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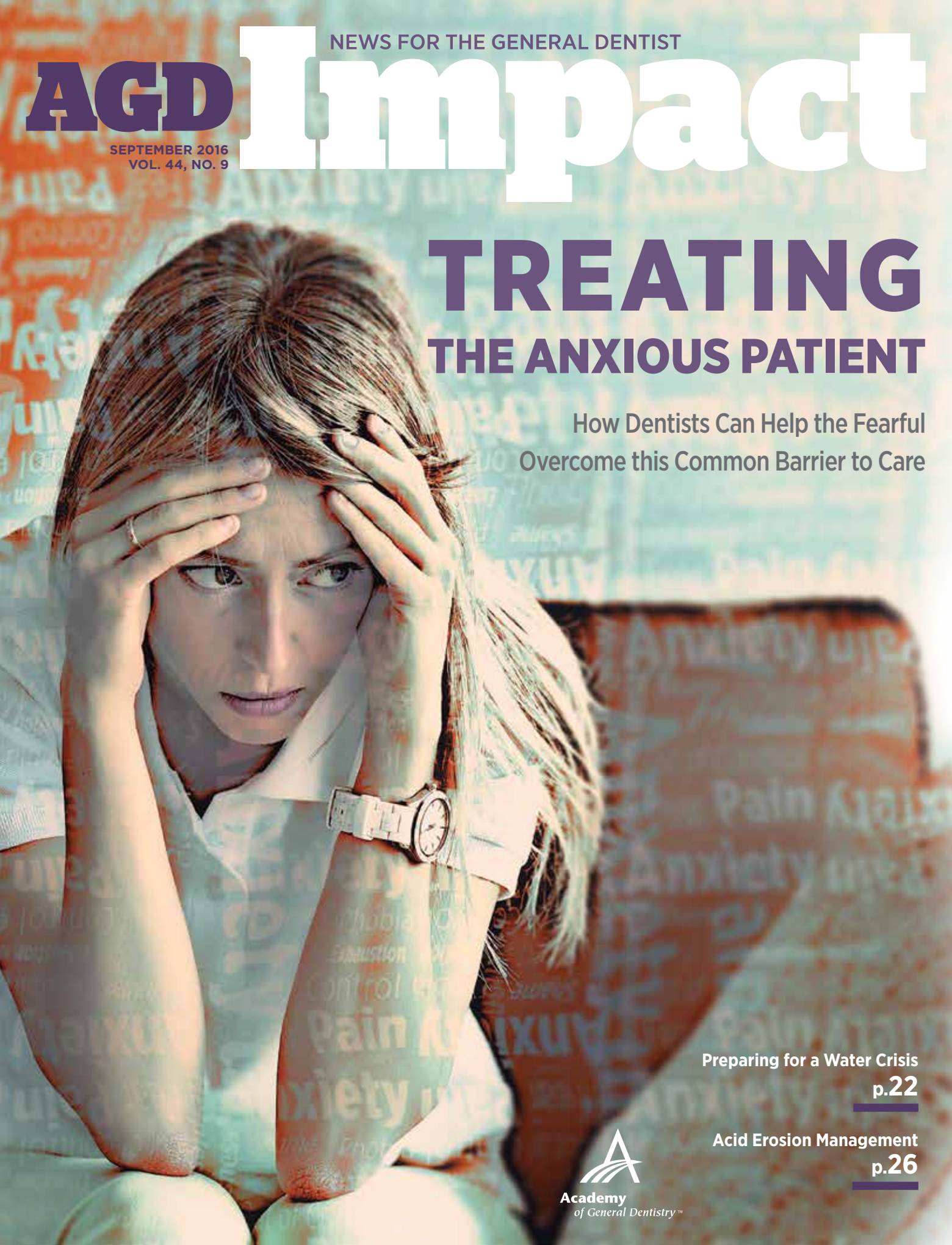
TREATING THE ANXIOUS PATIENT

How Dentists Can Help the Fearful Overcome this Common Barrier to Care



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Pain
Anxiety
Phobia
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Exhaustion

STRESSED OUT OF THE DENTAL CHAIR

What Dentists Should Know about Assessing and Managing Patient Fear and Anxiety

By Lindsey Lewandowski

As a young girl, Academy of General Dentistry (AGD) member Susan R. Cushing, DMD, MAGD, of Pocasset, Massachusetts, was afraid to go to the dentist.

