

Understanding dreams: Tapping a rich resource

Improved recall can reveal patients' progress in organizing troublesome feelings

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reams are a rich resource for understanding how the mind integrates waking experience into older memory networks. Any psychiatrist who doubts dreams' therapeutic value has probably not attended closely to his or her own dreams or become aware of exciting new evidence.

Recent understandings of how memory is processed during sleep are bringing dreams back into clinical importance. Patients can gather clinically useful data while sleeping—not in laboratories but in their own beds. Detecting and interpreting patterns in that data can help you treat patients not responding adequately to other therapies.

CHARTING DREAM SEQUENCES

The rate at which the eyes move during rapid-eye movement (REM) sleep (*Figure, page 16*) has been associated with memory consolidation. Eye movements increase during REM sleep, and waking performance improves after intensive learning periods. When eye movements are sparse, patients



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In this 30-second sleep recording, the eyes move rapidly during a REM period, with brain waves showing active sleep on EEG and EMG showing low muscle tone. During the transition to stage-2 sleep, the eyes grow quiet and muscle tone increases slightly.

EEG: electroencephalogram; EMG: electromyogram; REM: rapid eye movement

report dreams with less visual imagery and blander emotional content.¹

Though all sleep stages contribute to learning and memory, REM sleep appears to allow wider, easier access to memories² than does slow-wave sleep or waking. In other words, dreams are far from meaningless. They constitute a continuing mental operation that allows us to modify memory networks of emotional importance to us.

Dreams' emotional tone tends to shift from negative to positive as the night goes on:³

- Dream-to-dream down-regulation of negative feelings is seen when a person's waking concerns are strong but not overwhelming.
- Conversely, a dream sequence may show

no progress within the night⁴ and the last dream may be as negative as the first—if the person has reached a point of resignation while awake.

This "sequential hypothesis"⁵ holds that knowledge of dreams as they occur—one after the other within the night—is a valuable resource for observing how a person is relating waking experience to the past. Dreams thus can give the therapist a "heads up" about a patient's progress in organizing trouble-some feelings.

CASE EXAMPLE: NIGHTMARES FOR 13 YEARS

Ms. R, a newlywed at age 30, presents for help with repetitive nightmares that prevent her from sharing a bed with her husband. She was raped at age 17 and has suffered nightmares since then. Once or more nightly she dreams

of being attacked and awakens in terror, with profuse sweating. She usually has to change her nightclothes and sometimes the sheets.

Her therapist gives Ms. R four rules—the RISC method⁶—for shifting her dreams from negative to positive:

- Recognize that the dream is not going well.
- Identify what about it is frightening.
- Stop the dream, even if she must force her eyes open.
- Change the action to something positive.

At the third therapy session, Ms. R reports she had a successful dream. She was lying on her back on an open elevator platform. The elevator was rising dangerously high over the cityscape. She realized she was afraid and got up to see what was happen-



continued from page 16

ing. As she arose, the elevator walls rose up to protect her. The patient says she learned if she "stands up for herself" all would be well.

After two more sessions with successful practice of this skill, she terminates therapy. When called 1 year later, she says she is expecting a child and has only an occasional nightmare, which she feels she can handle.

CLINICAL USES OF DREAM THERAPY

Dream interpretation may help us understand emotional programs that underlie patients' unsatisfactory waking behavior. For example:

- Victims of posttraumatic stress disorder (PTSD) such as Ms. R may suffer repetitive nightmares with recurrent themes and excessive negative feelings. We can encourage them to shift their dream scripts from negative to positive.⁷
- Uninsightful, alexythymic patients, who often leave treatment before deriving any benefit, may learn to understand themselves by becoming aware of their dreams.⁸
- Severely depressed patients often have limited dream recall during sleep studies—even when every REM period is interrupted. They may be taught to improve their dream recall.⁹

Rules for improving dream recall are few, simple, and effective when the sleeper is motivated to remember them (*Box*). Just as one can learn to awaken before the morning alarm clock goes off, patients can learn to awaken to recall a dream.

After you have enough of a patient's dreams to work from—20 is a good start—look for repeated dimensions that are the dreams' building blocks.⁵ Look for polar opposites—such as safe-at risk, foolish-clever, exposed-hidden, strong-weak, attractive-ugly—that describe major characteris-

For the patient: How to recall dreams

Go to sleep intending to remember a dream as you awaken.

Sleep until you wake up naturally.* Spontaneous awakening is likely to be from REM sleep, which is dominant in the last third of the night.

Once awake, lie perfectly still. Do not jump up or open your eyes. This preserves a REM-like state when attention is focused inward, not on outside stimuli, and motor tone is profoundly reduced.

Rehearse the recalled images, and give the theme a title ("I left my briefcase on the train" or "My husband returned from a trip unexpectedly"), which makes dream details easier to recall.

Write or tape record all that you can remember, noting the date and time of the report.

