillow lay.” This describes the transition between waking and sleeping, the falling-asleep stage.

Stage 2: “Then bathe him in the dew from Lethe’s stream.” Here Goethe uses an image from Greek mythology: Faust bathes in the Lethe, the stream of forgetfulness. In stage two of sleep we lose our normal consciousness as the spiritual-soul detaches itself from material processes.

Stages 3 and 4: “His limbs, cramp stiffened, soon will freely play when rest has made him strong for morn’s new beam.” Middle-deep sleep transitions relatively quickly into the deep sleep stage. Deep sleep is the deepest of all the stages. Above all, physical regeneration occurs during this stage. Body movements often appear at the end of this stage. Body movements guarantee the necessary feeling of refreshment after sleep.

Goethe also describes the soul-spiritual regeneration that corresponds to what sleep researchers refer to as the REM phase (dream phase) of sleep:

Appease the furious conflict in his heart!
Draw out the burning arrows of remorse,
From suffered horrors cleanse his inmost part!

From the viewpoint of modern sleep research, the REM phase of sleep is accorded a soul-cleansing function.

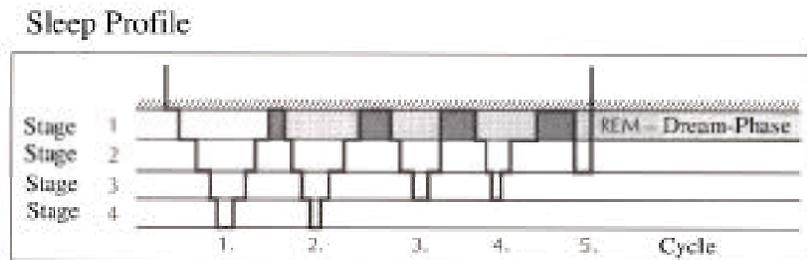
We see that during sleep we are in no way merely ruled by peaceful quietude and that the sleeping state is not passive, not “nothingness,” but rather something in which very much happens. Modern sleep research has also concluded that sleep is an active process, that the brain does not take a rest during sleep but only works in different ways than during the day, in some ways becoming even more active. This can be determined by an electroencephalogram, which measures electrical brain waves.

Recently, natural-scientific knowledge has confirmed the spiritual-scientific research of Rudolf Steiner: “Initially, sleep life remains unconscious, if it is not, in a certain way, riddled with dream life. But this does not signify inactivity, quite the opposite. Sleep life has a much more active inner soul life . . . than the waking life of soul.” Contrary to this, Nobel prize winner, Scott Sherrington (1857–1952) made his opinion known around the turn of the twentieth century: “When we sleep, the lights go out in our brain.”

Michel Jouvet (1972), one of the most prolific sleep physiologists, admits: “As long as we do not know in what way and why sleep imposes a necessary and regularly reoccurring change in our relationship to our environment, it is also impossible to give a definition of sleep. . . . In spite of all research efforts, the causes and mechanisms of sleep are still unknown to us.”

If we examine the content of fairytales, poems, and spiritual-scientific research, many thoughts appear which can lead us further. Current natural-scientific research results can easily be incorporated. In this way, some light can shine into the opaque and unknown nature of sleep.

First, let us take a closer look at the measured stages of sleep as they have been put forth by sleep research scientists. The sleep profile below outlines the sequence of the various phases of sleep.



After the first stage has ended, which is a transitional stage between waking and sleeping, the second stage, light sleep, begins. Many researchers see this second stage as the actual beginning of sleep. The third and fourth stages are often referred to together as the stage of deep-sleep. After a renewed transitional phase between waking and sleeping, there follows a completely new sleep quality, the so-called REM phase (dream-phase). Then a new cycle begins. In one night, this cycle is repeated four or five times. The deepest sleep phases occur in the first two sleep cycles. In contrast, the REM phases become longer with each succeeding cycle. Stages one through four (non-REM sleep) make up approximately seventy to eighty percent of the entire sleeping period; REM sleep accounts for about twenty to thirty percent. Approximately every ninety minutes a REM phase occurs which lasts twenty minutes on average but increases in length throughout the night. Deep sleep and REM sleep demonstrate a counteractive duration. After the first stage of falling asleep, sleep is deeper and therefore it is more difficult to awaken a person. Physical regeneration occurs mainly during the first stage. Towards the end of the night, dreams and soul-spiritual regeneration are at the forefront. One additional note: REM sleep makes up a larger proportion of total sleep time for children than for adults.

What Happens When We Dream?

In illustration of the sleep curve, we see that during the REM phases, we are very close to awakening. These dream phases are transitional stages; our soul-spiritual aspect has already partially immersed itself back into the physical body. Paul Ernst put it very aptly in his poem: "...because dreams are with reality still infused." Rapid eye movement (REM) is observed during this phase of sleep. This phenomenon was observed and first described by Aristotle in the fourth century B.C.

The outer world becomes the content of our consciousness through our sense perceptions. In contrast, our soul-spiritual aspect works from the inside

during our waking state. In other words when we are outside with another person, we are simultaneously intensively observing that person. We are “in” the flower we are observing. Steiner described how during sleep the soul-spiritual part of a person, which has immersed itself into the spiritual cosmos, reacts with us through our sense organs, such as the eyes, for example.

If we now look at the content of our dreams, we can determine that their origin and meaning are different. The following classifications have been known since Aristotle’s time.

Often dreams can be traced back to the soul life and are also referred to as *subjective* dreams. Wishes and various scenes from daily experience appear imaginatively decorated and altered. Dreams help us to work through our experiences. Further, what we have learned during the day penetrates our long-term memory. Dreams about people who have died belong in this category. Such a dream experience is a witness to the fact that we have previously been engaged with the dead person before, whether on a conscious or unconscious level.

