Treatment of Dental Fear

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The Origin of Dental Fear and its Consequences for Dentists and Dental Patients

Part 1

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The information presented in these articles is, in part, a result of the authors’ experience in working with fearful dental patients and dental professionals in that center.

Fear of dentistry is a major problem for dentists and patients. Many suffer from untreated dental disease because they fear dental treatment. Their fear is also a source of frustration and stress for the dentist. This article will review the etiology of dental fear and its impact on both patients and the emotional and economic well being of dentists. Later articles in this series will explore the nature of dental fear, how to treat it, and how to incorporate the treatment of fear into dental practice.

FEAR, ANXIETY AND PHOBIA

Many terms—such as dental fear, anxiety, and phobia—are used interchangeably in the literature. It may be helpful at the outset of the discussion to understand the difference between them. Milgrom¹, defines fear as an individual’s emotional response to perceived threat or danger. This response is composed of certain beliefs about the situation, which lead to an unpleasant emotional state, physiologic changes, and overt behavior. This state can be recognized as a classic “fight or flight” response. Anxiety, a similar response, stems from thinking about a future and non-immediate threat or event. Phobia is a special form of intense fear; the individual sees his phobia as unreasonable, but his attempts to avoid actual danger cause significant distress or interfere with his social functioning.

It is not always easy to distinguish these states, since they rarely exist in a pure form and their intensity may vary. A practical clinical approach is to consider that those who refuse needed dental care, or whose negative dental experiences are caused by their fear, have this kind of problem. They can benefit from treatment of their fear.

THE SCOPE OF THE PROBLEM

Anxiety about dental treatment is extremely common. In a study of people’s anxiety about illness in general, Robbins² found that 46% of his subjects were worried about dental problems. Their numbers are exceeded only by those fearing cancer. Interviewing 609 undergraduate students at a state university, Scott³ found that 75% suffered at least some anxiety about dental treatment.
In a random survey in New England, Agras discovered that fear of dentistry ranked fifth among forty commonly feared situations and that 20% of those questioned suffered from it. Other studies report that between 6% and 14% of the population have not gone to see dentists at all because of their fear, and among those who do not visit dentists regularly, 90% report that the reason is dental fear. Dentists themselves have reported that treating fearful patients is among their most frequent problems.

These studies indicate that dental fear is widespread. In fact, the dentist could reasonably assume that all his patients may suffer some dental fear. This realization alone can be the first step in treating the problem.

CONSEQUENCES FOR PATIENTS

Dental phobia can have significant negative effects on patients in terms of their dental health, their psychological health, and their social behavior.

Dental Health Consequences

In terms of dental health, the effects can range from simply making the person a little more anxious during dental treatment to receiving no dental care for many years. Evidence supports the common knowledge among dentists that many patients choose to have teeth extracted rather than saved because of their fear -- and that some patients have all their teeth extracted and wear dentures rather than face their dental anxieties. Others endure severe pain and infections rather than receive care at a dentist’s office. The most serious phobics will endure intense pain, chronic discomfort, disfigurement due to missing teeth, malnutrition because of a restricted diet (unable to eat certain foods), and a variety of other health risks because they avoid dental care.

The less severe phobics will seek dental care if, for example, a tooth breaks or if a severe infection develops. They can overcome their fear temporarily and get emergency treatment, but they will rarely return for further care if needed, going many years without seeing a dentist. These patients often ask for intravenous sedation or general anesthesia during treatment.

Less fearful patients may be able to tolerate certain dental procedures but not others. For example, some patients will not permit the use of the drill or perhaps any procedure that requires an injectable anesthetic. Other patients may tolerate only brief procedures or those that don’t require them to recline in the dental chair.

For patients less fearful than these, consequences may be limited to a somewhat impaired relationship with the dentist, a lack of full participation in their dental care and responsibility for their dental health, and less than optimal treatment. The impact of dental phobia on the person’s dental health can vary from slight to severe.

Psychological Consequences

The psychological consequences of dental phobia on the patient can go far beyond the dental office. Patients suffering significant dental phobia may organize much of their life around their fear. For example, during meals they may be concerned about damaging a tooth and having to get dental treatment. Their anxiety about any dental discomfort is likely to be exaggerated whether or not they even need treatment. They may have frequent nightmares involving dentistry. Patients often report anxiety reactions to the sound of a pneumatic or electrical drill, or to pictures of dentists in magazines or on television. The baseline anxiety of a person with a significant dental phobia may be quite a bit higher than that of a non-fearful patient.

Another psychological consequence of dental phobia can be a decrease in self-esteem. The person may be ashamed not only for being fearful but also for not taking care of his health properly. He may be quite responsible in other areas, and his lack of control in these areas may be very troubling.

Along with decreased self-esteem may come increased isolation, a sense of being different from others. Dental phobics frequently think everyone else can
get needed care, that they are unique in their disability. They also believe, perhaps because of experience, that when trying to discuss their fears with others, they’ll be told everyone is anxious and it just takes a little will power to get treatment. This response confirms their sense of being different and the notion that no one can really understand their situation—it’s obvious to them their fears are different in quality and intensity from those of others. Moderate or severe phobia can cause depression due to decreased self-esteem and isolation.

**Psycho-Social Consequences**

Because of shame or concern over the condition of their teeth, dental phobics may avoid social contacts and dates. They try not to smile and cover their mouth with their hands when they do smile so that others won’t see the condition of their teeth. They feel self-conscious and ashamed of themselves, and their lives may become restricted as a consequence of these feelings. Patients have reported not applying for employment or being refused promotions because of the condition of their teeth. Patients commonly report that their fear of dentistry has had an important negative effect on their lives.

**CONSEQUENCES FOR DENTISTS**

**Stress**

Dental fear, especially when it is unrecognized, can have significant consequences for the dentist, one of the most important being increased stress. Direct sources of stress include hostility and non-cooperation, suspicion, and frequent interruptions during treatment. A fearful patient will likely miss appointments, not pay his bill, and not follow through with treatment recommendations.

Many aspects of dental care are made more difficult when treating fearful patients. Sometimes it is not obvious that the origin of the problem is the patient’s dental fear. Fearful patients can have problems with gagging, holding their mouth open, and achieving adequate local anesthesia. For the dentist, such behavior can result in confusion, frustration, and feelings of inadequacy, all of which may cause stress.

**Economic Implications**

Another important consequence of dental fear for dentists is its economic implication. If all those who now avoid dental treatment because of their fear were to begin seeing dentists, we would be much closer to solving the “busyness problem.” Dental fear contributes to cancellations and failing to keep dental appointments. Fearful patients also take longer to treat than non-fearful patients. Filewich found it took 20 percent more time to place two surface amalgam restorations in high-fear as compared to low fear patients.

**Health Consequences**

The kinds of stress discussed above can have both physical and mental consequences. Forrest points out that two stress-related health problems (coronary artery disease and hypertension) are 25% more prevalent among dentists than in the general population. Studies show, he adds, that dentists suffer psychoneurotic disorders twice as often as other medical practitioners and that the suicide rate among dentists is almost twice that of the general population. Though many factors contribute to this problem, dentists have listed the treatment of fearful patients as the most frequent problem they encounter with patients in the dental chair. It is surely an important contributor to the stress of dental practice.

**Self-Image**

Another cause of stress for dentists is the difficulty of performing “good” dentistry. Most dentists are challenged to meet their standards even when treating the most cooperative patients. Fearful patients often increase the difficulty significantly. The dentist may internalize the emotional effects of not being able to do “good” work and feel that the situation is caused by his or her inadequate skills.

**ETIOLOGY OF DENTAL FEAR**

**Studies About Etiology**

Most reports on the etiology of dental fear cite
previous traumatic dental experiences and the influence of peer or family members as the most likely antecedents of dental fear. A survey of patients in the waiting room of 20 dental offices\textsuperscript{16} found that 65\% of them reported having had at least one negative dental experience. Hall\textsuperscript{17} found that high-fear patients tended to remember past traumatic experiences more vividly than did low-fear patients. Other studies report a higher incidence of traumatic dental experiences among phobic as opposed to non-phobic patients.\textsuperscript{18}

When Kjeinknecht\textsuperscript{19} asked high-fear college students how they thought their fear originated, they replied this way:

- negative expectations of parents or peers (17\%)
- much painful dental work (14\%)
- dentist error (slips of the anesthetic needle or drill and filling the wrong tooth); poor management (threats if the patients didn’t cooperate, refusal to use an anesthetic when the patients requested it, and starting dental work before the anesthetic took effect); dislike of the dentist’s personality; and physical abuse by the dentist or assistant (21\%).

A common denominator in many of these experiences is the perceived lack of control by the patient in the dental setting.

For many, dental fear begins in childhood. Shaw\textsuperscript{20} interviewed the mothers of 100 dentally anxious children and 100 dentally non-anxious children. He found that the anxious children had first visited the dentist at a younger age than the non-anxious children. The anxious children had had more dental procedures at a younger age and more extractions than non-anxious children. He also found that the mothers and fathers of the anxious children were more likely to have dental anxiety themselves.

**Patient Reports about Etiology**

From our experience with dental phobics at Mt. Zion Hospital, we find that the etiological factors are similar to those described in the studies listed above. One of the most common causes of dental phobia seems to be direct trauma during dental treatment in childhood. Most of our fearful patients report childhood experiences involving fear and a sense of helplessness during dental treatment. Patients often say significant pain occurred during these experiences, but the pain does not seem to be the primary cause of their fear. Rather, the cause seems to be a sense of helplessness at the hands of someone more powerful than one self whose behavior is seen as threatening. Patients frequently say that the dentist did not explain what he was going to do, that he brushed aside their reports of pain, and that he was verbally or even physically abusive. They also say that their parents did not come to their aid either during the treatment session or afterward when they reported the abuse. This experience seems to have contributed to their sense of helplessness. Fears can also be acquired by observing the behavior of others. Parents may themselves fear dentists and communicate this fear to their children by their behavior or by describing their experiences. Children may also draw their own conclusions about what visits to the dentist are like. For example, seeing a parent return from dental treatment with a bleeding mouth or in apparent discomfort, the child may conclude that the dentist is someone to avoid. Sometimes parents may discipline their children by threatening to take them to the dentist if they don’t behave. Children also may scare each other by telling horrible stories of experiences with dentists. Thus, fears may be learned vicariously as well as directly.

