

# ACADEMY OF DENTAL LEARNING

## Best Practices for Treating Anxious Dental Patients of All Ages

*6 Homestudy Credit Hours*

Mary Oeding, R.D.H., M Ed.

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**Anxious or Phobic Dental Patient (6 Credit Hours - \$54.00)**

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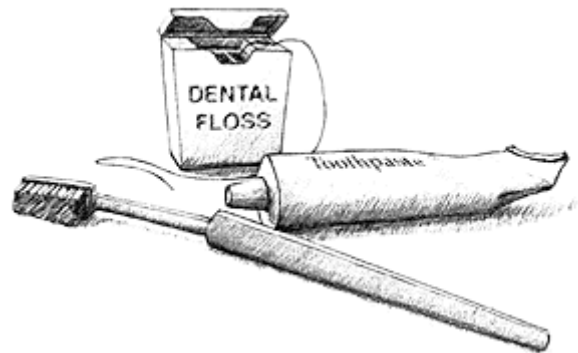
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Upon completion of this course, the student should be able to:

- Define fear, anxiety, phobia, and pain. Describe how they are related.
- List some of the methods of assessment of dental fear or phobia.
- Describe the physiological reactions to fear stimuli.
- List common reasons for patient's fear of dentistry.
- List some current methods used by dentists to reduce the anxiety of their patients.
- Describe the role of the dental staff in reducing patient anxiety.
- List actions that experts recommend avoiding in order to reduce patient anxiety.
- Describe ways of teaching the patient to relax during dental treatment.
- Describe some current methods of anesthesia.
- List the conditions when is it appropriate to refer the patient to a mental health professional or a dental fears treatment clinic associated with a dental school.



Many patients only visit the dentist for emergency situations or when the pain of a dental problem becomes so severe that they can't stand it anymore. Why don't these people seek treatment when they first notice the symptoms? Why aren't they scheduling routine maintenance visits?

Some people can't face dental treatment because it terrifies them. They would rather live with the pain or poor esthetics caused by lack of dental care. A study by Dr. Scott in 1984, shows that dental fear affects as much as eighty percent of the United States population to some degree. Current data shows that up to twenty-percent of those needing dental care avoid the dentist due to fear and anxiety. In fact, dental phobias are one of the most common types of phobias around the world.

Many of those patients experiencing dental phobia seek a referral for IV sedation or general anesthesia for dental procedures, but does sedation really help the patient overcome his or her fears? Many experts agree that medication for sedation will only propagate the cycle of emergency treatment and avoidance of routine care. (Kroeger 1988)

Additionally, dental professionals agree that anxious patients can be difficult to manage and treat. In addition to taking up to twenty-percent more appointment time (Jepsen 1992), the anxious patient is more likely to be late and three times more likely than any other patient to not show up for their appointment at all (Mendola 1991). Many dental professionals experience feelings of frustration or inadequacy leading to increased stress when treating anxious patients (Glassman 1993). While treating an anxious patient can be difficult, exceptional care may lead to more referrals for the dental office that is willing to take the time to treat the patient's anxiety.

The key to treating patients who experience dental fear and anxiety lies in a concept as simple as compassion. In addition to common techniques that can ease pain during dental procedures, this manual will provide helpful assessment techniques and revisit the idea of a compassionate and caring dental team.

### Definitions



**Fear** is a learned reaction characterized by physiological symptoms such as quickened heart rate, nausea, sweating, muscular tension, and increased respiration. The response is initiated by a real or imagined threat to one's safety. The patient poises in a fight or flight stance ready to either escape the stimulus or stand and defeat it.



**Anxiety** is a different type of disturbed emotional state. Usually associated with dangerous or unpredictable situations, the physiological symptoms include sweating, increased heart rate, pounding chest, dry mouth, diarrhea, muscle tension, and hyperventilation. The patient may have a sense of impending doom. Unlike fear, where the source is easily identifiable, when a patient is questioned about the stimulus for anxiety, the source is not easily identifiable.



**Phobia** is an irrational fear reaction. It is excessive, persistent, and exaggerated. The physiological reactions are the same as anxiety, but the phobic state is beyond conscious control. Reason or explanation cannot comfort the phobic. Often a dental phobic feels as though no one understands his or her problem. They are usually embarrassed and ashamed of their fears and may be concerned that they are mentally unstable.



**Pain** is an anatomical and physiological reaction to a stimulus. The thoughts and emotions of the patient as well as previous experiences, expectations, and distractions can influence the patient's perception of pain. The physiological and emotional symptoms are very similar to those of anxiety. Often anxiety and pain occur at the same time.

# The Body's Response To Pain And Fear

It is valuable to compare the physical response of pain in the body to the relaxation response of the body. (Kroegeer 1987)

| <b><u>STRESSFUL RESPONSE</u></b>   | <b><u>RELAXATION RESPONSE</u></b>   |
|--|---|
| The stressful situation activates two systems:   | The relaxation response produces the opposite effects.  |
| <p style="text-align: center;"><b>System 1</b></p> <p><i>hypothalamus to anterior pituitary to adrenal cortex</i></p> <ul style="list-style-type: none"> <li>• adrenal cortex produces steroids</li> <li>• inactivates lymphoid tissues</li> <li>• stimulates glucose production</li> <li>• irritates G.I. tract lining</li> <li>• stimulates kidney to produce renin</li> </ul>   | <p style="text-align: center;"><b>System 1</b></p> <p><i>hypothalamus to anterior pituitary to adrenal cortex</i></p> <ul style="list-style-type: none"> <li>• adrenal cortex is deactivated</li> <li>• decreases steroid production (syntoxic)</li> </ul>  |
| <p style="text-align: center;"><b>System 2</b></p> <p><i>hypothalamus to sympathetic division of the autonomic nervous system, sympathetic nerve endings secrete norepinephrine and epinephrine</i></p> <ul style="list-style-type: none"> <li>• adrenal medulla produces epinephrine               <ul style="list-style-type: none"> <li>○ increases                   <ul style="list-style-type: none"> <li>▪ blood pressure</li> <li>▪ heart rate</li> <li>▪ blood glucose</li> <li>▪ blood cholesterol</li> <li>▪ respiration</li> </ul> </li> </ul> </li> <li>• irritates G.I. tract</li> <li>• decreases salivation</li> <li>• dilates pupils</li> </ul> | <p style="text-align: center;"><b>System 2</b></p> <p><i>hypothalamus to sympathetic division of the autonomic nervous system</i></p> <ul style="list-style-type: none"> <li>• deactivates sympathetic system               <ul style="list-style-type: none"> <li>○ decreases                   <ul style="list-style-type: none"> <li>▪ epinephrine production</li> <li>▪ blood pressure</li> <li>▪ blood glucose</li> </ul> </li> </ul> </li> <li>• <i>activates parasympathetic system</i> <ul style="list-style-type: none"> <li>○ constricts pupils</li> <li>○ increases salivation</li> <li>○ decreases respiration</li> <li>○ decreases heart activities</li> </ul> </li> </ul> |