"I was a fearful patient — I mean, intensely," says Cushing, author of the book "Have No Fear of the Dental Chair! A Guide for Reducing Dental Fear" for dental patients and professionals, which was released in April 2016. The book explores 19 cases of neuro-linguistic programming success. "I was absolutely terrified. I would get to the dental office, and I would shake, and I couldn't even open a door. My hands would sweat, and I was just a wreck."

As a patient, Cushing worked to quell her fear. Now, as a dentist, she has devoted her career to understanding and overcoming dental anxiety.

When she was a child, the dentist's office had a negative reputation. It smelled of medicine; equipment was big and scary and, as Cushing describes it, "horrendous." There were tubes, wires, and cords. It was intimidating, she confesses.

"I had nitrous, which helped me get over my fear," Cushing says. Eventually, "I had a nice, gentle, kind dentist who was understanding of my fear, and the nitrous helped save my teeth."

Cushing's past experience isn't uncommon. In fact, people dread a dental appointment almost as much as they dread snakes, heights, and storms. Fear associated with the thought of visiting the dentist is the fifth most common, according to the March 1969 study, "The Epidemiology of Common Fears and Phobia," published in *Comprehensive Psychiatry*.

A RANKING OF FEARS

Fear of the dentist is the fifth most common in a list of the top 11 common fears. At a glance:

Common Fears

1. Snakes
2. Heights
3. Storms
4. Flying
5. ***Dentist***
6. Injury
7. Illness
8. Death
9. Enclosures
10. Journeys alone
11. Being alone

Source: The Epidemiology of Common Fears and Phobia (March 10, 1969, Comprehensive Psychiatry)

"Everybody has some fear of dentistry," says AGD emeritus member Arthur A. Weiner, DMD, FAGD, of Ashland, Massachusettes, "whether it's the cost of the dentistry, the injection or the sound of the drill, the use of the rubber dam, or the smells within the office. There are a variety of things [that cause patient anxiety]."

Weiner — editor of the textbook, "The Fearful Dental Patient: A Guide to Understanding and Managing (2011)," and retired professor emeritus, general and behavioral dental medicine, at Tufts University School of Dental Medicine — estimates that the average patient who goes to the dentist probably has an anxiety sensitivity level (ASL) of 2 to 3 on a scale of 1–10 and that the level of a dentally anxious patient likely is at a 6, 7, and 8.

"The ASL acts as a predisposition for amplifying an anxious response, and when fully understood, it can predict the experience and level of pain and pain-related response before and during treatment," according to the article, "Anxiety Sensitivity Levels: A Predictor of Treatment Compliance of Avoidance," authored by Weiner and published in spring 2013 in the *Journal of the Massachusetts Dental Society.*

There are three factors that affect a patient's ASL, Weiner writes: fear of physical concerns (such as pain and low tolerance), fear of cognitive dyscontrol (such as the loss of control), and fear of social/public display, including embarrassment.

A patient whose ASL is high would benefit from behavior-modification therapy in the dental office, he says. In the event behavior modification isn't successful, a practitioner can administer mild, moderate, or deep sedation or, if a patient's anxiety is severe and in the case of dental emergencies, general anesthesia.

Understanding the Prevalence of Dental Anxiety and Phobia

There's not much current literature surrounding how many patients are affected by dental anxiety, says Cushing, although she believes the number has decreased over the

past quarter of a century. "When I started looking into this about 25 years ago, it was about 60 percent — over half of the public had some anxiety or stress. Then, it got down to about 50 percent. About 10 years ago, maybe 40 percent. I'm hearing now that it's between 15 and 40 percent."