Though most patients say their dental fears originated in childhood, some acquire theirs as adults after a relatively intense experience of trauma and helplessness.

Fear can also result from non-dental experiences. Children who were threatened, abused, or intimidated by their parents may come to expect similar experiences with any authority figure. Since dentists are frequently seen as authority figures, such children may feel similarly threatened by dentists. This behavior may persist throughout adulthood despite the absence of any direct experience of trauma during dental treatment.
MECHANISMS THAT SUSTAIN FEAR

Internal Recall

One of the most important mechanisms sustaining dental fear is the person’s internal rehearsal and recall of aversive experiences. By going over and over in one’s mind past traumas, and by imagining similar traumas to ensue if one attempted dental treatment, one may actually reinforce fear and may even cause the fear to increase over time. The imaginary experiences have the same effect as real ones, although to a lesser degree.

Avoidance

A second mechanism is avoiding the feared situation. Avoidance prevents the person from getting new information, for example, that not all dentists are like the original, feared dentist, or that equipment is now different from previous equipment. Avoidance also prevents a person from learning how to cope and from getting used to the dental situation. Avoidance can also increase the need for dental care, make the prospect of receiving it overwhelming, and thereby cause further avoidance. To counteract the negative consequences of avoidance, all effective treatments for phobias involve some contact with the actual feared situation.

Continued Traumatic Experiences

A third factor sustaining dental fear is that the patient as an adult may continue having traumatic experiences that confirm his expectations and increase fear and avoidance. Such experiences may result if the dentist is insensitive to the patient’s pain, criticizes him for being frightened, or in some other way is insensitive to his discomfort. On the other hand, the negative experience may not be caused by the dentist at all, but by the tendency of some fearful patients to force themselves to endure dental care as part of their adult responsibility. They may be unaware that their fear can be treated and that their “adult” behavior may actually perpetuate their fear, even worsen it.

If the fearful individual goes for dental treatment anxious about what will happen, it may not matter what actually takes place. The dentist and his staff may be the gentlest, most caring people and the dental treatment may be given without any uncomfortable sensations whatsoever, but if the patient has strong automatic fear reactions, he may remember only his anxiety, reinforcing his belief that the dental office is an unpleasant place to be.

A similar situation can occur if dental phobics, uncomfortable and frightened in the dental office, provoke irritation and frustration in others. A vicious circle may be created in which phobic patients provoke the very behavior in others that increases their own desire to avoid dental treatment.

PSYCHOLOGICAL ISSUES IN DENTISTRY

Many psychological issues confront the dental practitioner, and the problems encountered in working with fearful dental patients cut across many of them. Some of these problems affect the dentist’s image of himself as a professional and as a member of society. Other issues have to do with running a business in a competitive economic environment while trying to be a compassionate provider of health care. Other issues touch on the dentist’s technical skills and ability to produce dental work that will be valued by other dentists and by him or herself. Numerous issues relate to communication with patients and staff. The dentist should understand the importance of these issues and learn how to deal with them in order to work with fearful dental patients successfully.

Until recently, these problems and issues have been neglected in dental training. Only recently has training given dentists and other dental personnel effective tools to cope with all of them.21 Dentists trained to work with fearful dental patients have found that their new skills have had a
significant impact on other aspects of their professional lives and on their personal lives as well.

REFERENCES


Many people fear dentistry. As we mentioned in the first article of this series, surveys show that up to 75% of the general population harbor at least some anxiety about dentistry. More fearful and less fearful patients share similar anxieties, but the more fearful are more intensely concerned, and are concerned about more areas than the less anxious patients. The beliefs, attitudes, and behavior discussed in this article, with particular reference to dental phobics, apply to a lesser degree to the majority of dental patients.

COMMON BELIEFS OF FEARFUL DENTAL PATIENTS

At the Mt. Zion Hospital “Center for the Treatment of Dental Fear,” all fearful patients complete a Dental Belief Survey (Figure 2-1) at the start of their treatment. Asked to rate their beliefs about dentists in general, most patients indicate “true half of the time” for several items, and many indicate “true every time.” Surprisingly, many people accept the statements in this survey as truths, and such beliefs strongly contribute to patient’s fear and avoidance of dentists.

The views in the following sections are based on information obtained from interviews with patients and assessments made of their condition during their treatment for dental fear at Mt. Zion Hospital.

The Belief in the Dentist’s Abuse of Power

One of the most common beliefs of fearful dental patients is that the dentist likes to have power over them, that he likes his authoritarian role and wants them to defer to him. As a result, they often feel uncomfortable asking questions; they think the dentist won’t like it if they make a request, and they expect he’ll do what he wants no matter what they say. They feel that questions or requests threaten the dentist, making him respond in a defensive, intimidating manner. To avoid encounters of this sort, they become overly compliant. This behavior of course adds to their fears since they are not being appropriately assertive regarding their own needs.

Patients frequently expect the dentist’s wish for power over them to manifest itself in a variety of negative ways, ranging from mild to extreme. One of the mildest might be the dentist’s desire, in their view, to work uninterrupted by them. They think the dentist wouldn’t want to be bothered by their needing a rest during treatment, for example, or some adjustment in the equipment. For this reason, they may secretly endure significant discomfort. Naturally, this dilemma is likely to cause anxiety.

Fearful patients harbor a slightly stronger expectation of abuse if they believe the dentist will make them feel guilty about the way they’ve cared for their teeth. If they’ve not been to a dentist for some time, they fear the dentist’s criticism or ridicule of their behavior. This belief is not irrational since critical remarks are fairly common. Some examples: “How could
you have let your teeth get to this stage?” “Don’t you care about your teeth?” “You should be ashamed of yourself.” “What’s wrong with you?” “Don’t you know any better than this?” The longer they’ve gone without treatment, the more severe is the criticism they expect and the harder it is for them to seek help.

The belief that the dentist will do what he wants no matter what they say leads to a greater expectation of the abuse of power. Dental phobics believe their wishes and feelings are irrelevant to the dentist. This belief indicates a more significant sense of helplessness. Many dental phobics also believe that if they were to indicate to the dentist something was hurting them, he would not try to correct the problem. In the mind of this patient is a picture of an uncaring, even sadistic, dentist. Feelings of helplessness combined with the belief that the dentist is sadistic will likely produce a high degree of dental fear and avoidance.

The Belief in the Dentist’s Incompetence

Fearful patients frequently are concerned about the dentist’s technical competence and claim that improper treatment led to a deterioration of their condition. We’ve had reports of drunken dentists, dentists who extracted the wrong tooth or who performed unnecessary extractions, dentists who caused injury with the handpiece or the syringe (sometimes resulting in chronic impairment, dysfunction, or pain), and dentists who left serious conditions unattended. Patients who have suffered such experiences, particularly as children, are often quite worried about the quality of the dental care they’ll receive.

These concerns are perhaps more difficult to address than others since the patient has no direct way to estimate the dentist’s competence. It is crucial that the dentist be willing to provide clear explanations for recommended treatment, explain procedures in detail, and discuss treatment options fully. These patients often respond well to the dentist’s allowing them to observe the treatment as it takes place. Whether or not they accept the offer, the dentist’s openness can be quite reassuring to them.

Mistrust of the Dentist

Some patients fear the dentist may deliberately try to deceive them about the treatment they need. They aren’t necessarily suspicious in other areas of their lives, although they may be. They fear that the dentist will try to take advantage of them by recommending unneeded work or work that is not fully in their interest. Usually they relate stories that make their fear seem reasonable. They tell of having extensive work done which was later found to be unnecessary, or of having overly expensive procedures performed. These fears may not be enough by themselves to produce dental phobia, but when they are combined with a sense of helplessness or with feelings of intimidation, the problem may seem insurmountable and result in avoidance of dental care.

A review of these beliefs and expectations makes apparent how childlike and powerless the patient feels in relation to the dentist. It’s very easy to imagine these experiences starting in childhood and their consequent beliefs and expectations being sustained well into adulthood. Fearful patients often recognize their fears as irrational and feel humiliated by their inability to control them. But until new experiences can change these beliefs and expectations, the child of the past continues to control the adult of the present.

PHYSIOLOGICAL RESPONSES

The physiological symptoms of anxiety are well known. In their milder form they include muscle tension, elevated blood pressure, increased perspiration (frequently experienced as sweaty Palms), “butterflies” in the stomach, increased respiratory rate, and dry mouth. At moderate levels patients experience perceptible heartbeat, some weakness, dizziness, agitation and emotional outbursts. High levels of anxiety can result in hyperventilation, tachycardia, fainting, severe dizziness, disorientation, a sense of impending doom, and involuntary urination.
CLASSIC CONDITIONING

Many stimuli associated with dentistry may cause anxiety in fearful patients. This phenomenon is known as “classic conditioning.” As Pavlov’s conditioning experiments showed, a stimulus that initially produces no response (the “conditioned stimulus”) can elicit the same response as an “unconditioned stimulus” (one the organism naturally responds to) if it is regularly presented just before the appearance of the unconditioned stimulus. Pavlov showed that dogs would salivate when a bell is rung if many times previously the ringing had been immediately followed by the presentation of food. It was said that the dog had learned to associate the sound of the bell with the presentation of food. However, it seems that the predictive value of the bell is crucial. If the bell is rung after the presentation of food, little or no conditioning takes place. The dog salivates because he has learned the ringing announces the appearance of food.

Classic conditioning occurs also in humans, specifically in fearful dental patients. For them, various aspects of the dental environment have become predictors of aversive experiences, and these stimuli therefore elicit anxiety. The more directly the stimulus predicts the aversive experience, the more anxiety it will elicit. Thus, syringes may produce high anxiety in patients who have had negative experiences with injections, whereas the sight of the dental chair may cause them less anxiety. The degree of anxiety any particular stimulus elicits is wholly dependent on its significance for each patient. During treatment, the predictive value of conditioned stimuli is diminished by allowing the patient contact with them with no subsequent aversive occurrence. The stimuli cease to elicit anxiety as they lose their predictive value.

Fearful patients usually experience dental anxiety in situations not related to treatment. They are able to respond to a variety of symbolic stimuli (such as pictures, descriptions, and imagined scenes) as well as actual objects and situations. Anxiety can arise when patients think about receiving dental treatment or are reminded of it, as when they see a picture of a dentist in a magazine or hear dental treatment described. Many patients report nightmares or difficulty getting to sleep, especially when the dental appointment is imminent. All these symptoms tend to increase as dental treatment approaches and diminish if the prospect of dental treatment recedes.