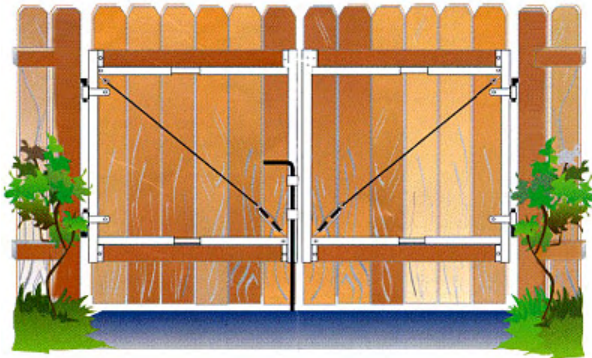
## Gate Control Theory

The Gate Control Theory postulates that the body cannot produce a stress response and a relaxation response at the same time. Presented in 1965 by Melzack and Wall, it shows a correlation between the emotional and cognitive state of the patient and the degree of response to pain stimuli. Though controversial with respect to its physiological basis, the pain research community widely supports its findings.

As a pain impulse is generated in the receptor cell it goes through the spinal cord to the brain where it is interpreted as painful or not painful. The spinal cord is referred to as the "gate." The signal is sent to the brain from the gate. Simultaneously a signal is sent from the brain to the gate to either open or close the gate. This action modifies the intensity of the pain response. If the patient experienced fear during a dental appointment in the past, and if they are expecting pain, their brain signals the gate to be wide open. Thus, the patient will react to the smallest pain impulse.

The theory states that if a patient can learn effective relaxation methods, have confidence in the dentist and staff, and use positive self-talk, then he or she can make their brain signal the gate to be closed. If the patient is relaxed during a procedure, the anesthetics can be more effective. If the anesthetics are more effective, the patient will not respond to minor impulses from the area being treated.

The Gate Control Theory has had a tremendous impact on the way pain is defined. The anatomical and physiological responses to stimuli are influenced by the mental and emotional state of the individual. Current expectations, experiences, and distractions all play a role in the pain experience.



## Assessment Techniques

The phobic patient can sometimes be identified during their first phone call to the office to schedule an appointment. Therefore, it is important that the receptionist not only be thorough, but compassionate when dealing with potential patients.

To assist with the identification of a phobic or anxious patient the receptionist should include the following questions in the first conversation with the patient:

- When was your last dental visit?
- What was the procedure?
- How did it make you feel?
- Are you concerned about any aspect of the dental office?



If the responses indicate anxiety, the receptionist can reassure the patient that the entire dental staff is very interested in working with individuals and their dental fears. He or she can stress that dental anxiety is normal and that the dental staff has measured success (if applicable) with treating patients with similar fears. Since most dental phobics don't come to their scheduled appointments, this initial reassurance may be necessary for the patient to have the bravery needed to walk through your office's front door.

The receptionist should take note of the patient's responses and inform the dentist before the patient's arrival. This will enable the dentist to structure the first visit differently if anxiety is suspected. It will also allow the dentist to allow more time for the initial visit.

It is important to remember that someone on the dental team may need to approach the patient regarding fear and anxiety. Particularly in adults, the patient may mask his or her behavior making assessment difficult. Additionally, the patient may be too embarrassed to initiate discussion about his or her fears.

It may be beneficial to utilize health history forms which include questions such as: "Have you ever had a bad experience in the dental office?" or "Are you afraid of dental treatment?" Space should be given for the patient to write additional comments about specific fears. Simply spending time at the initial treatment planning appointment and identifying the patient's fears can be rewarding. Such simple actions reassure the patient that the dental staff cares about their emotional state as well as the condition of their teeth.

If the dental staff determines that the patient has a dental phobia, an assessment tool such as the Corah Anxiety Scale can be very useful. This scale "kills two birds with one stone" and completes the patient's medical history while determining the extent of his or her fears. Sometimes just the action of writing out the fears can produce a catharsis or purging effect, helping the patient better understand his or her fears.

| <b>The Corah Anxiety Scale</b>   |   |
|--|---|
| <b>1. If you had to go to the dentist tomorrow, how would you feel about it?</b>   | <ul style="list-style-type: none"><li>a. I would look forward to it as a reasonably enjoyable experience.</li><li>b. I wouldn't care one way or the other.</li><li>c. I would be a little uneasy about it.</li><li>d. I would be afraid that it would be unpleasant and painful.</li><li>e. I would be frightened at what the dentist might do.</li></ul> |
| <b>2. When you are waiting in the dentist office for your turn in the chair how do you feel?</b>   | <ul style="list-style-type: none"><li>a. relaxed</li><li>b. a little uneasy</li><li>c. tense</li><li>d. anxious</li><li>e. so anxious I sometimes break out in a sweat or almost feel physically sick.</li></ul>  |
| <b>3. When you are in the dentist chair waiting while he gets the drill ready to begin working on your teeth, how do you feel?</b>   | <ul style="list-style-type: none"><li>a. relaxed</li><li>b. a little uneasy</li><li>c. tense</li><li>d. anxious</li><li>e. So anxious I sometimes break out in a sweat or almost feel physically sick.</li></ul>  |
| <b>4. You are in the dentist chair to have your teeth cleaned, while you are waiting the dentist is getting out the instruments he will use to scrape your teeth around the gums, how do you feel?</b> | <ul style="list-style-type: none"><li>a. relaxed</li><li>b. a little uneasy</li><li>c. tense</li><li>d. anxious</li><li>e. So anxious I sometimes break out in a sweat or almost feel physically sick.</li></ul>  |

This survey can easily be tailored to each dental office. Use the responses from such a survey to identify what the patient is most afraid of and address it at the first meeting.

Since the signs of fear can present in many ways, it is important to focus your full attention on the patient. The anxious patient will sometimes exhibit signs of fear that are verbal, behavioral, or somatic (physical).



**Verbal signs:** include self reports such as: "I never did like the dentist," or "I hit the last dentist who tried to give me a shot"; also "When will it be over," "I usually need extra novocaine," or "I faint at the sight of a drill."



**Behavioral signs:** the patient jumps as the chair back is lowered; physically closed nonverbal communication like arms crossed, legs crossed; gripping armrests; sits in operators chair instead of patient chair upon entering the operatory; muscular tension; avoidance of eye contact; fidgeting; fainting; or lack of cooperation.



**Somatic signs:** high pulse rate, sweating, irregular breathing, pupillary dilation.

Some experts maintain that the best indicator of a patient's true anxiety level is a combination of the patient's self-report and their records of dental care. The oral examination may reveal extensive restoration and signs of long spans in between dental visits. A patient may not admit to being anxious but there are many signs that the dental staff can look for that aide in diagnosing a patient with dental fear. During the initial exam it is important to look for advanced carious lesions, extensive periodontal disease with abundant calculus, or extensive fixed prosthetics. Each of these issues indicate that the patient has not received routine dental care.