There are dreams that have *physiological* causes, i.e. they are caused by physical processes. For example, if someone has a headache she might dream that she is crawling through a cave. Dreams about snakes often indicate irregularities in the intestinal tract. Bad air could be the catalyst for a nightmare. If someone dreams about a hot oven or a fire, then the cause may be fever or bedcovers that are too warm.

Finally, there are dreams caused by some outside *stimulus*. For instance, someone dreams a long, exciting story, with many details, in which someone falls. At that moment the person wakes up and hears the noise of some falling object in the room. The long, imaginative, dramatic, dream story plays out in a short moment of time. Time appears to stretch. Another example: We experience a terrifying fire in a dream, see a huge home go up in flames and hear the hissing of the fire. The trigger was a fire truck driving by outside with its sirens going that we perceived during our sleep. Or of a dream in which dogs are being chased away, the cause might have been a blanket that got bunched up in the wrong place and had to be pushed out of the way. In another case, a child had a dream in which the child wildly fought against a lion when his sister had thrown a pillow in his face. These dreams reflect reactions to direct, outside effects or perceptions and do not indicate psychological problems. The images are echoes from daily, waking life. There is something arbitrary about the way these dreams are formed. When the wild animal that is being repelled in the dream is a lion, then perhaps the child has consciously or unconsciously seen a picture of a lion during the day. The dream alters the waking sense perceptions into a creative, imaginative picture. When the soul is completely disengaged, these pictures sink and dreamless sleep begins.

Prophetic dreams in which clairvoyant perceptions are reflected are well-known. Rudolf Steiner pointed out that these dreams more often occur with people who are spiritually highly-developed and have gone through an appropriate training.

One should be careful and reserved regarding the interpretation of every dream. One can quickly fall into generalizations and schematizing psychology.

For an anthroposophical doctor the content of dreams is much less significant than their quality and quantity. When the spiritual-soul aspect of the human organism harmoniously takes hold of the enlivened physical aspect and then correctly detaches itself again during sleep, then an abundant amount of dreams do not occur. The frequency of dreams can be a key to revealing a person's constitution.

Rhythms of Sleeping and Waking

Sleep, and its organization of various phases, is indispensable to human life. However, the rhythmic alternation between waking and sleeping is just as important. Whereas researchers in the 1960s and 70s were more concerned with understanding the inner structure of sleep, the cyclic change from REM sleep to non-REM sleep, today many sleep researchers are more interested in the connection between the sleeping-waking cycle and other rhythms. It has been recognized that all of our life processes work rhythmically and that the rhythms inside the human organism are connected to the cosmic rhythms. *All body functions are subject to a twenty-four hour rhythm (Sun rhythm).* Interestingly, it is not an exact twenty-four hours because in the area of living things there is no exact linearity. So, in the above instance, one speaks of a *circadian rhythm* derived from the Latin "circa" meaning "about" and "dies" meaning "day." One prerequisite for our well-being is met if these rhythms in our human organism run synchronized with our environment, that is, if our microcosmic functions are in harmony with cosmic rhythms such as the rhythm of day and night or the rhythm of the seasons. If this harmony between inner and outer rhythms is missing, the result can be problems with existential orientation and illness.

Originally, human beings were more connected with these cosmic rhythms than they are today. People went to bed in the evening when it became dark and arose in the morning with the Sun. Today we know that light, which permeates the rhythm between waking and sleeping, is a very significant factor in physiological reactions. Sunlight is an important timer for our body's thermal system. Body temperature rises in the morning just before we awaken and sinks again in the evening hours. This is an expression of our human ego or "I." If this sinking, this letting-go, can not properly take place, then sleep is disturbed.

REM sleep follows a circadian rhythm. That means it is dependent upon the time of day. It reaches its maximum in the late nighttime hours and its minimum occurs in the late afternoon hours. Normally it takes ninety minutes for the first phase of REM sleep to appear. If a person goes to bed late the amount of time is shorter.

In contrast to the REM sleep rhythm, the so-called non-REM sleep is dependent only upon the time of wakefulness and not the time-of-day/light rhythm. The longer the time of wakefulness before sleep, the longer the portion of deep sleep. Deep sleep always reaches its maximum at the beginning of the sleep period. This means that in the case of shift work, for instance, deep sleep accommodates itself to the situation; physical regeneration is assured for the most part. In contrast, REM sleep, which is more responsible for mental/emotional regeneration, suffers when one goes to bed too late. From these facts it becomes clear that the old saying is true: "Sleep before midnight is the best."

Individuals can experience a relationship between their abilities and the time of the day. We can differentiate between a *morning person* and a *night owl*. Morning people have a tendency to get ahead of the daytime rhythm. They react quickly, and sometimes even overreact, to the activation that the morning brings. With night owls this active phase is put off to the nighttime hours. This postponement can even cause variations in rhythms of physiological processes like body temperature, for instance.

In a healthy person, the ideal ratio of respiration to heartbeat is 1:4. During the waking period it constantly changes. Sometimes the nerve/sense pole is more strongly active and respiration is at the forefront; then the metabolism/blood pole takes over and the pulse increases. However, during sleep the ideal ratio of one breath to four heartbeats is restored. The faster this coupling takes place, the shorter the sleep period can be while remaining restorative.

The morning-types tend to have a pulse-to-respiration ratio that is higher than 4:1. In contrast, when respiration is more prominent in relationship to the heartbeat it signifies a stronger nerve/sense impact, i.e. more tearing-down. Naturally, personal habits and professional or personal necessities play a role.