BEHAVIOR WITH FAMILY AND FRIENDS

Most typically, dental phobics conceal their fears from their family and friends. They consider themselves deficient because of their fears and are usually ashamed of their feelings and behavior. Having experienced criticism, ridicule, or a lack of appreciation of their difficulties, they expect it and have decided that the best course is not to get dental care, saying something like, “I just really don’t like to go to the dentist,” often hiding the full extent of the problem. Typically, even close family members and spouses are unaware of how serious the problem is. Frequently, patients report telling a spouse or a close friend about their fear, as if this confession were an early step in coming to grips with their problem. By the time they do come in for fear treatment, they often say one person close to them knows about their fear and supports their attempts to get help.

WHAT FEARFUL PATIENTS SAY ABOUT THEMSELVES

At Mt. Zion Hospital, one of the most frequent statements fear patients make is that their phobia has existed for years, most typically since childhood. They often describe a frightening, humiliating, and painful experience with one or more dentists, adding they’ve been frightened ever since. Often they have tried to get dental treatment, during childhood and adulthood, but their fear remains, whether or not these attempts have succeeded.

Dental fear causes most patients shame and humiliation. They feel they are not in appropriate control of their lives, are not caring for their health as they’d like to, and are unable to do something everyone else seems able to do. They often act
apologetic for being fearful, but say they just can’t seem to help themselves. They almost invariably see their fear as a sign of inadequacy. They do not attribute their fear to events that happened to them, but rather to some inherent failing of their own. They see themselves as weak and are commonly self-condemning.

Very frequently, fearful patients are afraid they’ll be forced to do something they don’t want to do even during fear treatment, and they expect to comply. They often say, “I know I just have to force myself to do it,” or they expect the dentist to force them to do something. They say that if they can just make themselves go through with this kind of experience, they’ll improve. It’s very difficult for them to imagine a collaborative relationship with a dentist, one based on mutual respect.

Even when these patients come for help, they do not expect the treatment to work. Discouraged by years of failure, they don’t see why the fear treatment should have any better result.

Fearful patients frequently are very emotional when discussing their fears. Often they grow embarrassed, tearful, and occasionally angry as they describe past experiences, even those occurring twenty or thirty years ago. Evidently they’ve not fully expressed their feelings about these experiences before, and they are eager to do so despite the uncomfortable emotions that come forth when they do.

Dental phobics say they expect the dentist to be angry or impatient with them if they try to be assertive or expressive in almost any way. They fear the dentist will be critical of them if they report their fear to him, and they act apologetic about their wish to be involved in their dental treatment, often saying they know they should let the dentist get on with things since he is the expert; they seem to think of themselves as troublemakers for wanting to take some part in the treatment process.

WHAT DO PATIENTS FEAR?

The following is a list of the causes of fear most frequently mentioned by our patients:

Pain

One of the most common items mentioned by patients is pain. Patients who fear pain typically have had painful dental experiences. Other painful experiences have not produced a phobic reaction, and many are not especially cowardly about pain. To them, something about dental pain is different. The authors believe the difference is that they associate dental pain with helplessness and fear which were part of their early dental experiences. This association, results in the avoidance of dental pain.

Equipment

Any equipment associated with dentistry may engender fear. High on the list are the drill and the syringe, which are typically associated with pain, in some cases with danger. Fearful patients sometimes tell of accidents or misuse of these dental tools—for example, a dentist slips with a drill and cuts them, or injections are given inappropriately.

Procedures

Any procedure may arouse fear in a dental phobic, the most common being extractions, root canals, and drilling. Often the patient’s fears result from direct experience, but not always. For example, many fearful patients dread root canal work even though most of them don’t know what it involves. They fear it because they’ve heard scary stories about the procedure. One patient said she thought the treatment consisted of pulling a nerve out of her body through a hole in her tooth. She imagined the nerve about twelve inches long and expected the procedure to be excruciatingly painful.

X-Rays

Some patients are afraid to have x-rays taken. A few fear they won’t be able to swallow during the process, or that they will be hurt by the placement of the film. More often they are afraid of feeling helpless because they have to hold still, or they fear embarrassing themselves by becoming anxious or emotional in the dental environment.
Emotionality

Frequently patients are ashamed of how emotionally labile they become in the dental environment, afraid they won’t be able to control themselves. They imagine that others will be critical or unsympathetic, since they are quite critical of themselves. Thus, for some patients, their own emotions become objects of fear and increase their phobia.

The Dentist

The dentist is probably the major object of fear, though patients don’t always explicitly say so. They fear he has power over them, that he will hurt them, and that they are powerless to resist him. Often an element of sadism is in their descriptions of him.

Gagging or Choking

Some patients have a specific fear of gagging, afraid that they won’t be able to breathe during treatment. This fear may be one of many or their only dental fear. Typically it stems from one or more gagging episodes, but it may have also resulted from stories told by others or to a fear of loss of control.

Numbness

Some patients become terrified upon feeling any degree of numbness. They may associate this feeling with an inability to swallow or breathe. They may find it difficult to relax as well and seem more difficult to treat. Presumably this fear also relates to a sense of loss of control, and our experience indicates it doesn’t seem to stem directly from dental experiences.

Behavior of Fearful Patients in the Dental Office

Fear Versus Motivation

The behavior of a dental phobic often reflects a balance between his fear and motivation. He wants to receive dental care but is also quite frightened of it. He may also be motivated by a dental emergency or the fear that one will develop if he doesn’t get dental care. At any time either the fear of dental treatment or the motivation to receive dental treatment may be higher. Such behavior may confuse someone who doesn’t understand the interplay of these factors.

A very fearful patient may avoid dental care even in the face of severe pain and a disfiguring deterioration of his dentition. A dental infection may spread to the soft tissues of the face. At first the individual may hope the swelling will go away as it had in the past. As the swelling continues, however, he may become frightened of developing a serious infection and dying if it isn’t treated. At that point, the fear of death or severe illness might overwhelm the fear of dental procedures and enable him to seek dental treatment. Motivation will have exceeded dental fear.

Once the dental infection has been treated (probably under general anesthesia) and the fear of death or severe illness is gone, the balance will shift in favor of dental fear. Likely the patient will avoid further dental treatment until the next life-threatening emergency. He may actually act as if he wants further care and make another appointment. This behavior may simply be due to fear of the dentist, with the patient not intending to return for further care, or he may in fact wish he could withstand further treatment but be unable to.

A less frightened patient may seek dental care when he has a milder dental emergency, such as a toothache. The toothache or the fear that he’ll develop an infection may overcome his other fear and enable him to call a dental office. When he does, his motivation is greater than his fear, but as the appointment approaches, the reality of going to the dental office may become more apparent, increasing his fear. If the level of fear exceeds that of his motivation, he may cancel the appointment at the last minute, or just not show up.

The dentist or member of his staff may think he or she is dealing with an irresponsible person who casually makes and breaks appointments. In some in-
stances, however, the patient may desperately want dental care but just be unable to force himself to go through with it. He may feel so much shame and humiliation because of his defeat that he can’t call the dental office and risk being criticized the way he is criticizing himself.

At the other end of the spectrum is the “hater but goer,” the patient who fears dental treatment but has motivation enough to go anyway.

He may get regular dental care, but he’ll hate each experience, and the dental staff may be entirely unaware of his feelings. The behavior of such a patient is discussed in the next section.

Signs of Dental Fear

As discussed previously, phobic patients often have enough motivation to seek dental treatment in spite of their fear. Although they’ve managed to get to the dental office, their fear is still intact and can manifest itself in a variety of ways. Some of them are listed below.

1. The patient misses or breaks appointments.

As just discussed, fearful patients can have trouble getting themselves to keep appointments in spite of their desire to do so. They may be ashamed of this behavior but can’t discuss it or their fear with the dental staff.


Such a history may indicate the presence of dental fear. It’s important to distinguish this factor from other causes of irregular care, such as finances, transportation, or not understanding the importance of regular dental care.

3. The patient doesn’t have necessary treatment completed.

A fearful patient may stop coming before all his treatment is done, possibly because the rest of the treatment plan included procedures more frightening than earlier ones. It’s also possible he was forcing himself to endure the initial treatment despite significant fear, and that behavior reinforced his belief that the dental environment is unpleasant. Forcing himself to undergo initial treatment could have increased his fear and made it impossible to finish the treatment.

4. The patient has an emotional outburst.

One manifestation of dental fear may be the patient’s emotional behavior. Some patients turn their negative feelings about themselves toward the dentist and the dental staff. Their fear may be manifested as anger or unreasonable requests. They may also cry for no apparent reason. They may have been fighting desperately to maintain control but were overwhelmed by a situation that was just too difficult. These emotional reactions may be unrelated to the actual behavior of the dentist or the dental staff.

5. The patient asks for a lot of sedation.

Another manifestation of dental fear is the patient’s desire to be as far removed from the dental experience as possible. The patient who says, “Just knock me out an U’ then you can do whatever you want!” is probably saying, “I am extremely frightened of dental procedures.” Even those who don’t ask for general anesthesia, but request milder sedatives for relatively uncomplicated dental procedures, may fear dental treatment.

6. The patient has an exaggerated gag reflex.

Some patients exhibit their anxiety by having a hyperactive gag reflex which prevents any significant dental procedures from being performed. The authors have worked with a number of individuals whose severe gag reflexes went away when their fear was treated.

7. The patient has trouble holding his mouth open.

As with the gag reflex, the patient who can’t hold his mouth open or needs to stop and swallow very frequently, or who feels he is having trouble breathing during treatment, may be suffering from dental phobia. Such behavior gives the patient a
measure of control over a threatening situation and can prevent any significant dental procedures from being performed. The authors have also worked with many patients whose obstructive behavior disappeared after treatment.

8. The patient doesn’t get numb.

Some patients don’t get numb because of physiologic or anatomic reasons. Others, however, suffer from dental fear. When someone is anxious, many sensations become magnified. It can be difficult for them to distinguish between their anxiety reaction and the noise and vibration of the drill. Nevertheless, the dentist shouldn’t ignore a patient’s report that he isn’t numb or ever tell the patient that he isn’t really feeling something when the patient says he is. This subject will be further discussed in the last article in this series.