Another issue many patients with dental fears report is a past allergic response to dental anesthetic. These patients should be questioned more in depth about the details surrounding the perceived allergic experience. Sometimes the reaction is actually an uncomfortable state caused by a combination of the patient's anxiety and epinephrine. If the patient truly feels that he or she is allergic to the anesthetic, they can be referred to an allergist. If the patient is in agreement, exposure to a small amount of anesthetic (such as a little topical on the lip or buccal mucosa) may be applied so you and the patient can observe any symptoms. If the patient comes to the realization that the "allergic reaction" is simply a combination of the anxiety and the feeling of being numb, with the patient's permission, increase the dosage in small increments so he/she can become accustomed to the anesthesia without adding the anxiety of a dental procedure. If you wish to attempt this procedure, be cautious of putting the patient on the defensive as it may lead the patient to feel that the dentist is not concerned with their problem.

There are many reasons people experience dental anxiety. The most often reported reasons are: fear of injections, anticipating pain during treatment, and expectations of post-operative discomfort.



**Uncertainty.** Most people are somewhat apprehensive during a new experience. Uncertainty about what is going to happen and tension with being in new surroundings increases anxiety.



**Previous experiences.** Past bad experiences in a dental or medical setting usually leave vivid emotional memories that can be triggered by just being in the dental office. Patients who have experienced the following are typically more sensitive to the dental experience and report increased dental anxiety: patients who have had trauma or injury to their face; patients who have been treated in an emergency room or were recently hospitalized; and individuals who had bad immunization experiences.



**Vulnerability and Loss of Control.** While dental staff may believe that dental chairs are designed with comfort in mind, patients with dental fear feel vulnerable when reclined in the dental chair. They also express concern that they will be unable to communicate discomfort once the dentist begins work.



**Invasion.** Dentistry can be invasive and the mouth is often considered a private area of a person's body. Some patients report that dental treatment makes them feel "violated".



**Isolation.** Some patients have reported that they feel isolated during a procedure because the dentist carries on a conversation with the assistant without including them.



**Embarrassment and Shame.** Patients have reported fear that the dentist will reprimand them for the poor state of their dental health. A patient may imagine that the dentist and his or her staff will mock them for the shape, color, or size of their teeth. These patients have a poor self-image and are often ashamed to open their mouths, sure of criticism.



**Second-Hand Information.** Stories from friends or family members about painful dental experiences and uncomfortable situations portrayed in the media may make an impression on a patient and cause undue anxiety.



**Concern About Finances.** Dental treatment can be expensive. Even if the patient is covered by insurance, they may be concerned that all the cost will not be included in their plan.



**Asphyxiation.** Patients with asthma or emphysema are usually very concerned with maintaining an open airway. Stress during a procedure can cause the neck muscles to constrict which can be a source of anxiety.



**Emotional State and Self-Esteem.** Stress in the life of the patient (even if totally unrelated to dentistry) can affect their tolerance and sensitivity to pain and fear.



**Sterile Procedures.** Patients, with or without dental fears, are very concerned about the cleanliness of the office and of the instruments. Recent attention has been given in the media to proper sterile techniques. Though meant to educate the public of the necessity of proper sterile technique, some of the shows have used graphic representations that make a dramatic impression on and instill unnecessary fear in patients.

Other Patients have also reported fear of:

- disfigurement from the loss of a tooth, cut tongue or lip,
- loss of feeling,
- receiving "bad news,"
- dentist superiority or patient inferiority,
- betrayal by past assurances of painless procedures that were painful,
- radiation exposure, and
- mercury poisoning.

The key to successful management of children during a dental visit is a true desire to accomplish a health service for the child. It is recommended that children start receiving dental care as early as one-year-old, thus it is critical that the dentist take the time to make first visits as comfortable as possible for all children even if their behavior is not at first attractive. It is very important for both the dentist and dental staff to mask their own emotions when children start to act up. Never show anger, even if provoked. Keep a sense of humor and try not to hold early bad behavior against the child at future appointments. Establishing a rapport with difficult children initially will help put them at ease for future visits.

Studies have shown that children often model parent's behavior. Assessment of the parent's level of anxiety is the first step in dealing with a child's anxiety. For example, if a parent is anxious about dental treatment, it may be easier to treat the child without the parent in the room. Conversely, if a child patient is uncooperative and the parent has a healthy attitude towards dentistry, it may be helpful to have the parent present during treatment. Traditionally, children preschool age and younger are more cooperative with a parent present while those over eight years old are more cooperative without (Koplik 1991).

It is also important to remember that too many people in the room can distract a young patient and lead to confusion and frustration. The child should be listening and responding to just one person, the dentist. If the parent is present during the treatment, suggest that he/she take the role of a passive bystander so the child can stay focused on the dentist and not be distracted. Children often look to their parents for reassurance, so it is helpful if the parent maintains a sense of calm. A child can sense worry in a parent which may trigger fear and anxiety in the child. As a dentist, keep in mind that some parents use threats in an attempt to frighten their children into brushing more. Unfortunately this puts Dental professionals on the same level as the 'Boogey Man' in the child's mind. If it seems that the child has irrational fears from such suggestions, it may be helpful to provide the parents with materials regarding appropriate verbalization and behavior in relation to Dentistry.



### The Child's First Appointment

A child's first dental appointment can be as early as twelve months of age. Visits at this age are mostly a consultation with parents, addressing their concerns regarding care for the primary teeth, oral hygiene instructions, how to examine the baby's teeth, fluoridation, and nutrition. Such appointments also provide an opportunity for the dentist to discuss proper verbage for parents to use when discussing dental treatment and office visits. This initial visit also provides the child with an opportunity to become familiar with the office and the dentist, exploring the dental chair, or letting the dentist count their teeth. Such visits are a good time to describe to the parents what types of behaviors are acceptable in the dental office and standard office policy for a misbehaving child.



## Children's Fears

In younger years, children are afraid of three basic things:

- Separation from parents
- The unknown
- Being injured



## Behavior

Behavior is learned at home. Children from permissive and undisciplined families often exhibit combative, defiant, and/or tantrum-like behavior. Children from an overprotective family will act shy and timid or sob when they are afraid - looking to the parent for comfort. Keep in mind that the child exhibiting fear may have had a previous experience with a doctor or dentist that makes them afraid. If the dentist takes the time to unravel the events that have led to the child's present behavior, it may be easier to reverse the trend. A little patience, understanding, and communication with the child and their parents can do wonders.

Be sure to reinforce good behavior with children. Remember to reward the behavior, not the child. Saying "very good" to a child does not tell the child what it was that he or she did that was very good. Saying something to the effect of, "You are doing a great job sitting still reinforces the good behavior and the child learns what behavior will be rewarded.

However, reinforcing negative behavior can only make the situation more difficult. Remain patient when a child acts out, let them know that their behavior is not acceptable and remind them what behaviors you consider acceptable. If you simply stop treatment and refuse to address the situation, the child learns that all he/she has to do to get out of a dental appointment is make a big scene. Every time that trick is successful, the negative behavior is reinforced. Thus, some children go from one dental office to another without receiving treatment because of poor behavior and never learning "good behavior."