By definition, according to the March 10, 2016, literature review, "Strategies to manage patients with dental anxiety and phobia," published in the journal *Clinical, Cosmetic and Investigational Dentistry*, dental anxiety, dental fear, and dental phobia differ:

- *Dental anxiety* is associated with the thought of visiting the dentist for preventive care and dental procedures. It's an emotional state that precedes the actual encounter with the threatening stimuli.

- *Dental fear* is a reaction to a known or perceived threat or danger that prompts a fight-or-flight response.

- *Dental phobia* is a persistent, unrealistic, and intense fear of a specific stimulus, leading to complete avoidance of the perceived danger. Avoidance is characterized as failed appointments, infrequent attendance, and several years of non-attendance, according to the article, "Behavioural dentistry: The impact of dental anxiety on daily living," published in the *British Dental Journal* in 2000. This can lead to more dental pain, poorer oral health, and a decreased quality of life, according to King's College London researchers.

"I differentiate anxiety and phobia," explains AGD emeritus member Harvey Levy, DMD, MAGD, of Frederick, Maryland, an expert in treating patients who are dentally anxious or who have special needs. Levy, an author and frequent lecturer on this subject, is the 1986 AGD Humanitarian Award recipient and has attained five AGD Lifelong Learning and Service Recognitions.

"Anxiety is a feeling of nervousness or apprehension about what will happen during a dental visit," he says. "In most cases, we can deal with anxious patients by using mild oral sedation and/or laughing gas. It's when anxiety progresses to phobia — an extreme fear or aversion to the dental visit — that we have to use deeper sedation or even general anesthesia."

According to the Centers for Disease Control and Prevention, more than one-third of the U.S. population avoids going to the dentist altogether. Levy says that for adults, the two main deterrents to seeking dental care are fear and finances. For patients with special needs, the proportion is even higher due to the scarce number of dentists who are both able and willing to treat them.

According to the August 1999 case report, "The psychology of dental patient care: Barriers to accessing dental care: patient factor," dental anxiety is among the psychosocial factors that act as barriers to accessing care, the others being financial costs, perceptions of need, and lack of access.

Uncovering the Root Cause of Anxiety

What causes dental anxiety? Fear of pain, primarily, according to "The Fearful Dental Patient: A Guide to Understanding and Managing (2011)."

Levy says some dental patients may have either had their own negative past experience or simply heard about someone else's negative experience. In addition, according to "Strategies to manage patients with dental anxiety and phobia: a literature review," what dentally anxious patients commonly fear include:

- A sense of helplessness in the dental chair
- Choking and/or gagging
- Detached treatment by a dentist or a sense of depersonalization
- Lack of control during dental treatment
- Ridicule

"My experience has shown that there's always some history that [the patient has] had," Cushing says. "Either somebody was screaming in a chair next to them in a dental office, or they heard their parents say that the dentist hurt them. They watched a TV movie, or they're just a nervous person in general, so everything scares them. There's almost always an original event or something that has made them afraid."

Questionnaires can be useful in assessing a patient's anxiety level. According to the October 2000 study, "Anxiety and pain measures in dentistry: a guide to their quality and application," published in the *Journal of the American Dental Association*, Corah's Dental Anxiety Scale is the most widely used measure of anxiety. It was introduced in 1969 by Norman L. Corah of the Department of Behavioral Science, School of Dentistry, State University of New York at Buffalo. The questionnaire says:

1. If you had to go to the dentist tomorrow, how would you feel about it?
   a) I would look forward to it as a resonably enjoyable experience.
   b) I wouldn't care one way or the other.
   c) I would be a little uneasy about it.
   d) I would be afraid that it would be unpleasant and painful.
   e) I would be very frightened of what the dentist might do.