A regular rhythm, in accordance with a person's individual needs, contributes to synchronization with daily rhythm, even if it is forced by the ringing of an alarm clock. The well-known Monday-morning-tiredness is caused by lost synchronization that can come about due to sleeping later on the weekend, for example.

Just as the daily rhythm plays a role in the sleeping-waking rhythm and the rhythm of internal organs, the *seasonal rhythm* also has significance for human beings. Both rhythms are dependent upon the Sun. Even though the length of sleep periods is shorter in the summer, a high level of physical

performance is still possible. For instance, getting out of bed in the morning is easier in May and June and positive moods occur more often than in November and December when getting up in the morning is more difficult and depressed moods occur more easily due to a lack of light during shorter days and overcast weather.

According to today's sleep physicians, all of these rhythms make up the objective measuring rod for the quality of sleep. It has also been observed that sleep quality is not the same every day. Only the same days of the week can be compared; for example, Wednesday can be compared to Wednesday of the following week, but Tuesday can not be compared to Wednesday.

Mental performance is also subject to a daily and *weekly rhythm*. It decreases during the course of the week so that a pause on the seventh day is sensible and necessary. A different "weekly" rhythm instituted for practical reasons (a ten-day week, for example) lacks a physiological basis and can cause a person to become ill. Modern, natural-scientific research increasingly confirms evidence from spiritual-scientific research.

Lunar rhythms, that is, rhythms derived from the Moon's orbit, also have an effect upon human life. A woman's hormonal rhythm, a pronounced lunar rhythm, can affect her sleep. To the best of my knowledge it has not been scientifically described, but is definitely observable, that there is a connection between dream life and the Moon phases. Steiner pointed out the stimulation of the imagination from the Moon.

Not only do we find such biological rhythms which correspond to the full length of the cosmic-earthly rhythms, but we also find such rhythms based upon cutting the larger rhythms in halves or quarters. For instance, there is a *four-hour rhythm* during the day; after fours have passed, sleepiness becomes noticeable. Scientifically, these are referred to as sleep-window periods which can be used to advantage by people who have trouble falling asleep. The *ninety-minute rhythm* (amount of time before the first REM phase begins) also plays a role during the day. During this time, lack of concentration, fatigue, or even sleepiness can temporarily be experienced.

The Significance of Sleep

Everything that happens during the waking hours has significance for sleep, both quantitative and qualitative. Just as the length of our waking period affects our deep-sleep period, that which we think, feel and do during our waking hours is also significant to our life of sleep. Conversely, the possibilities for us during the day are influenced by what happens during sleep in terms of wonderful, wisdom-filled building-up, or also that which is perhaps disturbing.

Sometimes dreams are a type of physical self-knowledge. As has already been described, dreams can indicate the inner organic life of a person.

However, dreams also play an important role in a person's ability to learn and mentally-emotionally process what has been experienced during the day. We can see that these nightly pauses are of great significance and also how important it is to go to bed at a proper time. For instance, getting enough sleep before a test can be more useful in terms of results than studying long hours the night before.

Steiner described how dreamless sleep also works toward gaining knowledge. The interruption of the stream of memory which happens during sleep makes it possible for people to come to a better idea of their own selves and help them not lose themselves in the outside world. A sense that answers to questions we have can be found in the night from spiritual beings (angels, people who have passed away, and so forth) is apparent in these sayings: "Sleep on it;" and "Sleep over important decisions for three nights." Continuity of daily experiences can be ensured only through remembrance. Every day we must again take hold of the thread anew on this side and every night on the other side. In this way we can always take hold of our destiny anew.

Steiner said that sleep was more important to life than food. Modern science has reached a similar conclusion. Food deprivation can be endured longer than sleep deprivation. Absolute insomnia can not be survived for more than a few days. Resistance is quickly worn down, and psychological symptoms such as hallucinations and experiences mimicking alcohol-related delirium tremens occur. It has been reported that at one time in China death penalties were carried out "non-violently" by sleep deprivation. Absolute insomnia is not compatible with life. Just as the physical body needs food, so must the soul body draw nigh to the images of the surrounding spiritual world through sleep. It is these archetypical images, whose source lies in the spiritual world, that make possible the construction and maintenance of the human form.

We say today, generally, that the information is contained in the cells. But how do the individual cells know to differentiate in embryonic development into liver, lung, or brain cells? A higher power is at work that is archetypal in a certain way and, at the same time, has a specific effect. The workings of these specifically-organizing, differentiated, formative forces can easily be disturbed. This can lead to defective developments or carcinomas, for example. Construction of the physical body and its maintenance is bound to organized, new construction, guided formation, and growth all subject to a concept.

In the embryonic phase these constructive forces are the most intensely active, but there is no actual consciousness present in the normal sense of the word. An infant also has few conscious functions. Directed movements or even thinking are not yet possible. A newborn infant goes through the day sleeping, for the most part, and completely abandoned to a horizontal position.

Older infants sleep about sixteen hours per day and toddlers about twelve hours. The more the formation of the physical body, the internal organs, is completed, the less sleep is necessary and the more a person can use these forces which were previously used in organ formation for a quickened soul life. The same forces which were active in building the physical organs then transform themselves into thinking forces. So, it becomes clear that the result of conscious, lively, soul activity causes a tearing-down of the physical organism. Consequently, adults need sleep. Unconscious, formative activity with the building-up of the physical body alternate in a rhythmic sequences when the deconstructive elements of the processes of conscious thinking, feeling, and willing. That explains the alternation between waking and sleeping bound up in cosmic rhythms.

