

## NIGHTMARES

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The term *nightmare* is used by the general public in at least three senses. Some use the term to mean "a frightening dream"; some use it to mean simply "waking up frightened at night," whether or not there is any dream; and finally, the term has sometimes been used to refer to the fearful "demon" or "creature" that supposedly produces the awakening as in "the nightmare in my closet." Sleep laboratory research of the last 25 years has greatly clarified the situation, although not much scientific light has been shed on the third sense of nightmare: the closet generally turns out to be empty.

### Nightmares Versus Night Terrors

When someone who describes having nightmares is studied in the sleep laboratory, one of the following two situations is almost inevitably found when an episode occurs during that night. In the more common type, there is an awakening during the second half of sleep, from a long REM period usually at least 15 minutes in length. Physiologically, the REM period may show more eye movements than usual and perhaps a small increase in pulse and respiratory rate, but nothing very unusual. The subject lies quietly in bed; does not move or get up; and when he or she awakens, a long frightening dream is reported. This dream is commonly a detailed vivid dream that becomes more frightening as it goes on and ends at the most terrifying point, when the dreamer is being hurt, attacked, killed, or something of the kind. This sort of nightmare event is clearly a dream, and like most dreams it is reported from a REM period.

The other sort of event, less common, usually occurs within the first 2 hours after sleep onset. It involves an unusual kind of arousal from sleep. The sleeper is usually in stage 3 or 4 NREM sleep

and wakes up over a period of 15 to 30 seconds during which the pulse and respiratory rate may double, and there is a great deal of activity, which may include screaming, sitting up, or even sleep-walking. The subject wakes up terrified, but either remembers nothing or remembers a single image such as "something was crushing me." The experience is *not* described as a dream.

This second sort of experience, sometimes loosely called nightmare, is now designated as a night terror or sleep terror (see SLEEP TERRORS). The first sort of episode is what we refer to as the *nightmare*. It is sometimes called a *REM-nightmare*, because it occurs in REM sleep, and sometimes a *dream anxiety attack*. Night terrors and nightmares are very different phenomena. They are experienced differently: The nightmare is a dream; the night terror is not. As we have seen, they are different in terms of physiology. And generally, they are experienced by different people (see below).

Most, though not all, nightmare experiences fall into these two groups. Occasionally someone has a nightmare at sleep onset during the transition from waking to NREM sleep. And post-traumatic nightmares (see POSTTRAUMATIC STRESS DISORDER) are unusual in that although they appear to be dreams, they occur in NREM sleep as well as in REM sleep.

### Definition and Content of Nightmares

Thus, as the term is currently used, a nightmare is a frightening dream during REM sleep from which the dreamer awakens. It is almost always a long, vivid, detailed dream. This is the best definition available at present, although logically it is not entirely precise. For instance, if someone describes a particular nightmare that seems to wake him or her up a couple of times during the night, and then says on another occasion he or she remembers having had the same nightmare but it did not awaken him or her, the definition requires one to say the last event was not a nightmare. Commonsense suggests it was the same thing, but perhaps a bit less severe.

Although the nightmare can be differentiated from the night terror, the nightmare cannot be differentiated from a dream. The nightmare is a specific sort of dream.

The content of a nightmare may include any

number of actions or events frightening to the dreamer. Occasionally the material may not sound frightening to an impartial observer, for example, "a long shadow that felt ominous." However, the most common content involves the dreamer being chased, threatened, hurt, or attacked in some way; simply being chased is the most common nightmare theme. In childhood, the perpetrator who chases or hurts the dreamer is often a wild animal or a monster; in adults it is more frequently a threatening man, a group of people, or a gang.

In almost all cases, the dreamer is the victim—the person being chased or attacked. It is relatively rare for the dreamer to commit violence or simply to watch a violent dangerous scene. One major exception occurs in the case of parents, usually mothers, of young children; the victim in the nightmare is frequently the dreamer's child rather than the dreamer herself: "I dreamt that someone broke into the house and was attacking my child." A pregnant woman will often have a nightmare that something bad is happening to her developing fetus—that she will give birth to a deformed child. Apart from these situations, we are usually concerned with ourselves and our own safety and not for that of others in our nightmares.

### Who Has Nightmares?

Almost everyone has nightmares. At least in childhood—especially during the ages 3 to 6 years—nightmares are very frequent. There is some disagreement as to what percentage of children report nightmares. The percentage is lower for instance when one speaks of children whose nightmares are reported to their pediatricians, but much higher when one speaks directly to children or to sensitive parents. It is likely that almost all children aged 3 to 6 years experience at least a few nightmares. Nightmares become less frequent with age; however, they are by no means rare. Studies suggest that the average college student experiences four to eight nightmares per year, and the average adult aged 25 years or older may have one or two per year.