9. The patient is overtly anxious.

Sometimes the patient is obviously anxious. He may grip the arm rest tightly, sweating, breathing rapidly, or telling the dentist that he would rather be anywhere else but in the dental office. It is imperative that the dentist and dental staff respond to these overt signs of fear and recommend treatment for this problem in the same way that they would recommend treatment for any other dental problem.

10. Some patients have no signs of fear.

Many people are very good at concealing their fear. It has been shown that a poor correlation exists between the dentist’s assessment of a patient’s fear based on overt behavior and the patient’s own assessment. That is, many patients suffer in silence. Again, some phobics fear that the dentist or dental staff will criticize them for their fear, so they are reluctant to show it. As mentioned earlier, forcing oneself to undergo treatment while being highly anxious can reinforce the fear reaction.

It is especially important that the dental staff use adequate assessment tools to find out whether an individual is fearful. The assessment of dental fear will be discussed further in the last article in this series.

REFERENCES

Figure 2-1: Dental Belief Survey

The items in this questionnaire refer to various situations, feelings, and reactions related to dental work from the patient’s point of view. Please rate how you feel about dentists in general, or their work in particular, by writing 1, 2, 3, 4, or 5 -- whichever most closely corresponds to your feelings -- in the blank following the statements below.

1 = Never  
2 = Occasionally  
3 = Half the time  
4 = Often  
5 = Every time

When I have dental work done:

1. I feel that dentists don’t like it when I make a request.____
2. Dentists are efficient, but often they seem in a hurry.____
3. I feel that dentists do not provide clear explanations.____
4. I feel that dentists do not really listen to what I say.____
5. I feel the dentist will do what he wants to do no matter what I say.____
6. Remarks by dental professionals make me feel guilty about the way I care for my teeth.____
7. I am not sure I can believe what the dentist says about the work that is needed.____
8. I think dentists say things in a way to try and fool me.____
9. I feel that dentists do not take my worries (fears) seriously.____
10. I feel dentists put me down (make light of my fears).____
11. I worry whether dentists are technically competent and do a good-quality job.
12. If I were to indicate that the treatment hurts, I don’t think the dentist would stop and try to correct the problem.____
13. When I am in the chair, I feel as though I can’t stop the treatment for a rest, if I feel the need.____
14. I feel uncomfortable asking questions.____
Dentists and psychologists have tried to treat dental fear in behavioral, pharmacological, and psychological ways. This article will review some of them, then describe in some detail two vital skills for dentists to master if they are to treat fearful dental patients. Those skills are using good listening skills and developing a gradual approach to the patient’s feared situations.

**PROPOSED METHODS FOR TREATING DENTAL FEAR**

**Treatment by Dentists**

The literature proposes many methods dentists can use in working with fearful patients. Malamed describes a “spectrum of pain and anxiety” control that begins with iatrosedation and ends with general anesthesia. Friedma has the dentist provide the patient with certain information as a part of iatrosedation. Information can reduce anxiety, but only when it is given in the amount the patient desires. After reviewing the literature, Anderson found that those who received information alone showed only slight improvement over controls. He concluded that, to be effective, information must be combined with other procedures.

Hypnosis has been reported to reduce anxiety, and one study has shown it can produce long-term benefits. McAmmond found that hypnosis was somewhat more effective than relaxation training for fearful dental patients, as indicated by their willingness to return for more dental work.

The other major technique dentists employ is to prescribe drugs that range from mild oral medications or nitrous oxide to intravenous sedation and general anesthesia. Baker showed that oral Valium could reduce anxiety at the time of the dental appointment but did not alter the underlying fear. Carisson also concluded that medications or procedures like nitrous oxide, audioanalgesia, and general anesthesia may get patients through an appointment but are unlikely to have long-term effects. He says patients can be as fearful after treatment under general anesthesia as before, and they continue to avoid further dental treatment.

Significantly, the techniques described above are usually referred to as methods of “pain and anxiety control,” or “behavior management techniques.” The problem with many of them is that they emphasize the dentist’s getting control of the patient although the patient’s perceived lack of control over what happens in the dental environment is one of the greatest contributors to the etiology of dental fear. It is vital to the patient’s long-term dental health that “management” techniques be used in conjunction with an understanding of the patient’s level of dental fear and that, when appropriate, these techniques be combined with psychological treatment of the patient’s fear. It is also vital that the highest priority be given to
the patient’s ability and willingness to participate in a lifetime of dental maintenance and care rather than to just getting the patient through the appointment. Otherwise, the battle can be won but the war lost.

Psychological Treatment for Dental Fear

Many psychological approaches now effectively treat dental fear. They include methods that are informative, psychotherapeutic, modeling, behavioral, cognitive-behavioral, and hypnotic. The behavioral approaches have included, in various combinations, distraction, relaxation, breathing control, learning hand signals to the dentist, systematic desensitization, imaginal flooding, and redefinition of the meaning of the experience. These techniques can develop a new set of expectations and responses in the dental phobic, teach him coping strategies, and give him control over himself and what happens to him.

Since it isn’t possible in this series of articles to discuss all of these techniques, emphasis will be placed on two skills the dentist must master if he works with fearful patients listening and developing a gradual approach to fear provoking situations.

As we present techniques for using listening skills and developing a gradual approach, it is vital to understand, however, that they are only techniques. The dentist must also genuinely desire to listen to, work with, and help fearful patients overcome their fear. If not, any technique will be doomed to failure. The successful dentist is interested in working with people and not just with structures in the oral cavity.

LISTENING SKILLS

We begin our discussion with the assumption that dentists generally talk too much. They often begin to impart information before they thoroughly understand the patient’s desires, fears, concerns, and questions. Trained to impart information to patients, dentists are also, as proprietors of small businesses, urged by practice-management consultants to “sell” dentistry to patients. The desire to accomplish these two objectives can sometimes result in the dentist’s doing most of the talking during the patient’s interview and not listening to the patient. Many dentists who master good listening skills find it easier to discuss dental treatment with patients than previously. They have much less to do in consultation because they listen to the patient rather than talk. This type of patient interaction requires a shift to a more receptive mode of thinking, in which the major emphasis is on the importance of understanding a patient’s fears, desires, and experience.

Did You Hear What Was Said?

Communication involves sending and interpreting messages. The sender has an idea or feeling to communicate, parts of which may not even be conscious. He encodes his message in both verbal and nonverbal language. The receiver decodes the verbal and nonverbal messages, trying to understand what has been said. Clear communication occurs only when the sender’s message is the same as the receiver’s. The only way to know whether or not the two messages agree is to provide feedback that can be confirmed or corrected. How many times have we all said later, “Oh, is that what you mean? I thought you meant...”?

There are several listening techniques that tell the patient you’re interested in what he says, but they don’t provide the right kind of feedback. These techniques include encouraging a patient to talk about what concerns him. You might say, “I’d like to hear about it...tell me more” or “Can you tell me how you feel about that?” Remaining silent and letting the patient express himself is another way of listening attentively. You can also show you’re listening and encourage the patient to keep talking by using eye contact, nodding your head, or saying, “Go on.”

All these responses express your interest in what the patient has to say and can encourage him to talk, but they don’t provide the feedback loop essential to being sure you are hearing what the patient is saying. One simple way to get that all-important feedback is to repeat what you’ve just heard, not word for word but generally. You should express the main feeling or idea in the communication. An example of this technique might go as follows:
Patient: Do I have to get a shot?
Dentist: Are you saying that you’re nervous about the local anesthetic injection?

The dentist could’ve answered simply “Yes” or explained that the injection wouldn’t really hurt; or he could’ve explained the value of the injection in making the patient more comfortable. Such responses communicate information deemed important by the dentist, but they don’t demonstrate his desire to listen to the patient. They might make the patient feel the dentist is more interested in getting through the dental procedure than in listening to him.

Let’s consider another dentist-patient interaction:

Patient: I bet you’ve never seen teeth in as bad a shape as mine are.
Dentist: Are you worried about what I’ll think when I see your teeth?

What is the patient really saying here? The dentist, sensing the patient’s fear of being judged negatively by him for having bad teeth, asks about the patient’s fear, enabling the patient either to confirm or to correct the dentist’s impression. The dentist might have tried to reassure the patient, saying, “Don’t worry; I’ve seen lots of teeth in bad shape” or “Oh, I bet they’re not all that bad.” In both of these attempts, the dentist would’ve missed an opportunity to learn what the patient actually meant. The right kind of feedback not only enables the dentist to confirm what was actually meant, but is an important message in itself that shows the dentist is genuinely interested in listening to the patient and knowing how he feels.

Another example of good listening skills is demonstrated by a dental receptionist’s response to a nervous patient calling for an appointment:

Patient: Can I be put to sleep while having this dental work done?
Receptionist: Are you nervous about having dental treatment?

The receptionist has chosen what she thinks is the essence of the caller’s meaning. Repeating that message enables the patient to confirm or correct the interpretation. After only two sentences, the patient could be thinking, “The people in this office would really listen to how I feel and might be more sensitive to my needs than some other offices I have been to.”

The receptionist could have replied, “No, but we use nitrous oxide and can make you quite comfortable” or “There is no need to do that. The doctor is very gentle.” Both replies are aimed at reassuring the patient and giving him or her the “right kind” of information. If the receptionist practices good listening skills, however, she knows it’s much too early to begin giving information. Neither of these two responses is as effective as the first one in saying to the patient that the receptionist wants to be sure she understands the patient’s feelings. The first response is most likely to make the patient feel listened to.

The best response in these examples makes the patient feel listened to; it is also the simplest response, though the skill itself is not easy to master. On the contrary, it can be quite difficult. It is simple in the sense that the dentist or staff member need not supply any information, but it requires putting yourself in the patient’s place to see what you would’ve meant if you’d spoken those words.

**Good listening skills require that you repeat what you think is the patient’s essential meaning.** When mastered, this skill is a far more powerful reassurance to the patient that his or her needs will be listened to than any long explanation or reassurance can ever be.