## Techniques for the Crying Crisis

Crying is a normal reaction to fear, however, most often, a crying child cannot be treated safely. If a child has a crying fit or temper tantrum at any point during treatment, it is necessary to stop treatment until the dentist can regain the attention of the child. Once the child's attention has been gained, then and only then can the dentist teach the child behavior that is appropriate. In the following are behavioral techniques that are designed to "grab" the child's attention during a dental visit. Sometimes if the parent is alright with it, the child tends to cry and act out less WITHOUT the parent in the operatory. It may stem from the child acting out simply to see if the parent will react. Some parents are insistent about staying in the operatory with the child but if the parent is willing he or she can test this theory by standing behind the operatory wall to peer over to see if the child becomes calmer. This way the parent still gets to observe if they are concerned.



## Voice Control

Voice control is one of the methods that can be successful in calming a child who is out of control. Sometimes, it may be necessary for the dentist to raise his or her voice level to assert authority over a misbehaving child. It is important to convey that the dentist is not angry with the child, but that the child's behavior is unacceptable. It is important for the dentist to remember that as soon as the child's attention is regained, he or she should immediately change back to a normal, soft, friendly tone of voice. Give positive reinforcement and start talking about something that has been determined to interest the child such as Mickey Mouse (or the latest movie hero) to get the child's mind back on a positive track.



## Tell-Show-Do

Children, like most people, have a fear of the unknown. A particular instrument can be threatening until the child is introduced to it. Show the child the instrument, tell them what it does, and use the instrument to perform the procedure on an alternative subject such as a stuffed animal (it may be helpful to keep one on hand for such demonstrations). Many times the child just wants to hold or touch the instrument. As long as it's safe and doesn't compromise the sterility of the procedure, it may be helpful to let the child touch the instrument. Be certain to inform the child when it is acceptable to touch the dental instruments and when they should keep their hands to themselves.



## Restraint

It is dangerous for a child to squirm or grab at instruments while they are being treated. It is important for the dentist to explain to the child that grabbing is unacceptable and that if they are unable to follow directions and remain calm during a procedure, they may be restrained. If a child requires restraint during a procedure, a practice that is considered controversial, it may be helpful to "ease" into full restraints. If a child is simply a bit squirmy during an injection, the assistant or parent can hold the patient's hand while the injection is performed. If the child becomes out of control, it may be necessary to use more powerful restraints, such as a Papoose Board, to safely treat the child. A Papoose Board consists of a firm backing with cloth ties or Velcro used to snugly wrap the child's arms, legs, and stabilize the head to the board. It is suggested that if the use of such restraint becomes necessary the parent should not only be consulted, but should assist in placing the child in the device. It is essential that prior to use, the dentist or dental assistant explain the procedure and benefits of using such a method of restraint.



## Medication

There are many different medications that can assist with calming children for dental procedures. It is suggested that medications that allow for conscious sedation be used so an anxious child learns to cope with the procedures over time, thus enabling the child to have a dental procedure without medication.



The most common conscious sedative used in dentistry is Diazepam. Diazepam is often given to the patient prior to the arrival to the dental office as the onset of action for an oral dose is 45 to 90 minutes and its duration is from 2 to 4 hours. It has a long half-life (20 to 100 hours) so it is not desirable for short procedures. It is taken in a pill form, so can be easily administered in children.

Studies also show good results with Midazolam. It is absorbed rapidly (within 10 minutes if administered nasally, 1 hour orally), has a short duration of action and has few side effects. It can also be administered intravenously if necessary.



Nitrous oxide/oxygen sedation is also effective in calming pediatric patients, but is typically a last resort.

If the child is too disruptive in the general practice setting, consider referral to a Pedodontist. Pedodontists specialize in working with children and are trained in behavioral management techniques and have offices specially designed for children.

## Socio-Legal Concerns

In recent years, there is significant public concern over matters of child abuse in the dental setting. While the procedures covered here are considered acceptable, it is important to use any means of restraint or medication in a professional way that is in the best interest of the child. In all instances that restraint or medication is used, it is necessary to obtain a specific informed consent from the parent. (Braham et al, 1994) It is also necessary that a witness present (the assistant) at all procedures involving children.

Parents may find some behavior techniques unacceptable, even if they are commonly accepted in dentistry. Informed consent must include the nature of the intended treatment, the benefits and risks of the treatment, alternate methods of treatment, and the benefits and risks of not receiving treatment. It can no longer be assumed that the parent gives full consent to any type of treatment if they have not signed a written, detailed consent form.

## How Do Dentists Treat Anxious Patients?

While much of what a dentist can do to treat an anxious patient may seem like common sense, it is important to remember that it only takes one bad experience to deter an anxious patient from returning for dental treatment. It is up to the dentist and his or her staff to ensure that the patient not only receives exceptional dental care, but compassionate care as well. According to Dr. Josh Bernstein in his April 2008 article, *Your Patient's Wow Experience – don't hurt them!*, he emphasizes that dentists simply need to revisit the basic principles of comfortable dentistry to ensure relief for the anxious patient.

Dr. Bernstein focuses on making a patient as comfortable as possible during each visit. He believes that the most important step toward making a patient comfortable with all dental procedures begins with a painless injection. The most important step in administering a painless injection is to take the time necessary to allow the anesthetic to work. It takes up to five minutes for a topical and ten minutes for an injection to take effect. Once the dentist has established trust with the patient through a simple procedure such as an injection, the patient will be more agreeable when it is time for longer and more involved procedures. Dr. Bernstein also suggests that both the dentist and his staff be up to date on the most recent equipment, techniques, and materials used on a day-to-day basis. Greater knowledge and understanding of dentistry provides a patient with confidence that the dentist and his staff are knowledgeable and reliable.

Some surveys conducted in recent years have shown that in addition to painless injections, it is important to spend time explaining the procedure to the patient and giving the patient an opportunity to signal for a rest during the procedure if necessary. Patients have also benefited from music distraction, relaxation therapy, and nitrous oxide-oxygen conscious sedation.

A study published in 1991 (Smith, Kroeger, Mullins) provides more ideas to assist with managing patient anxiety.

- Be friendly to the patient
- Show that you pay attention to what the patient says
- Be calm and patient
- Reassure the patient during the procedure
- Make the patient feel welcome
- Show that you take seriously what the patient has to say
- Show that you understand what the patient is feeling
- Use understandable words in talking about the patient's care
- During the procedure, ask if the patient is having any discomfort
- Encourage the patient to ask questions about the treatment
- Say what you are going to do before starting
- Give moral support during the procedure

Some dentists also suggest using humor, giving a reassuring touch, employing a well-trained and empathetic staff, and generally conveying a sincere concern for the patient's well being.

## The Role of the Dental Staff

The dental staff can incorporate many skills into their standard procedure that will reduce anxiety in patients.