2. When you are waiting in the dentist's office for your turn in the chair, how do you feel?
   a) Relaxed
   b) A little uneasy
   c) Tense
   d) Anxious
   e) So anxious that I sometimes break out in a sweat or almost feel physically sick

3. When you are in the dentist's chair waiting while he gets his drill ready to begin working on your teeth, how do you feel?
   (Same alternatives as number 2.)

4. You are in the dentist's chair to have your teeth cleaned. While you are waiting and the dentist is getting out the instruments [that] he will use to scrape your teeth around the gums, how do you feel?
   (Same alternatives as number 2.)

(Source: "Development of a dental anxiety scale" 1969, *Journal of Dental Research*)

"The best way to [identify what is making the patient fearful] was to go about it like Dr. Corah did back in 1969 and start developing these questionnaires of experiences and conditions and events that the average person experienced when [he or she] went to the dentist for treatment," Weiner says. "Over the years, many practitioners have come up with different questionnaires." Some questionnaires gauge the ASL on a scale of 1–5, or mild to moderate to severe, he says. "It depends on the practitioner and the questionnaire [he or she] is developing."

When developing his own personal questionnaire for use in practice, Weiner said he would consult one of his "worst patients" — his wife.

"She was so frightened of [going to the] dentist," he says. "She was petrified. When she went to a dentist as a kid, they frightened her. She told me about all those things. When we made our first questionnaire, I used to ask her: 'What kind of questions do you think I should ask?' [She would say]: 'Why don't you ask me how I became frightened? Why don't you ask me about the dentist? Was he mean? Was he good? Why don't you ask me about my parents? Did they come to the visit with me? Did they stay in the room with me, or were they told to get out by the dentist?'

"Very few practitioners like to use questionnaires because they take up too much time," Weiner continues. "And that's sad because getting to know what causes a patient's fear is so important in developing a program to alleviate it."

A well-informed patient is one who is better able to cope with his or her anxiety, Weiner says. "You often hear that a well-informed patient who is more knowledgeable about what is going to be done, what to expect regarding feelings, and how much time it will take is better able to cognitively appraise the potential threat," he says, "and, therefore, can formulate an appropriate coping mechanism to ensure the treatment will occur, and you cannot do these things unless you ask questions."

Dialogue is a two-way street, and it's important for dentists to realize that patients may feel like they can't ask questions of a practitioner, adds Cushing. In her book, she shares the story of an adult patient who for years had felt the pain of drilling but had been told it was all in his head, so he had trained himself to grit his teeth and bear it after his complaints weren't heard, contributing to his dental anxiety. "I truly have heard so many patients tell me, 'I didn't know I had a right to say anything,'" Cushing says.

Cushing, Weiner, and Levy all agree that, in their experience, if patients are engaged in conversation, they will say whether or not they are experiencing anxiety.

"If you can sit one-on-one with a patient, and you're not rushed, you're caring, and you listen, people will share with you," Cushing says.

It's also important to look for signs of patient anxiety, which, according to "The Fearful Dental Patient: A Guide to Understanding and Managing (2011)," can manifest in muscle tension, increased heart rate, hyperventilation, and fearful facial expressions.

Helping Patients Overcome Dental Anxiety and Phobia with Therapy

Levy estimates that over the past 42 years, his practice has encountered 36,000 visits where patients presented with anxiety or phobia. Dental anxiety can be managed by psychotherapeutic interventions (such as behavior modification), pharmacological interventions (either sedation or general anesthesia), or a combination of both, according to "Strategies to manage patients with dental anxiety and phobia: a literature review":

Behavior Modification

Behavior modification is most effective with patients who are not cognitively impaired and do not have a pressing dental need, Levy says. These therapies aim to change unacceptable behaviors through learning, and involve muscle relaxation and relaxation breathing, along with guided imagery (a directed, deliberate daydream) and physiological monitoring using biofeedback, hypnosis, acupuncture, distraction, positive reinforcement, stop-signaling, and exposure-based treatments, such as systematic desensitization, according to "Strategies to manage patients with dental anxiety and phobia: a literature review." Below, two therapies are further explored:

Stop-Signaling
(to Offer a Sense of Control)

According to the literature review, this involves signaling to the dentist or dental hygienist to stop the procedure, increasing the patient's sense of control and trust in the dentist. Signals, such as a raised hand, can be determined prior to a procedure. A practitioner also could give the patient a sense of control by giving him or her a mirror to watch the procedure.