**Developing Listening Skills**

Trying to develop good listening skills can be awkward. As with any other skill, however, the more it is practiced, the better it becomes. Knowing how to listen well is the single most powerful tool a dental professional can have when working with fearful dental patients. It would be well worth devoting the time to practice this skill among members of the staff.8
THE GRADUAL APPROACH

The principle underlying phobia treatment is that anxiety in the presence of a feared situation will diminish if the anxiety is kept to a minimum and if the fearful individual maintains a sense of control. In the treatment of dental phobia, the method resulting from this principle is to approach the feared situation gradually and to give the patient adequate time at each stage to become relaxed. This method implies the following:

A. The feared stimulus is clearly identified.
B. Steps for approaching the feared situation have been carefully worked out.
C. The patient is aware of his or her anxiety level and feels free to communicate it to the dentist.

Let us take each of these items in turn.

Identifying the Feared Situation

Patients vary greatly in terms of which aspects of the dental situation are troublesome and how much fear is aroused. The feared situations must therefore be clearly identified so that the right ones can be worked on and overcome. Time is wasted working on non-troublesome situations. Typical situations that patients fear include the treatment area as a whole (sight, sounds and smells), the chair, the handpiece (sight, sound and feel), and the syringe. These stimuli will be feared to different degrees by different patients.

For example, some patients are terrified of leaning back in the dental chair, usually because it makes them feel a loss of control. A significant amount of time may be spent helping these patients get used to reclining little by little. Other patients may have no problem with the chair, but the drill sound may be highly significant to them. Clearly, patients must be questioned in detail about their fears to ensure that each patient receives the appropriate treatment.

Approaching the Feared Situation

Once the feared situations have been identified, they should be ranked in order of increasing difficulty so that the easier situations are approached first, in accordance with the principle of gradual approach. A common ranking of the dental situations might start with observing the treatment area at the lower end of the list, and then advance to sitting in the chair, looking at the drill, hearing the drill, seeing the syringe, having teeth cleaned, having an examination, and having a cavity filled. In this approach, the dental treatment area is observed first. Each additional situation would be approached as the fear of a preceding situation is overcome.

Anxiety Level

Typically, fearful patients have for years attempted to conceal their anxiety from their dentists. To be effective, fear treatment needs open communication between the patient and the dentist regarding the patient’s anxiety level. This step is relatively easy to reach, since once the dentist shows a sincere interest in how the patient feels, the patient usually grows less fearful of the dentist’s response and is able to communicate this information. However, the dentist must show a sincere interest and must not criticize the patient or become impatient when he does report anxiety.

It is useful to place anxiety on a scale of zero to ten, zero indicating complete relaxation (such as that preceding sleep) and ten indicating terror or panic. On this scale, a number three is about the maximum desirable anxiety level during phobia treatment. Anxiety symptoms at this level usually include sweaty palms, a tight or hollow feeling in the abdomen, muscle tension, or a feeling of warmth. Symptoms such as weakness, rapid breathing, pounding heart, or dizziness indicate too high an anxiety level. These symptoms, usually a five or six on the anxiety scale, make it difficult for the person to relax in a situation that arouses these feelings. Such a level of anxiety also results in a sense of being out of control and in danger, and may actually increase the patient’s fear.

The anxiety scale and its correlation with anxiety symptoms should be discussed fully with the
patient and should guide both dentist and patient in
determining the rate at which the phobia treatment is
carried out. Pace of treatment is determined solely by
the patient’s anxiety level, not by his wish to go more
rapidly or by the dentist’s idea of how quickly to go. If
the situation produces a number three anxiety level,
the situation should be held constant until the anxiety
drops to two or one. At this point, the next increment
may be attempted. However, if the anxiety level does
not decrease, or if it increases, the intensity of the stimu-
lus should be reduced.

The following example illustrates the principles
described above. (A more detailed description of the
employment of this method in the dental office is in-
cluded in the last article in this series.)

Suppose the patient has worked through the first
several items on the list (illustrated in the para-
graph on “Approaching the Feared Situation”) and is ready to encounter the handpiece.

To begin, the dentist might ask the patient
whether he’s ready to hold the handpiece. If the
patient says yes, the dentist might ask how much
anxiety the patient thinks this experience would
produce. Assuming the patient says level three
or less, the dentist would have the patient hold
the handpiece and look at it.

If the patient’s estimate is higher than three, it
might be appropriate to encourage the patient to
talk about his feelings associated with the hand-
piece, then let him look at the handpiece from a
distance until the expectation of handling it pro-
duces an anxiety level of three or less.

The patient would hold the handpiece, look at it
and perhaps report memories and feelings asso-
ciated with it. The dentist would occasionally ask
how anxious the patient felt. When the patient’s
anxiety level dropped to one or two, the patient
might be ready to try pressing the foot pedal and
getting accustomed to the sound and feel of the
handpiece. It’s usually better for the patient to
go through these motions rather than the dentist
since the patient’s sense of control is in this way
increased.

When the patient is able to tolerate the sound
and feel of the handpiece for some time without
undue anxiety, the dentist might hold the hand-
piece and turn it on while the patient listens. Fur-
ther steps might include the dentist’s bringing
the handpiece near the patient’s mouth, the pa-
tient meanwhile lying back in the chair. This pro-
cess will likely reduce the patient’s fear of the
handpiece considerably, but his fear will probably
not be fully extinguished until he has had a suc-
cessful dental experience in which the handpiece
is used.

The approach illustrated in the above example
applies to each feared situation. Patients are
never forced to try anything they don’t feel ready
for, and care is taken to make them feel in con-
trol of the pace at all times. Again, pace is always
determined by the patient’s anxiety level, never
by the patient’s or the dentist’s desire to “get on
with it.” Each situation is broken down into small
steps, and full communication between dentist
and patient is encouraged. Indeed, it is this free
communication between dentist and patient that
greatly facilitates fear treatment.

AREAS OF PSYCHOLOGICAL
FUNCTIONING AFFECTED
BY TREATMENT

Belief Systems

Fear treatment affects several areas of psycho-
logical functioning, one of the most important
being the patient’s belief systems. As explained
earlier, the fearful patient’s beliefs and expecta-
tions about dental treatment produce the patient’s
fear and avoidance. The fear treatment described
in this series offers a powerful way to change
these beliefs and expectations. For example,
when the dentist asks about the patient’s anxi-
ey and demonstrates an interest in the patient’s
feelings, he directly challenges the patient’s be-
 lief that the dentist does not care about his or her
experience. When the dentist’s care and concern are
demonstrated consistently throughout the treatment, the
patient begins to replace old beliefs and expectations
with new, more beneficial ones. Experience is the most
effective way to change beliefs, and because phobia
Treatment provides direct and powerful experiences, it is highly successful in helping a patient overcome old, negative beliefs.

Classically Conditioned Responses

Fearful patients almost invariably show classically conditioned responses to the dental treatment environment. The mere sight of a dental instrument may arouse fear in a phobic patient even though he feels no actual pain. He associates the dental instrument with pain, and just seeing the instrument arouses anxiety. One of the purposes of the gradual approach to the feared situation is to help extinguish these classically conditioned responses. Pavlov’s dog, associating the sound of a bell with the presentation of food, would salivate when the bell was rung. This response could be extinguished by ringing the bell and withholding the food. Eventually, the dog would stop salivating at the sound of the bell.

The same process takes place when patients encounter fearful situations. Their initial fear response diminishes when the sight of the dental instrument is not followed by pain or helplessness. Patients usually have classically conditioned responses to a variety of stimuli in the dental environment; these responses are all gradually extinguished as treatment proceeds.

Perceptual Distortions

High levels of anxiety frequently produce perceptual distortions. During periods of high anxiety, people typically report that lights seem unpleasantly bright, sounds are harsh and grating, smells especially noxious. To a fearful person, the environment is more unpleasant than it would be if fear were not present. This phenomenon can be called to the attention of the fearful person and they can be encouraged to notice how these distortions diminish with diminishing anxiety. Most patients find this process quite reassuring, for they come to realize that the dental environment is more benign than it initially appeared or than it exists in their memories.

Self-Confidence

Fear treatment almost invariably increases self-confidence, both in the dental environment and in other areas of a person’s life. In the dental office, the patient’s sense of helplessness diminishes, and he becomes increasingly able to discuss treatment options, ask questions, and express preferences in regard to treatment. Outside of the dental situation, the fact that he has overcome a long-standing fear is generally very encouraging to him. Frequently a patient will say that overcoming a problem that has troubled him for years has encouraged him to face other fearful situations. General levels of anxiety may decrease, along with depression, as the individual’s self-confidence builds.
REFERENCES


8. Specific training is available at the Mount Zion Hospital Center for the Treatment of Dental Fear.
This article will discuss principles and techniques for incorporating the treatment of fearful dental patients into the practice of dentistry. The dentist who considers adopting these techniques should give serious thought to how much he wants to get involved with them, for they will succeed only if he genuinely desires to work with fearful individuals. A dentist may decide to work with only the mildly fearful patients. In any case, he must be able to diagnose the presence of dental fear and, if it is present, either to treat it or refer the patient to someone who can.

ASSESSMENT

Assessment Tools

As we mentioned in the first part of this series, surveys show that up to 75% of all dental patients suffer at least some anxiety regarding dentistry—although many will not call the dentist’s attention to their anxiety. In fact, patients commonly try to conceal their anxiety from the dentist. We therefore recommend that all patients be asked about the degree of their dental anxiety, and we also suggest that, as part of the intake procedure, a question like the following be asked: “In general, how anxious or uncomfortable are you about receiving dental treatment?” If the question is written, a numerical scale might be included. The Corah Dental Anxiety Scale (Figure 4-1) is commonly used for this purpose.

Those who indicate any degree of anxiety require further investigation. The Dental Fear Survey (Figure 4-2) developed by the authors may be useful in further assessing the patient’s fear. This survey helps the dentist begin the process of determining each patient’s particular fears. Other instruments, such as the Confidence Scale (Figure 4-3), are also available.

For mildly anxious patients, simply asking them about their fear and showing a willingness to listen to their answer may provide all the treatment necessary. The degree of interest and concern evidenced by such a question will often by itself help the patient relax and trust the dentist more. Once communication is opened, the patient may describe some previous difficult experience or mention some concerns about the current situation. These discussions, though relatively brief, may make an important difference in the quality of the dentist-patient relationship.

The more fearful patient needs a more careful assessment. The Fear Survey will give some indication of his areas of concern, and the Confidence Scale will reveal how avoidant he is.