**Scheduling.** Make appointments in realistic increments so as not to keep patients waiting too long. Easy, non-invasive treatment should be scheduled for initial visits (oral examination, x-rays, home care instructions, treatment plan presentation). The patient should become familiar with the sights and sounds of the dental equipment during a low stress procedure such as prophylaxis or x-rays. If it has been a long time since the last prophylaxis, the procedure might be better accomplished in two short appointments rather than one long session. Gross removal of calculus along with one week of warm saline rinses and correct brushing technique may begin tissue healing for a more comfortable subgingival and fine scaling. The patient should be informed of the treatment plan before it is started so they can be prepared for multiple visits.

**First Meeting.** The dentist should interview the patient personally. Try to conduct the first session in a quiet, comfortable, confidence building room such as the doctor's private office. The interview's main purpose is to acquire information, "How can we help you?" The first contact between patient and dentist can create non-painful associations, build rapport, and increase the patient's confidence. The dentist should listen carefully to everything the patient has to say in an unhurried and nonjudgmental way. The dentist should convey understanding about not only the facts presented in the interview but also the way the patient feels about treatment in general.



**Compassion.** Help the patient to feel welcome. The receptionist and auxiliaries can provide encouragement and positive feedback to the patient about their progress. Friendly interaction with the dental assistant before treatment can "break the ice." Give the patient a reassuring and non-threatening touch on the shoulder or hand. Touch can convey warmth, security, and competence as well as caring. Always keep eye contact when speaking to the patient. Listen to what they say and use non-critical dialogue. Always use compassion when dealing with patients and show how much you care.



**Interactive Communication.** Assure the patient that you will do your best not to hurt them. Just the simple statement that you will do your best to not cause pain and that you will stop at the first sign of discomfort will reassure the patient and increase their trust. Be sure to follow through with this promise and stop at the first sign of discomfort.

Use previously successful coping skills. It may also be helpful to question the patient about their previous experiences and methods of coping. It can often be helpful to use previously established techniques to deter fear and anxiety in dental a situation.

Clearly state your expectations for the visit. Set goals with clearly defined objectives for the patient's treatment. The patient (especially if a child) should know exactly what is expected of them and the consequences of inappropriate behavior before the start of treatment. Simple explanations such as "When you are quiet and sit still you will be done faster and will feel better" can be very effective.



**Signals.** Set up a signal for communication. If the patient is given a signal to use (such as raising their hand) to stop treatment, they feel more in control of their situation. Use a tell-show-do method of describing the feelings to expect and explain how long the procedure will take. Let the patient ask questions before the procedure.

Ask the patient what they would prefer. Sometimes the patient themselves may have ideas of how the treatment may be more comfortably accomplished. Just asking them what they think and giving them time to respond will show a sense of caring and concern.



**Ambiance.** The office atmosphere can be very conducive to either tension or relaxation depending on many factors. The receptionist can relay a relaxed feeling to the patient when they first arrive. Soothing music and a visual distraction such as a fish tank is often helpful. A non-hurried, caring attitude from the staff and a professional, relaxed working relationship between dentist and assistant can influence the patient's emotional state. Always remember to save all criticism or concern among the dental staff for a time when you can meet privately.



**Hand-Outs.** Have copies of journal articles and other information regarding dental fear and phobia readily available in the waiting room. Simple, understandable articles can be studied at a later date, and just the availability of such materials will convey the concern of the dentist.

**Praise.** Give the patient positive comments about at least one aspect of their dentition or their coping skills at the end of each session. This will build confidence for the next appointment and the patient leaves feeling good. It is also helpful to give the patient praise throughout the appointment, particularly if the procedure takes more time than expected.



**Music.** Stereo headphones with soothing music, books on tape, or relaxation exercises can be a mental distraction as well as partially blocking out the noises of the drill.

**Guidance into Relaxation.** Teach the patient how to relax. If you currently know stress reduction exercises that work for you, explain them to the patient. Other behavioral techniques are covered later in this course.

**Last Resort.** If needed, pharmacological aids such as sedatives or nitrous oxide can be provided, but should be kept to a minimum because they do not help overcome the root of the patient's anxiety.



### Actions to Avoid

Experts warn against ignoring the patient's signals of anxiety and discomfort. Stern commands and excessive restraint may result in traumatizing the patient even more.

A significant number of dental professionals report treatment of the anxious patient causes them to become anxious as well. Patients in turn pick up on the anxiety and interpret it as either incompetence or animosity. The operator must recognize his or her own tension level and control it to decrease the patient's anxiety level.

The words the dental staff uses can reduce or increase the anxiety of the patient from the initial treatment planning appointment. Milgrom (1985) offers an excellent example:

"A dentist after the initial examination might say the following: 'The primary problem is this tooth that hurts. It looks like you will need a root canal, which is a procedure where we take out the nerve and replace it with an inert plug. You have two new cavities that need to be filled, and a few old fillings that should be replaced. You also have moderate periodontal disease which will require treatment. This may sound like a lot of work, but it is all pretty routine dentistry, and everything should turn out 'O.K.' by the time we finish.'"

Though the approach is straightforward enough, the primary focus is negative. The first thing mentioned is a root canal therapy: one of the most dreaded procedures a patient may encounter. Once the fear of the procedure begins, the patient may not pay attention to the remainder of the treatment plan. Instead of focusing on the negative, say:

"Let me begin by saying that most of your teeth are in good shape. You have two kinds of problems, both of which can be successfully treated. I'm glad you came in now, rather than waiting longer. We can make you healthy again. The problem I am most concerned with is the infection in your gums. It is the infection that makes your teeth so sensitive, and can eventually cause more problems. The second problem involves your teeth. There are two new cavities and two to three old fillings that need to be repaired. All of them involve routine patch work and they will be 'good as new' after we're done. The last tooth I want to discuss is the one that you pointed out as bothering you. Although I need to do some more tests, it looks as though that tooth will need more complicated treatment, which I will explain in detail later. It too should turn out fine. I want to give you some antibiotics to reduce the infection in that tooth which will also help the gums. Also, I'd like to start with some simpler procedures so that I can get to know how you react to treatment, and you have a chance to get to know me. Do you have any questions?"



Consider taping yourself during interaction with patients. Do you find any mediocre communication skills in your conversation? Do you emphasize the negative without any positive comments? What is your body posture telling your patients? What do your facial expressions portray?

Some dental schools place a relatively small emphasis on the behavioral sciences as they pertain to the dental experience. Some dental professionals possess little knowledge, experience, or confidence to execute behavioral or psychological techniques in their everyday method of treatment. A happy, relaxed patient is usually a loyal, referring patient. No promises are being made for perfect patient compliance every time. Behavioral techniques deserve at least a brief summary and possibly further independent study, because of their potential to ease stress and anxiety not only for the patient, but for the dental professional as well.



Behavioral management techniques in conjunction with adequate local anesthesia can often provide a comfortable and pleasant experience for the patient receiving dental treatment. All the following behavioral management techniques must be used along with local anesthetics, not in place of them.