Just as a person turns toward the outer, earthly world during waking consciousness and tarries in the spiritual world during sleep, so is a person an earthly being between birth and death and between death and re-birth without a physical body in the spiritual world. People work through their earthly experiences in the spiritual world and gather impulses which allow them to build up new physical bodies in accordance with their future tasks. In this sense we can understand the saying: "Sleep is death's little brother."

Various Sleep Disturbances

Sleep disturbances can occur for many reasons, from outer or inner influences. Among the causes originating on the outside are environmental disturbances such as noise, light, room temperature, a bad mattress, improper bed linens, and the like. A quick change in altitude to above 1,500 meters (approx. 5,000 feet) can have a negative effect on sleep. Everyone has experienced problems when becoming accustomed to new surroundings and sleeping in unfamiliar beds. Children who do not have a regular bedtime also can suffer from sleep disturbances. Sleep disturbances can be caused by sleep medications or other kinds of medications. Substances containing amphetamines (psycho-stimulants and especially in appetite suppressors) belong in this category. In the group of psychotropic drugs, these substances are found in neuroleptica, antidepressants, as well as lithium salts. Unstable sleep can come from medications that stimulate blood circulation, as well as cortisone compounds, antiepileptic drugs, ephedrine and drugs containing theophylline (flu, cough, colds, bronchitis, and asthma medication, also in spray form), antihypertensive drugs of the beta blocker type, thyroid medication (thyroxin), digitalis glycoside (given as support for heart function) if given in too high dosages, and medications to prevent fluid retention. Please consult your doctor if you have questions about the above-mentioned medications.

Stimulants such as coffee, tea, nicotine, energy drinks, and cola that are consumed in the late afternoon or evening can noticeably disturb sleep. Overeating, eating heavy foods, or eating too late in the evening is often not tolerated well. An erratic, irregular lifestyle can also lead to sleep disturbances as well as travel across time zones (jet lag), or shift changes at work.

At the forefront of sleep disturbances with an inner cause are all acute or chronic physical ailments. In this category are problems with the heart-circulatory system, the central nervous system (spasms or Parkinson's disease), as well as the stomach-intestinal tract, and the musculoskeletal system.

Problems with physical reorientation during menopause, premenstrual syndrome, and psychiatric illnesses like depression and schizophrenia can all cause sleep disturbances to appear.

Very often a person's mental state can leave one susceptible to sleep disturbances, problems like angst, worry, and hardship. Excessive demands in daily life resulting in nervousness and stress can also have lasting and disturbing effects on sleep.

Often people have *misconceptions* about their sleep. For instance, a patient in a hospital complains that she did not close her eyes the whole night while her neighbor in the next bed complains that the patient snored for hours. This situation is also familiar from studies in sleep laboratories. Usually, people get more sleep than is apparent to them.

By *temporary sleep disturbances* I do not mean those that do not last longer than three weeks. They are usually caused by particular situations like nervousness before exams or other one-time challenges or concerns. *Chronic sleep disturbances* are those that last longer than three weeks and despite the disappearance of the original cause. The extent and length of the problem is no longer related to the cause. In addition, there is a difference between *problems falling asleep* and *problems sleeping through the night* as well as *awakening too early*.

Parasomnia should also be mentioned here. This includes sleepwalking (somnambulism), night terrors (pavor nocturnus), nightly bedwetting (nocturnal enuresis), nightly teeth grinding (bruxism), and periodic myoclonic episodes (cramp-like twitches during sleep). These can have organic, physical causes or mental causes and they should be examined by a medical doctor. (Limb twitches while falling asleep is very common and not a cause for concern.)

Suggestions for Treating Sleep Disturbances

Temporary Sleep Disturbances

The following words by Goethe can help us in regard to temporary sleep disturbances:

Those who have never eaten with tears in their bread,
Those who have never the sorrowful night hours
Sat crying upon their cheerless bed,
They have never known you, you heavenly powers.

Such situations are part of being human. Suffering and pain can be our helpers. They affect a higher degree of consciousness and more alertness. They can lead us to new things. Many great things have been born from suffering. In this regard Herman Hesse wrote the short piece of prose titled “Sleepless Nights”:

But I can not love a person of whom I know that he has never had a sleepless night in his life. He must be a nature-child with the most naïve soul...

I mean the inner education that sleeplessness can give. Every illness and forced waiting is a taskmaster not to be misunderstood. However, the school of all nervous ailments is especially haunting. . . .

No school can teach mastery over one’s own body and over one’s own thoughts as well as the school of insomnia. . . .

Insomnia is a school of reverence; reverence for all things, the kind of reverence that can pour out the fragrance of a continuous, heightened sentiment. . . .

Hesse goes on to describe how one perceives things like a scurrying mouse, a rolling wagon, a ticking clock, a running fountain, the sound of the wind, and creaking furniture quite differently during a seemingly endless, sleepless night than during the day when one goes over it in one’s mind. He ends this essay with the following words:

In this way all those suffering sleeplessness have already certainly turned their hardship into a virtue.

Problems Falling Asleep

Most problems falling asleep are, above all, dependent upon our inner attitude. Taking what Hesse wrote into consideration, we can try to make

ourselves not nervous, and try to relax. Let us try to not think of the loss of accomplishment which may take place the next day, but rather, let us try to enjoy the peacefulness of the night. We can try to center ourselves in this stillness. For to allow the day to introspectively fade away, some may be helped by a walk, others by a good book. A prayer can be a good preparation for sleep, or reading a Psalm or a selection from the Gospels.

Steiner wrote a beautiful bedtime poem that can help children to trustingly give themselves up to sleep without fear.