Add a note about anything the dream brings to mind about your thoughts before sleep.

* To allow spontaneous awakening, practice dream recall when you do not have to wake up to an alarm clock, such as on weekends.

tics of the self figure. Each has a positive or negative emotional value that can be explored.

WHAT TURNED US OFF ABOUT DREAMS

Prolonged therapy. Freud's *The Interpretation of Dreams*¹⁰ was a major influence on how therapists used dreams to understand their patients in the early 20th century. Freud concluded that dreams —however strange—represent hallucinated ful-fillment of repressed early wishes and tie up psychic energy to conceal unacceptable desires.

From this point of view, dreams provide a road map to understand persistent, nonrational, sometimes self-defeating behaviors that bring patients to therapy. The map, however, was more maze than speedway, full of detours and requiring much time to navigate the boulevards of associations that lead from one dream element to the



next. Erik Erickson¹¹ suggested that dreams fell into disuse as therapeutic tools in the 1930s because psychoanalysis in general—and dream interpretation in particular—did not fit the American value of "the faster the better."

In retrospect, the unconscious mind's defenses may not have been what prolonged efforts to understand dream meaning. Rather, it may have been that the analyst had to work from whatever scraps the patient could remember of past dreams, to say nothing of new ones that occurred since the

last appointment. That one dream could occupy many treatment hours did not trouble the Freudians, however, as—they argued—anything the patient does remember is proof of its importance.

Sleep research dealt the worst blow to the pursuit of dreams' meaning and function.^{12,13} Contrary to

Freud's view, dreams are not elusive if caught in the act. They can be reliably retrieved from REM episodes, which occur three to five times nightly with great regularity.

After REM sleep was found to initiate from the "unthinking pons," dreams were proclaimed to have no inherent meaning worthy of serious effort. At best, they were explained as the result of random stimuli producing images to which we add meaning as we awaken. Thus, they offer no unique contribution to understanding psychic life. This "activation-synthesis" hypothesis¹⁴ wiped out dream research funding.

Medications. The pharmacologic revolution allowed more-rapid relief of anxiety and depression symptoms than did dream interpretation. Clinicians may feel that "we can forget about dreams because we now have better options." This ignores research showing that psychiatric medication plus psychotherapy is more effective for a longer time than either alone.¹⁵

Evidence-based medicine. Dream content is

inherently subjective and not open to objective observation, the heart of scientific methods. Only the dreamer can say what was dreamed.

WHAT BROUGHT DREAMS BACK

Rules for improving

dream recall are few,

simple, and effective

when the sleeper

is motivated

Better methods and more-sophisticated models renewed dream interpretation as a useful adjunct to other psychotherapies. In addition to research in memory processing, imaging methods and neuropsychological testing have changed our

understanding of brain activity during sleep.

Brain imaging. Early sleep study was limited to recordings from the scalp surface. Now positron emission tomography and functional magnetic imagery allow researchers to see changes in brain activity and to study patterns during waking, non-REM sleep, and REM sleep and among clinical groups. Nofzinger et al,¹⁶

for example, showed differences in areas of high and low brain activation

in persons with major depression, compared with normal controls.

Neuropsychological testing. Solms² used neuropsychological testing and interviewing to identify waking cognitive deficits and changes in dream experience in persons with brain damage from surgery or accident. Contrary to the "activationsynthesis" model, he concluded that dreams "are both generated and represented by some of the highest mental mechanisms." He also argued that although dreams often coincide with the REM state, they also occur beyond REM.

COMING SOON: AT-HOME SLEEP MONITORS

In a sleep laboratory, awakening sleepers during REM periods and asking them to tell what they remember is the classic method for examining the relation among a night's dreams.¹⁷⁻¹⁹ This cumbersome and expensive procedure is being simplified for home use.



Computer-linked monitors are being developed that awaken the sleeper after a pre-set number of rapid eye movements and start a tape recorder to which the person can tell his or her dream. This system, which preserves the dream story from memory loss or distortion,^{20,21} can easily record three or four dreams each night.

Translating this sensory data into verbal reports remains difficult. Although repeated elements give clues to dream structure, a repeated theme within a night might be an artifact induced by waking the sleeper to ask for a report. If a sleeper reports dreaming about being in an accident, for example, he may be influenced to continue that line of thought as he is falling back to sleep. This, in turn, may influence the next dream.

What else can we do? Because dream recall is ephemeral at best, patients may need training before a therapist has a sample large enough to extract repeating elements and be confident of its reliability.

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Related resources

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- American Psychological Association. Dreaming. Quarterly multidisciplinary journal. www.apa.org/journals/drm/.

DISCLOSURES

The author reports no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.

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Dreams help us process information, learn from experience, and modify behavior. Using dream recall rules, patients can learn to provide empiric data about troublesome feelings. Dream data may be particularly useful for treating PTSD, refractory major depression, and patients lacking insight

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