The various areas of fear identified in the Dental Fear Survey lead to particular kinds of treatment. Items 2
and 7 (aversion to equipment and the environment), identified as relating to “classic conditioning,” require the gradual approach. Items 3, 4 and 5 (“fear of criticism,” “distrust,” and “powerlessness”) involve various aspects of the dentist-patient relationship. To treat these fears, the dentist behaves in a way that demonstrates their groundlessness. Item 6 (“fear of pain”) requires a very gradual approach during treatment, with ample opportunity for the patient to explore his or her sensations each step of the way and, importantly, to remain in charge of the pace of treatment. Item 8 (“relaxation”) may indicate a particular difficulty with relaxation. Most patients who find it hard initially to relax become more comfortable as their fear diminishes. If difficulty in relaxing persists despite fear treatment, some specific attention to relaxation techniques may be useful.

**Assessment as Treatment**

Although these assessment instruments provide the dentist with specific information, one of their main values is communicating to patients the dentist’s interest in their experience and concern for their feelings. They aid the treatment process from the start by encouraging the patient to talk about past traumas, fears, and expectations. The assessment process itself therefore begins the fear treatment, providing a very different experience from what the fearful patient expected. It enables the dentist to demonstrate attentive listening, nondefensiveness, and a sincere interest in the patient’s welfare.

**Decisions about Treatment**

By the end of the assessment process, the dentist must decide how to conduct the fear treatment. Not all dentists will wish to try to help fearful patients overcome their fears, and not all fearful patients are appropriate for treatment in the dental office. Perhaps the most appropriate patients for a dentist inexperienced in fear treatment are those who come regularly for treatment but indicate some degree of anxiety. They are likely to require the least specialized training and therefore are the easiest to help.

A second category of fearful patient can receive only certain kinds of care. For example, he or she may be able to endure cleanings or examinations, but not fillings. This patient would probably be appropriate for treatment in the private office by an interested and sensitive dentist.

A third category of patient, one who is unlikely to be treated successfully in a private office, comes in only for emergency treatment when in severe pain. This type of patient may be much too fearful to consider receiving fear treatment by a dentist, and may require a well-trained professional, a fear-treatment center, or a psychologist specializing in the treatment of dental phobia.

**MAKING FEAR TREATMENT POSSIBLE IN A DENTAL OFFICE**

A number of steps must be taken to alter the normal organization and functioning of a dental office if fear treatment is to succeed in that office.

**Developing a Team Approach**

The treatment of dental fear should be shared by the entire office team. The dentist can’t do it alone or hope to avoid actively participating in the treatment by assigning it to a dental auxiliary. The entire team must believe that the goal of any treatment is to provide the patient with a lifetime of dental health and that the long-term effect of any treatment is more important than “getting through a procedure” on a particular day.

In addition to sharing the dentist’s belief in the importance of fear treatment, the staff must also possess excellent listening skills. Every contact with office personnel tells the patient whether the staff is interested in his well being, willing to listen and find out what his concerns and feelings are. An office staff interested in treating a patient’s fears should meet regularly to discuss the treatment, to practice listening skills, and to plan approaches.
Contract for Dental Fear Treatment

Some fear treatment can be provided without the patient being aware of it. Skillful listening is effective with all patients, fearful or not, and is unobtrusive. Other kinds of fear treatment, however, will work only if the patient sees that treatment is needed and is willing to devote the time, energy, and money to have that fear treated. It’s therefore necessary with all but mildly fearful patients to develop a “contract” for the fear treatment. It doesn’t have to be written; it can be a simple agreement between the patient and the dentist to make the fear treatment a goal as important as any dental procedure.

Once this agreement has been made, it will be possible to practice the techniques described below with the patient’s full cooperation. Without such an agreement, the patient will not fully participate in the treatment.

Financial Arrangements

A key ingredient in fear treatment is for the dentist to charge for his time. Dentists are trained to be procedure-oriented. This training is reinforced by insurance companies that pay only for dental procedures. For fear treatment to succeed, however, the dentist must allow the patient to pay for the dentist’s time whether a dental procedure is performed or not. This arrangement can be explained to the patient in a positive manner. The dentist could say something like the following:

“When I do a recognized dental procedure that can be billed to your dental insurance, I will charge for that procedure and bill it accordingly. However, when we spend time together without performing a dental procedure, I’ll charge you for my time so that you know that what happens on any particular day is entirely within your control. You are free to cancel a procedure when one is scheduled, to stop a procedure and complete it another day, or to set a much slower pace than I normally follow with other patients.

The freedom and control you gain by this arrangement are an important part of helping you overcome your fear.”

Usually dentists have more difficulty adjusting to the idea of charging for their time than patients do, but when the potential benefit of these charges is seen, their value is obvious. The dentist may spend several sessions on the patient’s fear without performing any dental procedures. If these sessions remove a fear many years old (sometimes most of the patient’s life), the cost in dollars and time is minimal. The possible benefit is a lifetime of being able to have dental treatment without fear.

The other benefit of this financial arrangement is that it removes from the dentist the burden of feeling that some dental procedure must be done for the dentist to get paid. Even the most caring and sympathetic dentist will have a hard time sitting and talking with a patient or having the patient look at the dental instruments for an hour without feeling some pressure to produce income. Knowing that income is generated whether a dental procedure is performed or not makes it far easier to let the patient actually be in control and make decisions about what to do from moment to moment and at each session.

Many patients see paying a dentist for his time as a wonderful opportunity. Patients treated at Mount Zion Hospital often say, “That’s great news that you’ll let me pay you. I’ve been looking a long time for a dentist who’d give me extra time without making me feel rushed, and I haven’t found one. I’m glad to be able to pay for that kind of approach.”

APPLYING FEAR-TREATMENT PRINCIPLES IN THE DENTAL OFFICE

The following steps can be taken when working with a patient’s specific fears in the dental office.
These steps apply to most dental fears.

**Listening Skills**

The single most important step in helping patients overcome their fear of dentistry is making them feel listened to in all contacts with the dentist and his staff. Listening well shows the patient that the office staff is genuinely interested in him and his fears and in giving him control over what happens in the dental office. None of the other steps can be effective with extremely fearful patients unless they are applied in conjunction with good listening skills.

**Developing a Treatment Hierarchy**

The development of a treatment hierarchy is not always a formal, written procedure like the one described in part three of this series. It is important, however, that the dentist and patient agree on a sequence of steps starting some distance from the patient’s feared situation and gradually moving closer to it. If the patient fears injections, the first step might be to have the dentist hold a capped anesthetic syringe by the patient’s side to see whether fear is aroused. When the patient can experience that situation without anxiety, the next step may be to bring the capped syringe closer and closer to the patient’s mouth. Eventually, the syringe would be placed uncapped inside the mouth. Each step is repeated until the patient feels no anxiety before going on to the next step, which might be touching the tissue very lightly with the tip of the needle. Finally, a drop of solution might be injected followed by incrementally larger amounts of solution.

This sequence might not be followed with each patient, but the dentist and patient should agree on the steps to take.

**Information about Fear Treatment**

It is often useful at the beginning of fear treatment to have a session that might be described as “everything you always wanted to ask the dentist but were too afraid to ask.” When patients are encouraged to ask questions in a nonjudgmental and supportive atmosphere, they often ask about the dentist’s background, how he feels about working with fearful patients, and how he practices dentistry.

At the same time, patients should be encouraged to ask about how fear treatment works, what it consists of, how likely it is to help them, and so on. Such information is not presented to the patient as a list, or in a speech by the dentist. Rather, it is woven into the conversation informally.

**Fears Are Common**

Since most fearful patients consider their fear unique, it can be very helpful to them to hear that they aren’t alone with this problem. They should be told that up to 75% of the population has at least some fear of dentistry, and approximately 10% are dental phobic. “Dental phobic” means that the person is so frightened that he avoids dental treatment. This information often makes the patient feel less isolated and less ashamed.

**Improvement Is Possible**

Patients should be told that fear treatment is usually successful. Most patients are able to receive dental care without undue anxiety after treatment, and it is even possible to eliminate fear in many cases. Most patients don’t believe such statements, for they’ve struggled many years with their fear. They can be told their reservations are natural and that their skepticism will not interfere with the effectiveness of the treatment.

**Treatment Is Relatively Brief**

Patients are frequently concerned that, since their fears are longstanding, treatment will also take a long time. The fact is, the length of treatment is not particularly correlated with duration of the fear; for many, relatively few sessions produce significant benefit.
Pace of Treatment Is Individualized

The patient should be told that the dentist has no preconception about the rate at which treatment will proceed. The pace of treatment depends not on the dentist’s ideas but on how the patient feels in each situation. The dentist should explain that high levels of anxiety are not required in order to eliminate fear. In fact, they are counterproductive and could make a person more fearful. The dentist should make every attempt to insure that the patient experience only low levels of anxiety. It is frequently the dentist’s function to suggest a slower pace, or to suggest repeating the same procedure a while longer, since patients often make themselves anxious by wanting to hurry.

Self-Criticism

Patients are generally reassured when told that having a fear of dentistry does not mean something is wrong with them. They often feel that fear is a sign of weakness, inadequacy, or some deep psychological problem. It is quite useful to tell them that their fear stems from past traumas and that most people would respond the way they did.

Patients’ self-criticism frequently is manifested as embarrassment or shame. They expect the dentist to feel the same way about them. It is useful for the dentist to say that he understands they may feel critical of themselves, but that he doesn’t feel that way. He doesn’t judge them, and he is there to help however he can.

Treatment Method

The dentist should explain to the patient that the treatment involves helping the patient get used to feared situations little by little. This is a common sense notion that most people will understand. The dentist explains that together he and the patient will list the feared situations, proceeding from easier ones to the more difficult. These situations will be approached one at a time, and the patient will become comfortable with each one before advancing to the next one.

Information about Dental Treatment

Some patients simply need information about what modern dentistry is like, having had dental treatment many years previously and not knowing how techniques have changed. A thorough diagnostic process is necessary to determine whether the patient needs this kind of information, which can also be used in conjunction with some other treatment modalities listed here.

With a new fearful dental patient, treatment often begins in the diagnostic interview, as described previously. Afterward, an introduction to the dental environment begins the desensitization process, in which the patient moves closer and closer to the feared situations. This introduction also provides information about what dental instruments look like, what the dental chair feels like, how dental instruments work, and how some dental procedures are performed.