Weiner writes in "Anxiety Sensitivity Levels: A Predictor of Treatment Compliance or Avoidance (2013)": "Individuals with high ASL may experience high fear-related pain, yet if the patient perceives that he or she has some degree of control over the situation and his or her well-being, either through

AVOIDING THE CHAIR

Here's a list of additional reasons why a patient may be afraid of going to the dentist, according to Susan R. Cushing, DMD, MAGD:

1. People may feel shamed into going to the dentist. They may believe they need a nice smile to be successful and that how their teeth look can make or break a first impression. They may feel like people are judging them — even their dentist.
2. They may feel forced to go to the dentist because they're experiencing pain and already are in a vulnerable and negative emotional space.
3. They may be conscious of boundaries and may not want the dentist to come so close to their mouths.
4. They may have a low "dental IQ status" and may not understand what is being communicated to them in technical terms.
5. They may have difficulty finding a dentist adequately prepared and able to handle intensely fearful patients.

information provided or accessory modalities (e.g., raising a hand) that might permit a pause, that perception of control is more likely to allow a patient to better endure the overall procedure and exhibit lessened aversive behavior."

In the article, Weiner explains two dimensions of control: desired control (the level of threat or harm and therefore the degree of control the patient believes he or she desires to have) and perceived control (a reflection of the patient's confidence to cope with the anticipated threat via coping strategies). "The greater the difference between these two factors, the greater the perception and belief by the patient that harm will exist," he writes.

Systematic Desensitization

According to "Strategies to manage patients with dental anxiety and phobia: a literature review," systematic desensitization involves three sets of activities: encouraging the patient to discuss his or her fear and anxiety in order to construct a hierarchy of feared dental situations, from the least to the most anxiety-provoking; teaching the patient relaxation techniques, such as breathing and muscle relaxation; and gradually exposing the patient to these situations in the hierarchy, from the last to the most anxiety-promoting.

"Behavior modification depends on finding what the patient really is fearful of," Weiner explains. "For example, let's say he or she is afraid of the injection. We would work up a step — there's a hierarchy of steps — from the least harmful exposure to that stimulus to the [fullest] exposure. So if someone is fearful of a needle, we might take a needle and cut off the point. We might let them pin it to their [clothing] and wear that for a while and play with it, and we would let them feel it. Then when they can do that, and it didn't cause them any anxiety, we'd go to the next step. We'd give them a syringe and let them look it in the wrapping. If that didn't cause anxiety, we'd take the wrapping off. We'd give them an orange and let them use the syringe on it, get used to the feeling of going in and out.

"I want to find out why: Why are you fearful? You were not born frightened. So, where'd that fear come from?"

— AGD emeritus member Arthur A. Weiner, DMD, FAGD

Eventually, we'd let them feel it against their skin. Each time, we'd increase."

Regarding the difference between familiarization and desensitization, Levy explains: "If someone is sensitive to something, that person can be desensitized to become less sensitive. If they are not familiar with something, they can be taught and made familiar with it. The two concepts may overlap, but are not identical. I might desensitize a person who had a previous bad experience. I might familiarize a child with things I am about to do, that they have never seen or experienced before, like a teacher or parent would do."

Levy specifies that the dental team doesn't have the luxury of employing behavior modification if a patient has an acute problem. "That's when we have to bypass the techniques that can be done over time," he says, and conscious sedation becomes the preferred option.

Together with behavior modification, Levy's practice prescribes a sedation pill or liquid just prior to the visit to ease the patient's anxiety and to raise his or her threshold to tactile sensitivity. For further comfort, nitrous oxide may be administered as well, he says.