### The Latroседative Process

The latroседative process, developed by Dr. Nathan Friedman of The School of Dentistry at The University of Southern California, is a technique that is dentist directed through verbal and non-verbal cues from the dentist. Latroседation is "the act of making calm by the doctor's behavior." This process eliminates or at least significantly reduces the patient's fears by relearning. The latroседative process is successful because it gives the Dentist control of the situation and gives the patient a sense of safety.

The process consists of two steps:

- The latroседative Interview where the dentist focuses on recognizing, analyzing and interpreting the patient's fear and
- The latroседative Clinical Encounter which specifically deals with the specific fear.

The dentist directs the interview by asking the patient open-ended question such as "Are you having any difficulties?" Giving the patient the opportunity to express concerns enables the Dentist to collect and analyze the symptoms and concerns of the patient. If the patient responds with "I'm afraid of the dentist" or "My teeth are in terrible shape, I've neglected them." then the dentist can begin the latroседative process and focus in on the concerns of the patient immediately.



It is important that the patient be open and honest for the latroседative process to work. Since the success of the process relies on the dentist determining the root of the problem, the questions should be open ended at first, then more direct as he or she zeroes in on the cause of the fear. The give and take during the interview serves multiple purposes, the dentist gains the information he or she needs to properly treat the patient while the patient establishes a sense of trust in the dentist. This gives the patient a sense of security while under the dentists care. Once the patient determines the root cause, he or she should outline the dental plan so the patient and the dentist can work through potential fears before the procedure. Consider the following dialogue from "Emergencies in Dental Practice" by F. McCarthy, Chapter 7, written by Dr. Nathan Friedman:

**Dr:** "Are you having any difficulties?" (An open ended question allows the patient to establish their priorities.)



**Patient:** "Doctor, I'm terribly afraid of anything to do with by teeth." (The patient expresses fear and now the Dentist must respond with recognition and acceptance of the problem and follow up questions that will help determine the specific fear.)

**Dr:** "What is it that you are afraid of?"



**Patient:** “I hate needles.” (More specific but still desire more information.. There are many reasons patients fear needles including: deep penetration, pain, and body damage.)

**Dr:** “What is it about injections that bother you?”



**Patient:** “It’s the pain of the shot that bothers me” (This is the specific threat. Now the questions can be directed toward revealing the origin of the fear and the behavior of the past doctor that may be responsible for this learning.)

**Dr:** “Have you had painful injections in the past?” (This is a precise question, repeating the word “pain” to get to the origin.)



**Patient:** “Yes, I have...many times and I’m really afraid of them.” (Sometimes the patient will continue the story, particularly if facilitation is used by nodding the head. If not, then--)

**Dr:** “Can you tell me what happened?” (This brings the patient closer to explaining the origin.)



**Patient:** “As a child I had shots for fillings and the needle hurt a lot...they were awful...” (This pairing of pain with injections may be traumatic enough to set up a conditioned response, but if the doctor’s behavior caused fear as well the threat increases.) I cried and squirmed and they got angry which frightened me more...” (The sense of helplessness is magnified here, the danger is intensified by the doctor; he offers this patient no protection... the distrust is compounded by the dentist’s anger.) “It got worse because sometimes the shots didn’t take, but he drilled anyway... it was terrible!” (The fear of the unknown is added to the other fears—the patient did not know if he or she would have protection from the pain or not... again compounded by the doctor’s lack of concern.)

Now the dentist can shift his or her strategy from gathering information to giving information. The elements of conditioning for this patient are painfully clear: the pain, the distress, the fear of helplessness and the unknown coupled with a particularly uncaring and uncompassionate dentist. The dentist now begins rebuilding the patients trust in dentists with an empathetic statement of support. This statement should be followed by an interpretation of the patient’s reason for his or her fears then an explanation of how you will assist the patient with eliminating his or her fear. The dentist will state: 1) How he or she will behave, 2) What he or she will do, and 3) How he or she will do it.



**Dr:** “I can understand why you would be afraid of injections...” (Support, respect and empathy) “It seems to me that you learned you couldn’t trust that particular doctor to protect you from pain.” (This helps show interpretation and explanation of why the patient is still fearful years after the original events.) “You were depending on him but he didn’t seem to want to help you. These feelings still exist within you and you are still feeling today the same terror and distress you felt as a child. But you can unlearn those fears and learn a new set of feelings based on our relationship.” (Suggests and stirs up hope for a new and different kind of relationship.) “Let me tell you how I think things will go. First, I am confident that I can give you an injection with very little, if any, pain. If there is some pain, it will not be enough to be upsetting. (Marks the beginning of the commitment. This is based on the ability to give injections as painlessly as possible. To promise what you cannot deliver would be disastrous.) “I will keep you informed of what I am doing at all times...” (This is to dispel the fear of the unknown.) “If you feel any concern or discomfort I will stop. I will not do any treatment until you are ready and the area is numb...” (To dispel the fear of helplessness and dependency and to create some sense of control for the patient... as well as establish a sense of trust.) “I know from past experiences that you can learn not to be afraid.” (Suggestion that she can learn not to be afraid is coupled with the assurance of the doctor’s knowledge and expertise.)

It is very important to remember that each patient is an individual, so the techniques used on one patient may not work for another. It is also necessary to avoid jumping to conclusions during the interview as each person’s experience is unique. Take the time and really listen to the patient and what he or she is saying. Try to pinpoint what caused their fears. Address the fears specifically, and make a commitment to act differently, fairly, and in the patient’s best interest to build trust and security.

During the second phase of the Latrosedative Clinical Encounter, the Dentist shows that he or she is more than empty promises. The Dentist must focus on every aspect of the appointment, how he or she handles the patient, both through verbal and non-verbal communications and especially and how gently the dental processes are carried out. Tactile behavior must convey concern and competence and must be gentle yet purposeful. Communicate with the patient continuously so the patient is not taken by surprise. Language used by the Dentist should be non-technical and non-threatening. During the entire appointment, the Dentist must convey a sense of concern about the patient’s fears, acknowledge that the patient’s fear is not unusual, and vow to help them overcome the fear. Patients should be treated with respect and dignity and they should be able to signal the Dentist to stop at any time if they feel discomfort.

Even though the interview and clinical encounter takes up space in writing, it is actually accomplished in as little as thirty to forty minutes. Data shows that patients with fear and anxiety respond well to this technique.



### The Dental Fears Control Program

Dr. Robert F. Kroeger of the University of Kentucky’s Dental Fears Treatment Clinic developed a program that includes a step-by-step process that uses relaxation techniques

to calm patients determined to have dental fear and anxiety. When used prior to treatment but after the initial treatment planning, this study has been shown to be 90% effective in helping patients reduce their dental anxiety.



At the first appointment, the patient completes various emotional evaluation questionnaires. Once the questionnaires are complete, the assistant interviews the patient to pinpoint the exact reason for their fears. This process provides a catharsis for the patient and begins the fear reduction process.