The patient can be brought into the environment and allowed to examine it at his own pace. He can push the buttons on the dental chair to see how it moves and hold and examine a set of dental instruments. He can pick up the dental drill, turn it on with the foot pedal, hear the sound, and observe the water spray. The function of a rubber dam can also be explained as he holds one. While these instruments are being demonstrated, the patient should be encouraged to ask questions about those procedures he fears and to learn exactly what is involved.

Let the Patient Decide What to Do Next

In the example cited above, it’s important that the patient decide what steps to take. The dentist may make suggestions, like, “If you would like, we could move the syringe closer to your mouth to see if any reaction is aroused. Would you like to do that?” Giving him a choice of steps at each moment helps him feel actually in control of what goes on in the dental setting.

The patient can be consulted in a wide variety of other ways. He can decide what steps to take in a desensitization program, whether to continue...
further dental treatment at a given appointment, or which filling to do first when a number of fillings are needed. Each such choice reinforces the idea that this is a dental office where the dentist’s interests are the same as those of the patient.

**Start with Small Procedures**

When first working with a fearful dental patient, it is important to realize that a large part of what goes on is fear treatment, not dentistry. As the patient’s fear diminishes, the dentist should include more and more dental procedures. At the start, though, the dental procedures should be very minimal, the exact ones depending on the patient’s fear. For some, dental treatment may start with getting used to sitting in the dental chair. Certainly the patient should be able to sit in the chair comfortably before being placed in a reclining position. Not until the patient can sit comfortably reclined should the dentist consider examining him or putting instruments into the patient’s mouth.

Some patients may have no anxiety about being examined, sitting in the dental chair, or receiving injections. For these patients a small start might be a simple filling before more complicated dental restorations are attempted.

**Separate Actual Sensations from Anxiety**

Since fear responses to dental situations are automatic and beyond the patient’s control, a patient cannot will his fear reaction away, nor can the dentist reassure or explain it away. However, by working with a procedure that evokes only mild anxiety, the dentist can teach the patient a new reaction to that procedure. When something evokes anxiety, it’s often helpful to discuss with the patient some ways of dealing with what is going on. One strategy is to help the patient separate his anxiety from the actual sensations experienced. The dentist can reassure the patient that he needn’t try pushing the anxiety away; it’s impossible to do so. Rather, the patient should recognize the difference between actual physical sensations and the anxiety response itself.

For example, as the anesthetic needle is brought towards the patient’s face, the patient may grow anxious. The needle is withdrawn and the anxiety is allowed to subside. The patient can then be asked about what happened: “Did you have an anxiety response? How large a response was it? What did it feel like? Did you have any actual sensation in your mouth?” The patient will usually indicate that he did have an anxiety response, a mild one it is hoped, perhaps some sweatiness in the palms, some tightening in the stomach or muscles, or other physical sensations.

When asked about whether he felt any sensation or pain from the anesthetic needle, the answer would of course be no. The patient can then be told, “Even though you intellectually recognize that the anxiety response was not based on any physical pain or sensation from the anesthetic needle, it’s still not possible to force the anxiety response to go away. What you can do, however, is recognize that a difference exists between the anxiety response itself and the actual sensation you were having. The anxiety response may continue to be there, but simply recognizing that it’s separate from your actual sensations will allow it to go away after we have repeated this procedure often enough.”

**Check Frequently How the Patient Is Doing**

It is important to pay close attention to the patient’s level of anxiety. As stated earlier, the first appointments with a fearful patient should be considered primarily fear treatment and not dentistry, no matter what dental procedures are attempted or accomplished. The key to successful fear treatment is to be sure that the patient is only doing things which will cause no anxiety, or very mild anxiety. It is therefore important that the dentist and patient always be aware of the patient’s anxiety level.

One way to monitor this level is to ask the patient frequently how he is doing. As explained earlier, an anxiety scale can be agreed upon as a shortcut in describing the patient’s anxiety. Zero can indicate no anxiety, and ten can indicate com-
plete panic, with various gradations between. That way, when asked what his anxiety level is, the patient can respond with a number the dentist will understand.

Some patients are fearful because they have a hard time telling an authority figure, such as a dentist, that they are uncomfortable or would like to stop or take a break. They are afraid the dentist will disapprove. It’s therefore important that the dentist also watch for any signs of discomfort or anxiety, such as a tightening of the small muscles around the eyes. The rate of breathing could also increase, or the patient’s hands might grip the armrest tightly. The patient may also make a sound or move some part of his body slightly.

If the dentist detects any signs of anxiety, he should immediately stop what he’s doing and ask about what he observed, saying, “I noticed your breathing rate just went up. Did you get anxious at that moment?” If the patient did become anxious, the dentist should ask how high the anxiety level rose. If the anxiety is mild, the causative procedure should be repeated until the patient can experience it without any anxiety before going on. If the level of anxiety is high, the patient may be trying something he isn’t ready for, and it might be appropriate to go back to procedures that cause less anxiety before returning to the present procedure.

Frequently checking how the patient is doing helps him feel that the dentist is genuinely interested in what happens to him in the dental chair; the dentist isn’t interested in just his own needs, such as finishing the dental procedure. Feeling confident that the dentist is interested in the patient’s experience is an integral part of fear treatment.

Use a Signal System to Stop

The dentist should arrange with the patient a set of signals that tell the dentist when the patient would like to stop or take a rest. Signals that are easy to use and see, like having the patient raise his hand, for instance, obviously work best, and it’s important that the dentist pay attention to them. Many fearful patients, say they’ve used a signal system like the one described, raising their hand, only to hear the dentist say, “Hang on for just a few more seconds and I’ll be finished.” This perceived lack of control in the dental chair terrifies some patients and has been a major factor in causing dental phobia. It is vital that the dentist stop instantly at any sign that the patient would like to stop. Having an arrangement whereby the patient pays for the dentist’s time regardless of what is accomplished makes it easier for the dentist to allow many breaks and pauses during treatment without feeling pressured to keep on working.

Use Positive Reinforcement

It helps to point out the patient’s progress. Patients are often afraid when being confronted by a number of different steps. After mastering the first step, they might feel it was easy, but view the next several steps as difficult. After progressing a few more steps, they can have the same reaction, thinking, “Well, those weren’t so hard, but the next one really is going to be the difficult one.” It is sometimes helpful for the dentist to point out that this is a normal response, many people have it, and that the patient has made significant progress, doing things without fear that he couldn’t do at first.

Be Sure the Patient Is Comfortable

The dentist should do everything possible to make each dental procedure as comfortable as he can. Most dentists have a long list of techniques that make dental procedures comfortable. For instance, local anesthetic injections done very slowly with a good topical anesthesia can be less painful than anesthetic injections performed quickly.

Another way to make patients comfortable who are afraid that drilling will hurt is to be absolutely sure the tooth is numb before drilling. The dentist might need twice the normal amount of anesthetic and might have to blow some air on the tooth first to make sure no sensitivity remains. When drilling starts, the dentist should go very lightly on the enamel so that the patient can feel the vibration of the drill without pain. The dentin of the
tooth should be touched very lightly for brief instances to be sure that the patient feels no pain.

Proceeding this way will insure that if the patient does feel something, it will be only a very mild sensation at first. When the dentist works this way, even when the tooth isn’t completely numb, the patient often describes a “cold” feeling on the tooth. Many patients fear that the dentist will drill on their tooth, they’ll not feel anything, then all of a sudden they’ll feel a tremendous amount of pain. By proceeding cautiously, the dentist can make sure their fear is never realized. He can also say to the patient, “I’ll be proceeding very slowly and cautiously. If the tooth isn’t quite numb enough, you’ll feel a slight cold sensation in the tooth. You can then raise your hand and stop me instantly.”

When cleaning a patient’s teeth, the practitioner can apply another technique to make sure the patient is comfortable. Some patients with particularly sensitive teeth or roots often find it difficult to distinguish between the sensitivity and their fear of pain, since both tend to reinforce each other. Offering to use local anesthesia can remove any possibility of pain from the procedure. Some patients would much rather have the local anesthetic injections and know the teeth will be numb than to worry constantly that the dentist or hygienist will hit a sensitive area and cause them pain.

Again, a key ingredient in treating dental fear is to be sure that the patient feels in control of whatever is happening. Therefore, when deciding how to make the patient more comfortable, as with all other aspects of dental treatment, the patient must be involved in a discussion of the pros and cons of each approach and allowed to make decisions himself.

Use Coping Strategies

A number of strategies help patients cope with their dental anxieties. Many are useful in dealing with mild discomfort or anxiety. It is a mistake, however, to think that these strategies will be effective against a large amount of pain or anxiety. It is therefore important to use an adequate assessment process to be sure that a coping strategy will actually be effective for the amount of discomfort or anxiety that the patient is having.

One coping strategy that can be effective during somewhat uncomfortable parts of dental treatment is relaxation breathing. Many such breathing techniques are available. One technique for the dentist to guide the patient through progressive muscle relaxation is as follows:

“While we are injecting local anesthetic, it can be helpful to focus your attention on your breathing. This can help you feel relaxed and be less aware of the sensations from the injection. If you would like to do this, you can take slow, deep breaths through your nose; visualize the air filling your lungs, circulating through your body, and leaving your body through your nose. Each time you exhale, see if you can let all of your muscles be a little more loose and relaxed. You can start by checking the muscles in your legs and when you exhale, make them as loose and relaxed as possible. Next, do the same thing for the muscles in your back. Let each group of muscles be as loose and relaxed as you can each time you exhale. Next, check the muscles in your arms and shoulders. Let them relax a little further with each exhalation.”

The dentist can repeat these instructions for muscle groups in the neck, forehead, eyes, and face. Note that he is making suggestions which the patient may choose to follow or not. The dentist is not demanding that the patient do any of these things. These instructions should be delivered in a slow, calm, quiet, hypnotic voice. The sound of the dentist’s voice and, speech pattern can often do as much to relax the patient as the words themselves.

Relaxation breathing techniques, such as the one described, can be useful during dental injections, when using the drill, or doing a surgical procedure. Again, it is important that the level of benefit from this coping strategy match the
patient’s level of anxiety. The patient who is extremely anxious about a procedure should not attempt that procedure without first doing other things to reduce the level of anxiety to a level where relaxation breathing can actually help free him of anxiety.