From my head to my feet,
I am the image of God,
From my heart to my hands,
I feel the breath of God;
When I speak with my mouth,
I follow God's will.
When I behold God,
In father and mother,
In beast and stone
In flowers and trees,
I shall feel no fear
But only love shall fill me
For all that is around me.

Fairytales also can be a help at bedtime

One can soon achieve a restful, inner peace if one cherishes the melody, the rhythm, and the images of poems such as the following by Goethe.

*Over every mountain peak,
Is peace,
In all the treetops,
You feel,
Nary a breeze.
The birds are silent in the woods.
Only wait, soon,
You too will find peace.*

Another suggestion on how to meaningfully end the day is a *review of the day*, called the *Rückschau* in German. One begins at the end of the day and pictures in one's mind the happenings of the day backwards from that point. One observes one's self from the outside, like a stranger, and allows the events of the day to unfold in broad images in reverse order without judgment or emotions. If a person is in a depressed mood, it may be wise to do this exercise initially by concentrating only on positive events.

With adults, but especially with children, it can be observed that *not being able to stop activity early enough* and crossing the “point of no return” can lead to feeling “too-tightly wound” which makes “shutting down” all the more difficult. Going to bed is put off more and more until, finally, the sleeping-waking rhythm is impaired. These are all big helps in preventing sleep disturbances: Always go to bed at the same time and arise at the same time, even on weekends; have regular mealtimes; take breaks during the day.

It is especially important for children to have *set bedtimes* and to cultivate a “bedtime ritual.” A song, a prayer, a story or fairytale, perhaps a kind of daily review in which unpleasant things are carefully and objectively discussed and good things especially praised; events will then be digested by the soul and contribute to being able to fall asleep more easily.

The more success adults have in becoming peaceful and introspective the more positive it will be for everyone. Stimulating books and television before bed are absolutely not appropriate.

Falling asleep also can be helped along by *outer applications*. Cold feet can prevent one from falling asleep. Therefore, it is wise to pay attention that feet are warm and put on bed socks or use a hot water bottle as needed. Warm foot baths, perhaps with pine needle or lavender milk baths, as well as showering thighs and calves with cold water (not longer than five to eight seconds), or washing the entire body with cold water that has some relaxing herb added to it, can all be very helpful in promoting sleep. After speedily washing, one should lie in bed without drying-off. Some people react well to a moist, three-quarter body wrap. A prerequisite for every cold-water application is that the patient is capable of reacting to the application with an increase in body warmth, never apply cold water to cold body parts! A warm bath with lavender or pine needle milk bath is recommended. However, it should not be too warm (96.8° to 98.6°) or it can have a stimulating effect.

Some people, especially children, are helped by a whole-body massage or a massage of the arms and chest with mallow oil. Another recommendation is: *Oleum Malvae* compound manufactured by WALA.

An unsettled heartbeat can be quieted by a cold, lower-arm soak, for instance with arnica added. After the soak, the arms should not be dried off; rather the person should swing their arms dry. An arnica compress on the heart area can also help as will a compress applied with *Aurum/Lavendula/Rosae* ointment manufactured by Weleda.

The problem of restless legs that can be so disturbing during the night can be helped by strongly massaging the soles of the feet with oil or an ointment containing iron (for example, *Ferrum met.* 0.4% manufactured by Weleda). Cold-water spraying of the calves and gymnastic exercises in which the legs are stretched high while lying down (holding the legs straight or doing a bicycling motion) are both beneficial. If a person suffers from these problems he should avoid stress and heavy meals.

Herbal teas for sleep and relaxation are a further help in getting to sleep. There are also many sedative tea mixtures available. One can also make his/her own tea mixture using, for example, a combination of lavender flowers, mallow (hollyhock) flowers, hops flowers, and valerian root, as well as chamomile flowers and St. John's wort flowers, marjoram leaves, and lemon balm leaves. A teaspoon of honey will support a sleep-promoting effect.

A late-evening meal has a detrimental effect on sleep. There is good reason for the saying: "Eating and drinking holds body and soul together." Our souls should be able to detach in order to address other tasks. There is further truth in the saying: "Breakfast like an emperor, lunch like a king, and dinner like a beggar." Above all, one should not eat too late in the evening (not after 6:00PM if possible); nor too much food or foods that are hard to digest.

For a good sleep it is important that the *room temperature* is neither too high nor too low. An ideal temperature range is 57°–65°F. Of course, one should use the quietest rooms in the house as the bedrooms. After all, a lot of time will be spent there. It has been scientifically proven the noise causes stress. Even if we apparently do not perceive the noise and sleep well in spite of it, increases in level of stress hormone and cholesterol have been registered. Each individual must decide if the window is to remain open or closed. If there is noise, fog, or smog present it is recommended that the window remain closed. Also, if a person feels pestered by noises outside, then the window should be closed during sleep and after a thorough airing of the room.

"The way a person beds is the way they sleep." The bed plays a very important role in sleep. It should not be too soft or too hard. The mattress, sheets, blankets, and bed clothes should be made from natural materials. It is advantageous to not lay the mattress directly on the floor so that there is better air circulation around it. The best bed consists of wooden slats with a one-piece mattress, for instance made from latex foam with a wool covering. Bedcovers should give enough warmth. Comforters filled with wool are very good. Feather beds can create problems as they can easily lead to a build-up of too much heat, which can lead to a rise in body temperature and even cause a fever in children. The pillow is also important. For children, a millet pillow is especially recommended. These pillows, filled with either millet chaff or the whole grain, are very comfortable. The child can get enough air, the pillow conforms to the shape of the head, and it always smells fresh. Of course, such a pillow can also be beneficial for adults.