Once the fears are determined, the patient watches a video that demonstrates: the dentist's statement of treatment philosophy, the dentist interviewing a fearful patient, a gentle injection after use of topical anesthetic, patient wearing stereo headphones with a relaxation CD, the patient using the hand control signal to interrupt treatment, the dentist completing a routine operative procedure like a filling, and the dentist's exit interview. The video demonstrates a model of correct responses to the dental setting and the successful completion of a dental procedure without undue stress and discomfort.

After the video the patient is taught two relaxation exercises: progressive relaxation and imagery.



The progressive relaxation exercise involves alternately tensing then relaxing each major muscle in his or her body thus reducing overall muscle tension. The patient is instructed to pace their breathing during these exercises at intervals of five seconds (take a deep breath, hold it for five seconds, let it out at a rate of five seconds, hold five seconds, breathe in five seconds).

The guided imagery exercise involves imagining a relaxing scene in a pleasant place. The patient is instructed to tell himself or herself a story about the place and to imagine as many details as possible involving sights, smells, sounds, and feelings. The patient is instructed to practice these exercises one hour daily over the following week.

During the second appointment, the assistant again interviews the patient and the patient completes the same questionnaires. If the patient has worked on progressive relaxation and imagery, by the second appointment the patient is much less fearful and gives lower ratings on the questionnaires. Once the interview and questionnaires are complete, the patient is instructed to relax for ten minutes and once again watches the modeling video.



After the video is complete, the assistant uses a method called systematic desensitization. The assistant reads a description of a dental scene (such as taking x-rays) and the patient is instructed to imagine the scene for ten seconds then practice a relaxation exercise until the fear reaction disappears. Then another, more stressful scene is described and the patient is again instructed to relax. The patient is eventually

conditioned to relax when confronted with all fear producing dental scenarios. If, following the sessions, the dentist determines that the patient is still too anxious for treatment other options should be considered. The Dentist may prescribe oral premedication or give an outside referral to a mental health professional or a dental fear treatment clinic.

An excellent resource for further study into this technique can be found in Dr. Kroeger's books. "Managing the Apprehensive Dental Patient" is written from the clinician's standpoint. "How to Overcome Fear of Dentistry" is written directly to the patient using nontechnical terminology and includes the questionnaires used to pinpoint the cause of fear.



### Deep Breathing

Sometimes all it takes for the patient to calm down is a few deep breaths. In addition to Dr. Kroeger's exercises, encourage the patient to breathe deeply from the abdominal area. Ten to twenty deep, slow breaths give the patient more time to think about the fact that they are in good hands and that the treatment is for their benefit.



Another type of deep breathing is alternate nostril breathing. Instruct the patient to block off one nostril and breathe in deeply for five seconds. Then, block off the other nostril and breathe out for five seconds. The patient should repeat this ten times then switch nostrils. According to Harvey and Marilyn Diamond in "Fit for Life II" this will balance the right and left sides of the brain and lead to a greater sense of tranquility and harmony.



### Modeling

Inappropriate expectations can lead to inappropriate reactions. Demonstration of appropriate behavior through videos (as mentioned as part of Dr. Kroeger's plan) is an excellent method of patient education.

An ideal modeling tape should include:

- Proper response to an injection (using a gentle technique with topical anesthetic).
- Dentist explaining the procedure including the sounds and feelings associated with it.
- Patient raising his or her hand for a rest stop.
- Proper response to discomfort.
- Successful completion of the dental procedure with dentist praising cooperative behavior.

## Pharmacological Sedation Techniques

Patients who conquer their dental fears through the natural methods mentioned previously in this course will gain self-esteem and tools that can be used not only to squelch dental fear and anxiety, but in many other areas of their lives. Attempts should be made to cure the anxious patient of the root causes of their fears prior to considering sedation. However, some patients will not respond to these methods and will need varying degrees of sedation to allow dental treatment. (Some methods of sedation require additional education or permits)

The three main types of pharmacological anxiety control are: conscious sedation, deep sedation, and general anesthesia.

Conscious sedation is the lightest form of sedation. The patient still maintains an airway continuously and independently, and will respond to verbal commands and physical stimulation. Deep sedation is a controlled state of depressed consciousness. Protective reflexes are reduced, and the airway is not independently maintained. The patient will not respond to verbal commands. General anesthesia is a controlled state of unconsciousness. Protective reflexes are nonexistent, and the airway is not independently maintained. Sedation drugs are administered orally, intramuscular or intravenously, or by inhalation.



Oral drugs like Benzodiazepines (Diazepam and Oxazepam) can be administered one hour prior to the dental appointment. Triazolam and Flurazepam are useful when administered the night before treatment to assure a sound night's sleep. Chlorohydrate with Promethazine or Hydroxyzine is used in pediatric dentistry.



Nitrous oxide is an effective anesthetic agent. Combined with oxygen, it is the safest and most controllable form of sedation available. It has few complications, and the patient has no side effects after the administration of pure oxygen. Hygienists must be licensed to use nitrous on patients. Dentists must be present when their patients are being administered nitrous. Some complain of residual headaches, and worst residual "highness" so it is important to make sure each patient receives enough time for 100% oxygen post-treatment for at least 5 minutes. Listen, too, if patients do not prefer Nitrous oxide. There exist other alternatives to it; fulfilling the same desired affect of relaxation, as mentioned in the previous paragraph.



Drugs that can be administered intramuscularly give a deeper effect and are most often used with uncooperative patients such as a child or the mentally handicapped. Adequate training is required for administration of intramuscular drugs. Training requirements are typically two years in a residency program in anesthesiology or completion of a residency in oral and maxillofacial surgery.



IV sedation is effective for many patients. The patient is still capable of responding to verbal commands and physical stimulation, but is essentially worry-free.

Some of the drugs used in IV sedation can cause amnesia, so the patient doesn't remember the experience at all. It is important to remember that in some states a dentist must obtain a permit in order to administer IV sedation or conscious sedation.

## Referral to a Mental Health Specialist

Many anxious patients will only visit the dentist in the case of a serious emergency. In these situations, the dentist must take the time to consider the treatment that will both fix the issue and be least traumatic for the patient. For example, if a patient is too anxious to receive treatment immediately for a true dental emergency, it may be necessary to prescribe antibiotics for pain and infection, and then work with the patient to eliminate the fear and anxiety before completing treatment. The prescription of antibiotics may not be a definitive treatment, but in conjunction with stress reduction instruction or therapy, it may increase the chances that an anxious patient will return for further treatment.



If all of the aforementioned treatments do not work to calm an anxious patient, it may be necessary to refer the patient out of the office to a mental health specialist, clinical psychologist (PhD), psychiatrist (MD), or a mental health center.

Dentists are not trained psychologists. If the patient is still too anxious for treatment, refer them to a mental health professional especially if the patient:

- wants to save his or her teeth,
- does not think he or she can have their dental work done while awake,
- refuses general anesthesia,
- feels that they may have a panic attack, and/or
- feels depressed often, especially about their teeth.