Conscious Sedation

Cushing says, in her experience, many of her patients opt for conscious sedation over behavior modification. Sedation is defined as the use of a drug of combination of drugs to depress the central nervous system, according to "Strategies to manage patients with dental anxiety and phobia: a literature review." The literature review further explains minimal and moderate sedation:

Minimal sedation/anxiolysis (for managing patients with mild-to-moderate anxiety): a drug-induced state during which patients respond normally to verbal commands; it is achieved with either oral sedatives alone or in combination with nitrous oxide and oxygen.

Moderate/conscious sedation (for managing patients with moderate-to-severe anxiety): a drug-induced depression of consciousness, during which patients respond purposefully to verbal commands; conscious sedation techniques include oral (benzodiazepines are commonly used), inhalational (this is the most commonly used technique for dental sedation; a mixture of nitrous oxide and oxygen is used), and intravenous (IV) (this common technique involves the use of benzodiazepine alone or in combination with an opioid).

Among dentally fearful patients, having greater dental needs, higher dental fear, more negative beliefs about dentists, more psychiatric pathology, fewer coping skills, and lower desire to cope were predictors for receiving IV sedation, according to the January 2012 manuscript, "Determinants of receiving intravenous sedation in a sample of dentally-fearful patients in the USA," published in *SAAD Digest*, the journal of the Society for the Advancement of Anaesthesia in Dentistry.

Sedation should only be sought in situations where the patient is not able to cooperate well or is considered phobic, according to "Strategies to manage patients with dental anxiety and phobia: a literature review"; in addition, patients with special needs (such as patients with mental retardation, autism, mental

THE IMPACT OF DENTAL ANXIETY ON DAILY LIVING

The effects of dental anxiety on people's lives are wide-ranging:

Physiological Symptoms
Researchers of an October 2000 study that probed the dental anxiety of 20 adult subjects, as well as its impact on their lives, found that the majority of them reported experiencing physiological symptoms of fear (such as dry mouth, sweatiness, and increased heart rate) the day of or night before a dental appointment. Some reported feelings of exhaustion after the appointment, which prevented them from carrying out normal daily activities.

Avoidance Behaviors
Participants expressed that in order to avoid going to the dentist, they avoid eating certain foods, particularly hard food (because of reduced ability to chew) or cold food (because of sensitivity); are motivated to maintain stellar oral hygiene and purchase what they perceived to be the best aids to oral hygiene; and self-medicate (including the use of antibiotics and over-the-counter analgesics).

Loss of Sleep
A majority of participants reported loss of sleep the night before a scheduled dental appointment, as well as dreams and nightmares "remote from a dental appointment" (although these were reported less frequently).

Source: "The impact of dental anxiety on daily living" (October 2000, British Dental Journal*)*

illness, and traumatic brain injury) also can "necessitate pharmacological management."

Weiner says a practitioner always should know whether a patient already is taking an anti-anxiety medication or any other medication.

"Sometimes patients will be in a purely anxious state — they're anxious about everything," he says. "Dentistry is just one of them. Call their primary care physician or whoever is attending the anxiety and find out if [conscious sedation] is OK."

General Anesthesia

Levy estimates his practice has encountered 1,800 instances over the past 42 years during which a patient's anxiety was beyond the dental team's ability to treat them in a safe office setting — so these patients were put under general anesthesia, a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation, according to "Strategies to manage patients with dental anxiety and phobia: a literature review."

"General anesthesia provides complete relief from both anxiety and pain," according to the 2012 "American Dental Association Policy Statement: The Use of Sedation and General Anesthesia by Dentists." Comparatively, according to the ADA statement, "Sedative drugs and techniques may control fear and anxiety, but do not by themselves fully control pain, and thus, are commonly used in conjunction with local anesthetics."