With an infant, one should take care that it feels enough protection while in the bed. This can be accomplished with a delicate, silk cloth as a canopy over the crib or cradle. We would not feel comfortable if our bed stood in the middle of a large hall, but that is what it is like for a small child who lies unprotected in a room.

Problems Sleeping through the Night

Here, Hesse's thoughts also are worthy of consideration. If you are lying in bed awake, try not to let feelings of discontent arise. Feelings of anger or envy of the partner sleeping next to you should be transformed. There are surely a few things to be observed that can lead us to a more positive and benevolent mood. The stillness of the night and the darkness do not have to be experienced as threatening, but rather as peaceful and quiet. In the darkness our light-filled thoughts can make us all the brighter inside. Finding an attitude of peace and composure can be practiced. Some are helped by reading a book or a poem. Or, we can look out an open window and admire the stars and the moon in the sky and enjoy the fresh air. One must realize that some sleep has already occurred and it is not really so bad that one is now awake. If one awakens in the second half of the night, it may be annoying. For purposes of regeneration however, it is less grave than one may think at first. According to each situation and condition, one will either remain in bed, calm and relaxed, to recuperate or one will undertake some meaningful activity. Perhaps we could make a note of good ideas that would otherwise be easily forgotten.

Arising Early

Arising early in the morning most often stems from the fact that one has had enough sleep. In this case one can say: "The morning hours are golden" and then happily begin the day. How wonderful it can be to hear the birds singing in the morning. What a lofty and special experience it is to see the red dawn of the sunrise.

There are causes for early awakening that are not so pleasant or normal. A drop in blood pressure in people with unstable blood pressure can stimulate awakeness. When older people get up to use the toilet due to the 4:00AM rhythm of the kidney and there is perhaps an added suppression of consciousness of a sleeping medication, there is danger of a fall. We hear often of hip fractures in the early morning hours. Furthermore, waking early can be a sign of a serious illness such as endogenous depression. *All sleep disturbances caused by illness* should naturally not be self-treated: *Seek professional medical help!*

Abnormal Physical Phenomena Accompanying Sleep Disturbances

Sleep is often accompanied by *snoring*. This can be the result of colds, allergies, sinus infections, as well as enlarged tonsils. An appropriate treatment is advisable and often brings relief. Corpulent people often snore while lying on their backs. Fatty tissue around the pharynx begins to vibrate creating the conditions for loud snoring. Sleep is therefore more shallow and not as rejuvenating.

Sleep apnea syndrome occurs mostly in men of middle age or older, especially if they are overweight. This involves a cessation of breathing lasting up to two minutes and occurring ten or more times in an hour. Often, an extremely loud snore will mark the end of each episode of apnea. The lack of oxygen and a temporary, sharp increase in blood pressure can put a very serious burden on the heart and blood circulation. In contrast, a very short halt in breathing is quite possible during normal, healthy sleep. With overweight people, their girth usually forces them to sleep on their backs for the most part. Lying flat is an unfavorable position; raising the upper body can be helpful.

A consequential weight-loss program can relieve symptoms. An examination at a sleep research laboratory might also be helpful. Of course, nicotine and alcohol, as well as depressant-type medications all have a negative influence. Since it can not be ruled out that physical illness could be the cause, a consultation with your medical doctor is advisable.

Since 1988, *Chronic Fatigue Syndrome (CFS)* has been making headlines. Weakness of the immune system, viruses, and chronic distress (mental and physical instability) are all factors considered as elements of this syndrome. It is possible that viral illnesses also play a role. The causes are really unknown, but there are thought to be many people suffering from CFS in the United States and incidents of this harassing ailment are epidemically on the rise in Europe. Many patients are unable to work for long periods of time. In addition to long-term fatigue, this syndrome can be accompanied by insomnia.

In 1924 Steiner told young physicians that youth could not get away unscathed with superficiality, that it would be the cause of their ruin, going even into their organs. He described that when a person does not deepen himself spiritually he can not sleep properly. The result would be worldwide epidemics of insomnia and that these people could not longer effect civilization. Is Chronic Fatigue Syndrome perhaps such a phenomenon?

Children who fear falling asleep are also quite numerous today. A study done in Freiburg, Germany, showed that children ranked television films as the number one cause. (Parents continue to underestimate media influence.) Other causes included fear of darkness, fear of being alone, problems at school, and discord in the family.

One should consult a physician about *specific sleep disturbances in children*. Rocking during sleep, which can have a brain-organic cause or a psychical cause, Pavor nocturnus (night terrors), and bed-wetting (enuresis) are disturbances in this category. Enuresis can also have an organic cause. In any case, stress, disquiet, and overloaded, overstimulated senses should be avoided. One should strive for a regular daily rhythm in which physical and mental activities are harmoniously alternated. It is well worth the effort to create a protective atmosphere without intellectual over-stimulation as

well. The important thing is to not dramatize disturbances. One should lovingly calm the child and look for possible causes such as burdens from school, troubled or difficult relationships with others, or injurious experiences, for example. An often-occurring but completely preventable cause is television (films about monsters, violence, or cruelty for instance).