A psychotherapist can offer the patient treatment including relaxation strategies, biofeedback training, hypnosis, desensitization programs, or group therapy.



If referring a patient, choose a therapist who will give recommendations to you and with whom you feel comfortable. Ingersoll and Geboy suggest that the psychologist meet the patient in the dental office for the sessions during off-hours. This can be very useful, as the office will become a familiar setting for the patient.



### University Dental Fears Clinics

University Dental Fears Clinics are another excellent option. Staffed by dentists and psychologists, they specialize in treating dental anxiety and phobias. Because many are affiliated with dental schools, they are not only places to refer patients but may offer continuing education courses for the dentist or auxiliary in the management of the anxious patient. Contact the Dental School nearest you for more information.

## Conclusion

The office staff can only do so much to alleviate a patient's fears. The dental professional's biggest responsibility is to provide caring, quality dental work with a minimum of operative and post-operative pain. The dental professional cannot be expected to produce perfect pain control for someone who is emotionally charged up and unwilling to assume responsibility for his or her fears.

It is important to remember that the reasons for patient's fears can be very different, so it is imperative that the dentist approach each patient anew and individualize each treatment plan, using the techniques in this manual as a guide.

The patient must take some of the responsibilities for treatment as well. The patient should be provided literature detailing effective relaxation techniques, learning distraction techniques, and becoming assertive enough in the dental operatory to tell the dentist when something bothers them. Most important, the patient must be open to developing trust in the dental staff.

The office staff who is willing to take the extra time and effort to assist the anxious or phobic patient will have:

- more patients
- more referrals
- satisfaction from helping another person
- reduction of office and personal stress
- less time spent in the operatory

There are several behavioral, non-pharmacologic techniques available for reducing a patient's anxiety or fear of dental treatment. If relaxation techniques and compassionate dentistry is used in conjunction with local anesthesia, many patients can easily be treated with no additional medication necessary. Satisfied anxious patients can become regular, referring members of any dental practice. All it takes is a caring dentist as well as dental staff willing to take a little extra time to treat not only the patient's teeth, but also the psychological fears that have kept anxious patients from seeking routine dental care.

This test contains 25 questions. Please mark only one **best** answer to the following questions on the one page answer sheet.

1. Dental fear affects \_\_\_\_\_ of the United States population.
  - a) 30%
  - b) 40%
  - c) 80%
  - d) 100%
  
2. An emotional state in which the patient exhibits an excessive, persistent, and exaggerated fear response is:
  - a) anxiety
  - b) schizophrenia
  - c) phobia
  - d) PMS
  
3. The somatic signs of fear include:
  - a) high pulse rate
  - b) flushing
  - c) sweating
  - d) irregular breathing
  - e) all of the above
  
4. Some of the more common reasons for dental fear are:
  - a) fear of injections
  - b) anticipating pain during treatment
  - c) expectations of post-operative discomfort
  - d) all of the above
  
5. The patient who is most afraid of asphyxiation is one who has:
  - a) asthma
  - b) AIDS
  - c) high blood pressure
  - d) dermatitis
  
6. Patients with low self-esteem will expect the worst in any situation, including dentistry.
  - a) True
  - b) False

7. Children usually model parent's behavior. Assessment of the parent's anxiety level can often indicate the amount of anxiety in their children.
  - a) True
  - b) False
  
8. It can be assumed that a parent consents to any type of treatment for their children without a signed consent form.
  - a) True
  - b) False
  
9. Some of the most popular methods of fear control used by dentists today (according to a 1991 survey) includes:
  - a) make sure anesthetic has taken effect before beginning treatment
  - b) be friendly to the patient
  - c) pay attention to what the patient says
  - d) assure patient that you will do all you can to not cause pain
  - e) all of the above
  
10. Where is the ideal place for the first interview with a patient to cause the least amount of anxiety?
  - a) The waiting room
  - b) The operatory
  - c) A quiet, comfortable, confidence building room, like the dentist's private office
  - d) Who needs an interview? Just get down to business!
  
11. Allowing the patient to use a hand signal to stop treatment is a good way to give the patient a sense of control.
  - a) True
  - b) False
  
12. Some of the methods of creating a relaxed ambiance in the office include:
  - a) soothing music
  - b) visual distraction
  - c) smooth working relationship between staff
  - d) all of the above
  
13. Ignoring a patient's signals of anxiety and discomfort can cause further trauma.
  - a) True
  - b) False

14. During a stressful situation, the adrenal cortex produces:
- a) epinephrine
  - b) steroids
  - c) saliva
  - d) blood glucose
  - e) all of the above
15. During a stressful situation, the adrenal medulla produces:
- a) epinephrine
  - b) steroids
  - c) saliva
  - d) blood glucose
  - e) all of the above
16. The relaxation response deactivates the sympathetic division of the autonomic nervous system to decrease:
- a) epinephrine production
  - b) blood pressure
  - c) blood glucose levels
  - d) all of the above
17. The Gate Control Theory postulates that:
- a) pain is purely a physiological reaction
  - b) there is a correlation between the emotions and the degree of response to a pain stimuli
  - c) pain can be prevented completely by mind control without the use of anesthetics or medication
  - d) there is no value in teaching patient relaxation techniques, emotions have no effect on pain
18. The Latrosedative Technique relies on
- a) the patient's own ability to cope with stress.
  - b) medication.
  - c) the Dentist's promises and actions to protect the patient from what is perceived dangerous.
  - d) the coincidence of acceptable anesthesia and a relaxed patient.
19. The Dental Fears Control Program is recommended:
- a) for all patients, before the initial consultation.
  - b) for some patients, after treatment is completed.
  - c) for patients the dentist determines are too anxious for treatment.
  - d) for all patients following emergency dental treatment.
  - e) for all patients, any time during their treatment.

20. In the Dental Fears control program, the patient is exposed to “systematic desensitization” consisting of:
- a) root canal therapy with no anesthetics.
  - b) tapes of periodontal surgery and extractions.
  - c) reading a description of a dental scene of increasing stress levels while the patient imagines the scene and then practices a relaxation exercise until the fear reaction disappears.
  - d) oral medications.
21. Ten to twenty deep slow breaths gives the patient more time to think about the fact that they are in good hands and that the treatment is for their benefit.
- a) True
  - b) False
22. An ideal modeling tape should include:
- a) a Dentist explaining the procedure including the sounds and feelings associated with it.
  - b) successful completion of the dental procedure with dentist praising cooperative behavior.
  - c) the patient raising their hand for a rest stop
  - d) all of the above
23. The moderately or mildly anxious patient may not need a structured anxiety reduction program, but different aspects may be helpful in overcoming their fears.
- a) True
  - b) False
24. University Dental Fears Clinics are staffed by:
- a) dentists
  - b) psychologists
  - c) researchers
  - d) fearful patients
  - e) a and b
25. The dental professional cannot be expected to produce perfect pain control for someone who is emotionally charged up and unwilling to assume responsibility for their fears
- a) True
  - b) False

(End of Test)

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