"For those [extremely anxious] patients, we said, 'Let's reschedule this while you are totally asleep in a hospital or surgical center operating room, where an anesthesiologist will safely put you to sleep,'" Levy says. He says he treats four patients under general anesthesia once a week, typically every Monday. His partners in dental practice also treat patients under general anesthesia.

"Asleep patients' anxieties or phobias or fears don't manifest," Levy says.

Weiner says while he believes the use of general anesthesia and conscious sedation to treat a frightened patient in need of an emergency procedure or who is facing potential tooth loss is "perfectly all right," its continuous use doesn't benefit the patient in the long-term — "simply because the patient learns nothing regarding the amelioration of their fear."

"[Conscious sedation] merely acts as a method to avoid their fear, and its use avoids the real things we are trying to do — and that is help the patient over time to abolish their fears and anxieties regarding the dental environment," Weiner continues. "Once the patient reaches the stage where he or she can no longer use sedation for reasons of drugs, disease, old age, or other compromises, he or she is confronted with the initial fear and avoidance experienced years before. Having done conscious inhalation and intravenous sedation for years, I speak with great certainty: Use it too much, and we addict patients to this method of escape."

Weiner advises general dentists to try behavior-modification therapy in helping their patients to overcome their anxiety. "You will, as I can now do, look back on a wonderful and satisfying career content in the knowledge that you have helped many and helped your profession to be looked at by others in 'a more gentle and kinder way,'" he says.

Cushing adds that successfully overcoming dental anxiety not only benefits a patient's oral and overall health, but also his or her peace of mind and self-esteem.

"I don't think living with the fear is good for us emotionally and spiritually," she explains. "I've had [confident people] say to me, 'I can do anything in this world, but I can't go to the dentist.' It's amazing how many people say to me, 'This has been holding me down for years.'" ✦

Lindsey Lewandowski is the communications editor at the Academy of General Dentistry. To comment on this article, email *impact@agd.org*.

As a Master or Fellow, what advice do you have for general dentists?

John W. Sung, DDS, FAGD

As I've heard it said, "Some people make things happen. Some people watch things happen, while others wonder what happened." Be the person who makes things happen. Connect with your fellow AGD members and learn from each other. Iron sharpens iron — we can achieve excellence together.

Sung is based in Oakland Gardens, New York.

Harvey Levy, DMD, MAGD

As a general dentist, you are fortunate in that you have far more freedom than a specialist. You are limited by only two things: your confidence and your competence. To boost them both, you need to do two things: take participation continuing education (CE) courses and practice what you learn. The more diverse your portfolio of offerings to patients, the more you and your practice will grow.

Levy is based in Frederick, Maryland.

T. Bob Davis, DMD, MAGD, FACD, FICD, FADI, FPFA

The overriding crisis … is to no longer focus first on educating the public about our knowledge and skills, but rather to seek to motivate the public to desire health. Motivate the public to desire dental care as much or more than they do their [other] habits and wants. A motivated person will seek what is best for them, and that will include quality dental habits and care. All of our efforts as dental organizations and practitioners must address this issue to successfully practice what we are prepared for and are licensed to be.

Davis is based in Dallas.

Alex Gonzalez, DDS, MAGD

Challenge yourself by honing and expanding your clinical skills. Maintain the high standards of our profession by pursuing education and lifelong learning. Embrace the camaraderie and community that exemplify the Academy of General Dentistry.

Gonzalez is based in El Paso, Texas.

Ivy Peltz, DDS, M.S.Ed., Ph.D., MAGD

Here are some yoga lessons (as I interpret them) that I try to apply to my dental practice and to my life:

- **Lead with your heart.** When your heart and brain are in conflict, go with your heart.
- **Find your center.** Figure out what brings you peace, and make it happen.
- **Continue to grow.** View each experience as a new one from which you can learn.
- **Maintain perspective.** Understand how small you are in the context of the universe.
- **Breathe in. Breathe out.** Your breath will nourish your mind, heart, and soul.

Peltz is based in New York, New York.