A small percentage of adults—less than 5 percent—report frequent nightmares (generally defined as one or more per week over long periods). Who are these people who report hav-

ing nightmares regularly or all the time? Recent studies have compared groups of frequent nightmare sufferers with various control groups. The nightmare group could not be described as simply sicker (more mentally ill) or even as more anxious, nor did most of them describe especially traumatic childhoods.

What did characterize the nightmare sufferers and separate them from the control groups was a number of characteristics that can be summarized as their having "thin boundaries" in many senses. First, they were unusually open. They told the interviewers far more about their lives than is usual in such interviews. They were interpersonally open in terms of getting into relationships very quickly. They seemed unprotected or undefended; everything "got to them." They were easily hurt and would remember for a long time the suffering of an animal for instance. Many of them described themselves as having been sensitive in several respects for their whole lives: sensitive to bright lights or loud sounds, sensitive emotionally, and also empathic to the feelings of others. Mostly, they tended to have been artistic and creative in some way since childhood. Most of these people with nightmares had jobs relating somehow to the arts or crafts, rather than ordinary blue collar or white collar positions. They also had thin boundaries between fantasy and reality, often describing fantasies or daydreams so real and vivid as to be difficult to distinguish from waking reality. Likewise, they described in-between states when they were not certain whether they were awake or asleep and dreaming. They would describe waking up after a dream but not being really sure they were awake for one-half hour or more. Most of them also had thin boundaries in such senses as sexual identification: They were very willing to recognize both masculine and feminine aspects of themselves, and they could easily imagine themselves as a member of the opposite sex. Some of them even described vivid daydreams, as well as night dreams in which they were someone of the opposite sex or in which they were animals.

In general, the best way to describe frequent nightmare sufferers psychologically seemed to be that they had thin boundaries in many senses; and in fact this was confirmed by findings on the Rorschach test. On this well-known inkblot test, the subjects with nightmares saw a great many more permeable, gauzy, amorphous, or torn things than did control subjects.

## When Do Nightmares Occur? What Causes Nightmares?

Whether people ordinarily have frequent or infrequent nightmares, they report more nightmares and worse nightmares at times of change and stress. Almost any kind of stress appears sometimes to produce an increase in nightmare frequency and nightmare intensity; this is especially true of stresses such as the loss of an important person, the loss of a relationship, or a major change of occupation. Periods of great anxiety, such as the beginning of a psychotic episode, are also often associated with nightmares. It is likely that each of us has specific stressful situations that may be nightmare producing for us, though perhaps not for others. These appear to be situations that remind us of our childhood vulnerability, when we were all small and to a great degree helpless (and when most of us did in fact have nightmares).

Overall, then, there is no single cause of nightmares. It appears that a certain type of personality ("thin boundaries") may be predisposed to nightmares; stressful situations definitely increase nightmares; extremely stressful occurrences known as trauma can definitely produce nightmares (see POSTTRAUMATIC NIGHTMARES); also, certain neurologic conditions and some medications produce a sudden onset of nightmares in people who have not previously had them. Research data do not support older views that suffocation under blankets causes nightmares, nor the view that spicy foods frequently produce nightmares ("the pepperoni pizza theory"; see MYTHS ABOUT DREAMING).

## Interpretation

Nightmares, like all other dreams, come from the mind of the dreamer and in some way refer to the dreamer's memories, problems, wishes, and fears. Thus, nightmares like any other dreams can be "interpreted" in the sense that connections with one's life can be examined and a better understanding of oneself obtained. Although one cannot generalize because everyone is different, associations to the content of the nightmare often lead to something in the adult's life that reminds

him or her of a childhood experience and childhood helplessness. (See also INTERPRETATION OF DREAMS.)

## Treatment

Nightmares should not be considered an illness that in itself requires treatment. In groups of people who experienced frequent nightmares, it was found that only about one-half actually wanted treatment and wanted to reduce the nightmares; many felt the nightmares were somehow a part of them and were perhaps useful; in fact, writers, painters, and other artists often use their nightmares in their work. When nightmares are very disturbing and treatment is desired, a number of treatments can be helpful. Psychotherapy of one kind or another is the most frequent treatment. There are also behavioral techniques, and techniques involving imagery and hypnosis can reduce nightmares. In serious cases, a number of medications can be useful. A person with frequent disturbing nightmares, however, first needs a detailed evaluation. The nightmares themselves may not require treatment, but at times they may be part of another condition, such as a neurologic illness, a psychosis, or post-traumatic stress disorder, which definitely requires treatment.

## REFERENCES

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