Various Soporific Drugs

Synthetic Sleep Medications

Synthetic sleep medications do not lead to a physiologically rejuvenating sleep because they negatively influence the rhythm and structure of sleep. Either the REM phase or the deep-sleep phase is changed. “Any other explanation is either wishful thinking or an unqualified claim by an advertiser” (Faust-Hole). Fundamentally, it should be taken into consideration that the effectual mechanism of sleep medications is largely unknown. Much harm has been done by these medications: Think of thalidomide, developed during the search for a safe sleep medication and thought to prevent morning sickness during the early stages of pregnancy. But the side effects included a deformation of the embryo which led to disfigured human beings. What illusions were, and are, kindled by these substances! One of the effects of benzodiazepine is retrograde amnesia which means it influences the memory so that the next morning the patient can not recall the period of wakefulness the night before! This leads to an erroneous evaluation of the medication’s effectiveness. This danger is all the more-so for the elderly and the periods of effectiveness of these preparations decreases over time. Certain medical procedures make use of this amnesia effect, for example, the patient does not remember the gastroscopy that he or she has just undergone. If such medications are taken during the day to suppress angst or disquiet, for instance, amnesia (confusion) can be simulated (pseudo dementia): The affected person will possibly ask the same question twice within a few minutes because he or she can not remember asking the first time! A short time ago I read that in England there has been a correlation drawn between abuse of sleep medications and an increase in the crime rate. Also, the numerous suicides precipitated by sleep medications should be taken into consideration.

Elderly people are especially endangered by sleep and sedative medications because their period of effectiveness can be lengthened by a slower absorption rate than in younger people. Aftereffects of benzodiazepam drugs have been registered in older people weeks after they stopped taking a fourteen-day series. There is also a greater danger of night-time accidents when, for instance, these people get up in the night to use the toilet and are not able to come completely awake.

Even after taking these drugs for a short time there is a *decrease in their effectiveness*. Long-term usage of sedatives can actually have the undesired effect of periods of wakefulness longer than without the use of medication. Most sedatives lead to *addiction*. Known *side effects* include problems with the stomach and intestinal tract, damage to the liver, heart and kidneys, and mental alterations. Interactions with other prescription drugs are also alarming. Other, possibly life-saving, medications can have their effectiveness reduced up to complete ineffectiveness. On the other hand, other drug-interactions can cause an increase in effectiveness to the point of poisoning. Furthermore, there is the *danger of summation*, or one drug's potency increased by the other such as sleep medication with sedatives or neuroleptic drugs with antidepressants. The summary effect of sedatives and alcohol can have very serious consequences.

One should be very cautious about medications which contain synthetic substances (barbiturates, bromines, or diphenhydramine) in combination with plant-based drugs like valerian and hops. The plant-based addition does not mitigate the possible danger of the main synthetic substance!

Alcohol as a Sedative

Using alcohol as a help to get to sleep can be countereffective. Even small amounts of alcohol can disrupt sleep patterns. One falls asleep quickly and the first dream phase is reached rapidly but deep-sleep is reduced and the REM phases are significantly shortened. There are also less significant changes in the discharge of brain waves (EEG discharges).

Sleep Medications from Anthroposophical Medicine

There is a vast array of substances with a homeopathic, naturopathic, or anthroposophic basis which can help people to sleep better. These medicines neither cause addiction nor effect essential changes in the sleep structure. These medicines should be individually prescribed for patients by their doctor. For that reason, only a few will be mentioned here.

The most well-known, sleep-promoting medicines are mostly flowering plants (hops, *Humulus lupulus*, passion flowers, lavender). Sulfur is also used in an appropriate dilution. Leaves with a flower-like character and a high content of essential oils such as lemon balm can be of help as well as valerian root which is permeated with a flower-like aroma.

Avena sativa has a sleep-promoting effect. In higher potencies, the homeopathic remedy *coffea tosta* can help in cases of restlessness or agitation that are similar to those experienced after drinking too much coffee—the principle of “*similia similibus curentur*” (like heals like) applies. The kava kava root, which comes from the South Seas, can relieve anxiety, nervous anxiety, and disquietude, but it does sometimes alter the dream-state. If depression is suspected *St. John's Wort* can be of help.

An anthroposophic doctor will choose from a wide variety of medicines based on a careful appraisal of numerous conditions in the patient, including the constitution of the patient and functional status of internal organs. For example, Bryophyllum, phosphorus, sulfur, Hepatodoron, and Vitis comp. may be used.

Further Therapy Possibilities from Anthroposophical Medicine

Besides medication therapy, there are numerous exterior applications such as compresses and hydro-therapy, and the dietetic-hygienic suggestions available treatments for sleep disturbances: Magnet therapy, in which physical magnets are used, *art therapies* such as painting, sculpture and clay modeling, music therapy, speech therapy, as well as *curative eurythmy*, all can fundamentally contribute to physical and mental harmonization and healing. Physician and therapist should work closely together in these cases. Unlike the therapies which are directed at specific illnesses or diseases, every artistic endeavor has a harmonizing effect and is therefore beneficial in promoting healthy sleep.

The Meaning of Sleep Disturbances

Sleep disturbances are not illnesses; they are symptoms of physical, mental, and spiritual problems. The causes of sleeplessness and insomnia can be physical ailments, mental imbalance, or spiritual one-sidedness. Viewed in this way, sleep disturbances are signs that something is not in order. They are messages from the organism that corrective measures are necessary. We become more alert to problems. We notice mistakes such as a life change that puts us out of our rhythm, a flood of unprocessed sense perceptions that burden us, and other things. Like all afflictions, sleeplessness is a fundamental experience of human life on Earth.

Treating symptoms can never relieve the underlying cause of a problem. Illnesses and afflictions have meaning for our lives and should not simply be expunged or eliminated by medication. Removing symptoms makes the search for the cause more difficult, sometimes impossible, and there is a danger that much worse harm can result.

What Time of Day Should One Go to Bed?

The amount of sleep required varies with each individual. The same goes for the best time to go to bed. However, it is generally true that a regular bedtime is beneficial to sleep quality. Sleep before midnight is especially restorative. We call it “beauty sleep.”

The poem *Watchmen's Call* by Johann Peter Hebel tells us something about bedtime:

Listen to what I will tell!
The clock has struck its tenth bell.
Now pray and now go to bed,
And if there is no remorseful thought in your head,
Sleep soft and sound! A serene eye,
In heaven keeps watch till morning is nigh.

Listen to what I will tell!
The clock has struck its eleventh bell.
And whoever still sweats at their task,
For the last time you are asked:
It is high time that you were in bed!

Listen to what I will tell!
The clock has struck its twelfth bell.
And who still at the hour of midnight,
Has a heart that suffers a painful plight,
May God give you a still, quiet time;
Make you happy again with health sublime!

Listen to what I will tell!
The clock has struck its second bell.
Heavy cares do nibble the heart,
Poor thing, from your sleep you're apart;
Oh, God, what is clouding the mind, do tell?

Children should be put to bed at a time appropriate for their age and always at the same time. Older people, on the other hand, should not go to bed too early. They require less sleep and sometimes suffer from a pseudo sleep disturbance because they are in bed too long. Of course, there are professions and life situations in which a regular sleep rhythm is impossible (shift work, night shifts, on-call services, for example). Even though these are not conducive to sleep quality, they are necessities that some people have taken upon themselves to perform for the good of others.

How Much Sleep Do We Need?

There is also no general answer to this question. There are many variables: a person's age, physical well-being, effort, mental challenges, the weather, and so on. Children need significantly more sleep than adults, especially older adults. In times where mental activity is predominant (when we are learning) sleep is especially important. Everyone must decide what the right amount of sleep is according to his/her stage of life and level of activity.

Just as too little sleep or disturbed sleep can cause problems, *too much sleep* can also have negative effects. In the case of too little sleep, the organism can make up the necessary sleep at a later time. In contrast, too much sleep can become problematic and more harmful than not enough. Who has not awakened on a weekend feeling battered, bloated, and not-together because he or she slept too long? As was described at the beginning of this article, regeneration of the physical body takes place mostly at night. Too much regeneration can lead to illnesses. Health is a *delicate balance* between too much and too little. It has been statistically confirmed that people who get between seven and eight hours of sleep per night live longer on average than people with more hours of sleep. Mortality rate increases with either extreme. For instance, too much vitality can build a suitable foundation for pathogens and lead to infections. On the other hand, when a person gets too much sleep and the spiritual-individual aspect does not penetrate, then the physical body cultivates the earth forces too strongly which can bring about sclerosis or even cancer formation. In such cases, might sleeplessness be seen as an expression of a tendency to self-healing?

The Significance of Daily Experiences for Sleep

Let us look once more at the daytime-side, the waking time. Sleep can be viewed as a rhythmic, regular, repetitive process which interrupts our periods of wakefulness and places us in another relationship to the world.

How one begins the day is important:

Take your time in the quiet of the morning fair,
And all through the day you'll have hardly a care.

If one awakens unhurried it has a positive effect on the entire day. In contrast, if we begin the day discontented or in a hectic state, everything will be more difficult. If we try to concentrate on what is essential in the mornings, even if we awaken less refreshed than we would like, if we are grateful and happy that we can begin a new day, everything will be easier. A short preview of the day conducted in an attitude of contentment and affirmation can have a beneficial and regulating effect. Those who have trouble getting started in the morning can help themselves by washing with the herb rosemary. This will help one become energized to tackle one's tasks with initiative and aplomb.

Everything we do during the day, our experiences, our thoughts and perceptions, has an effect on our sleep, on that which we can experience as help, and with which spiritual beings we come into contact. Whether we concern ourselves with spiritual or religious matters, or ask about the deeper meaning of our existence, all has an impact. Naturally, there are also effects

when we spend the day lazy and comfortable without inner or outer activity. We sleep better after physical, mental, and spiritual activity. It is beneficial to alternate these activities. For example, one should go on foot as much as possible, not only for one's health and fitness, but also to observe nature and other people with loving interest. Short, relaxing breaks should be taken between times of exertion and tension. Pause for a moment and then let go before beginning a new task. That contributes greatly to feeling balanced. We should become artists of life. Truly, artistic activity helps us to create strength for daily life. Painting, sculpture and clay modeling, playing music, and eurhythmy help us live our lives with initiative and positive attitude. Artistic activities intensify and improve our waking life and thus our sleep.

Conclusion

Every night we are immersed into primeval, creative forces. Higher beings are active in the regeneration and renewal of our physical bodies. These processes usually remain hidden to us; as our consciousness lapses during sleep. Our thoughts, our feelings, and our actions during waking consciousness are very important to what happens during sleep. The more consciously and positively we go about our daily activities, without losing ourselves in the outside, material world, the more we warm ourselves to all things of the world and our fellow human beings in loving interest, the more we try to penetrate to knowledge of the essential, then all the more can the divine-spiritual be revealed to us during sleep. Our waking life effects our sleep. Not only do we experience positive or negative effects on our own organism, but also that we can have a beneficial or perturbing effect on other spiritual beings such as the deceased, for example.

Each person has individual strengths and abilities and individual sleep requirements. One should try to find the golden medium, the right measure, in everything. The rhythm between a spiritualized, physical activity and a spiritual stimulus fired by the will, the rhythm between activity (tension) and calm, introspective regard (relaxation) is of great importance. Just as daily life should be permeated with rhythms, so also should there be rhythmic alteration between waking and sleeping. The more we consciously and freely integrate into cosmic rhythms, the more healing and curative aspects can enter into our lives.

The moods of soul that can help us to have a positive relationship to life are calm trust, contentment, and gratitude for everything that destiny sends.