Another coping strategy is visualization. Some patients find they can take their mind off what is happening at the moment by visualizing a pleasant scene. The dentist might use a technique called “guided imagery.” In this technique the dentist guides the patient through an image that the patient visualizes. After finding out that the patient would like to try guided imagery, the dentist might say the following:

“While we are doing this injection, it would be helpful if you could imagine your self-doing something you like to do. You have talked about taking walks on the beach in the sunshine. If you’d like, picture yourself on a beach, feel the warmth of the sand with your feet as you walk along. You can hear the sound of the waves rhythmically crashing on the shore and imagine the smell of the sea and surf. Try to hear the sound of seagulls flying in the air and feel that sense of peace and calm and relaxation that you told me you get when you’re walking on the beach.”

Guided imagery, like other coping techniques, can be useful in situations where the patient might feel mild discomfort or mild anxiety. Again, it is not going to help an extremely anxious patient. Trying to make it serve that purpose will only frustrate the patient and the dentist.

Visual and auditory distracters can also be used as coping strategies, including stereo music headphones, white noise headphones, and a TV on the ceiling. Such devices, if the patient has control over the volume or channel selection, can be especially useful. Again, visual and auditory distracter are only useful when applied in situations that arouse very mild discomfort or anxiety. They should not be used as a substitute for advanced fear treatment in a situation where the patient is highly anxious.

Sometimes patients have their own coping strategies developed through experience. Asking the patient whether he would like to try to relax himself often uncovers individual coping strategies. One patient brings a large teddy bear to dental appointments when she anticipates a lot of work or is concerned about getting nervous. Other patients think about specific things to distance their mind from the dental situation in the middle of an uncomfortable procedure. Not only do such strategies often work well for patients, but they’re another indication that the patient can control the dental situation and that the dentist is interested in finding out what can help and doing what he can to improve the quality of the patient’s experience in the dental chair.

Using Pharmacologic Agents

Pharmacologic agents can be used in conjunction with treatment for dental fear. They do not in themselves provide any benefit in reducing patient’s fears. Actually, the converse is true. The more sedated an individual is, leading up to general anesthesia, the less likely they will learn how to get dental treatment without fear. Someone already very anxious about losing control may become more anxious if he is sedated. It’s important to understand this idea thoroughly -- that pharmacologic agents do not treat fear -- and one must learn to use them intelligently in combination with techniques that do treat fear.

At one end of the spectrum are agents that provide very mild sedation, such as oral Valium or nitrous oxide analgesia. These agents can make a small but definite difference in the patient’s level of anxiety. Nitrous oxide especially provides an analgesia that can make the patient less aware of uncomfortable sensations. When these agents are used on fearful patients, it is vital that all of the previously discussed principles for treatment of the fear be followed. It is especially important that, even when these agents are used, the patient try only procedures they can do with no more than mild anxiety. If a patient attempts to “get through” a procedure about which he is highly anxious with the
use of mild sedative agents, he is likely to reinforce his fear, causing both himself and the dentist to become frustrated at this perceived failure of the sedative technique.

More significant sedation can be achieved with a combination of oral agents, intramuscular agents, and nitrous oxide. Intravenous sedation can range from mild to deep sedation. As stated earlier, the deeper the patient's sedation, the less likely he'll learn from the experience anything about his ability to tolerate procedures without sedation. General anesthesia makes it highly unlikely that the patient will learn anything about his ability to tolerate dental procedures without general anesthesia.

Deep sedation or general anesthesia, however, can be useful in conjunction with fear treatment. These techniques are most likely to be useful when a patient is faced with massive amounts of dental treatment and is extremely fearful of even small dental procedures. As long as the patient and the dentist both realize that the dental treatment under anesthesia will not help the patient conquer his fear, it can be used to accomplish the most involved parts of the dental treatment. Some smaller dental procedures should be left undone during the general anesthetic to give the patient a chance to use those smaller procedures as vehicles to work on their fear.

Redefine Successful Treatment

For many fearful patients, and for some dentists, success in dental treatment means getting the patient through an appointment or a series of dental procedures. The patient often wants to “get it over with.” The dentist, faced with the unpleasant situation of having a nervous patient in the dental chair, may share that desire. If fear treatment is to succeed for many individuals, it’s important to redefine “successful dental treatment.”

One way to define success is to think in terms of a lifetime of dental health. The dentist might say,

“I see our ultimate goal here as trying to figure out what best would help you have a lifetime of dental health. I suggest we make this our goal and base our decisions about what to do at each moment on what will most likely result in achieving that goal. If we do what allows you to get through the procedure, but doesn’t help you with your fear, it’s much less likely you’ll be able to get yourself to come back for regular dental appointments and have small procedures done while the problems are still small. You are much more likely to achieve a lifetime of dental health if we make our primary goal at each moment doing procedures that will allow you to overcome your fear of dentistry and therefore be able to know that when you come back for regular maintenance visits, you’ll not have a problem doing dental procedures. I don’t think we’ll be able to make dental procedures feel like a picnic in the park, but if we pay attention to your anxiety at each moment, we can set as a realistic goal having you walk out of each dental appointment saying to yourself, ‘That wasn’t so bad. I think if I needed to do that again I could without any problem.’ If you walk out of each dental procedure saying that to yourself, your fears will disappear, and you’ll not only get the dental work done that you need, but you can look forward to a lifetime of having healthy teeth.”

The patient who leaves the dental office in the middle of treatment feeling he could repeat the treatment without anxiety will more likely be free of fear in the future than one who suffers through the procedure. The first patient knows that the dentist has his comfort as a primary goal and is likely to become a longtime patient in that practice and a loyal advocate of the skills of that dentist in the community.
Figure 4-1: Dental Anxiety Scale

Please answer the following four questions by circling the appropriate response.

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 reasonably 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 sick.

3. When you are waiting in the dentist’s chair while he gets his drill ready to begin working on your teeth, 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 sick.

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 which he will use to scrape your teeth around the gums, 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 sick.

(From Corah, N.L., Assessment of a Dental Anxiety Scale. J. Dent. Res. 48:496, 1969.)
Figure 4.2: Dental Fear Survey (dentist’s version)

Please indicate how much each of the following is a concern or problem of yours. Use the following scale for each question:

1 = Not a concern or problem
2 = A slight concern or problem
3 = A moderate concern or problem
4 = A large concern or problem
5 = A great concern or problem

1. I am anxious about receiving dental treatment. _____

2. I don’t like to see dental equipment, such as hand tools, drills, or hypodermic needles. (classic conditioning) _____

3. I think the dentist may be annoyed by me or will make me feel guilty about not caring for my teeth. (fear of criticism) _____

4. I think that the dentist may not do a good job or may try to fool me about needed work. (distrust) _____

5. I think the dentist won’t listen to me or will do what he wants no matter what I say. (powerlessness) _____

6. I think I may feel a lot of pain during dental treatment. (fear of pain) _____

7. I imagine I’ll feel upset in the treatment area when I see the equipment, hear the drill sounds, notice the smells. (classic conditioning/perceptual distortions) _____

8. I don’t think I’ll be able to relax during treatment. (problems with relaxation) _____

(By Alan Rappoport, PhD. May 1, 1986)
Confidence Scale Instructions

The Confidence Scale (Figure 4-3) on the next page is for you to tell us how confident you are that you could engage in various dental treatment activities right now. Please take a look at the form and then read the rest of these instructions.

As you have seen, the form has a list of various activities, a “can do” column, and a “confidence” column. For each activity, please put a check next to it (in the “can do” column) if you think you can do this activity. For the activities you check as “can do”, indicate how confident you are that you could do them by entering a number from 10 to 100 in the “confidence” column. 10 means “quite certain”, 50 means “moderately certain”, and 100 means “certain”, as shown on the scale above the form.

In filling out this form, assume that each activity is complete in itself and won’t be followed by further treatment (for example, after you performed item 4, “sitting in the dental chair for one minute”, assume you would get up and leave the office.)

Below is a sample form filled out for lifting weights to help you see how this scale works. Please look it over and then go on to the Confidence Scale on the next page.

<table>
<thead>
<tr>
<th>Physical Strength</th>
<th>Can Do</th>
<th>Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lift a 10 pound box</td>
<td>______</td>
<td>______</td>
</tr>
<tr>
<td>Lift a 15 pound box</td>
<td>______</td>
<td>______</td>
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<tr>
<td>Lift a 20 pound box</td>
<td>______</td>
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<td>Lift a 30 pound box</td>
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<tr>
<td>Lift a 40 pound box</td>
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<tr>
<td>Lift a 50 pound box</td>
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<td>Lift a 60 pound box</td>
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<td>Lift a 70 pound box</td>
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<td>Lift a 80 pound box</td>
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<tr>
<td>Lift a 100 pound box</td>
<td>______</td>
<td>______</td>
</tr>
</tbody>
</table>
### Figure 4-3: Confidence Scale

<table>
<thead>
<tr>
<th>Scale (10 quite certain to 100 moderately certain)</th>
<th>Can do</th>
<th>Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sitting in the dentist’s waiting room for one minute.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Sitting in the dentist’s waiting room for five minutes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Standing in the dentist’s treatment room by yourself for one minute.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Sitting in the dentist’s chair for one minute with no one else in the room.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Sitting in the dentist’s chair for one minute with the dentist in the room.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Talking with the dentist in his office about your teeth for one minute.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Talking with the dentist in his office about your teeth for five minutes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Having x-rays taken.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Sitting in the dental chair, having the dentist place the bib around your neck and look in your mouth using no instruments.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Having the dentist examine your teeth using only the mirror for five minutes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Having the dentist examine your teeth using the probe and the mirror for five minutes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Sitting in the dental chair, hearing the sound of the drill in another room for five minutes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Having the dentist polish your teeth with the drill for five minutes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Seeing the dentist prepare the needle for an injection.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Having an injection of anesthetic.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Having the dentist drill a tooth to prepare for a filling for one minute.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Having the dentist drill a tooth to prepare for a filling for five minutes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Having a complete filling done (injection, preparation, drilling, restoration.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Having a tooth extracted.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Having a crown done.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Having gum surgery.</td>
<td></td>
<td></td>
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</tbody>
</table>
Questions

Treatment of Dental Fear
Dr. Glassman and Dr. Rappoport

1. Which of the following will the most severe phobics endure rather than seek dental care?
   a. intense pain
   b. disfigurement due to missing teeth
   c. malnutrition
   d. all of the above

2. Fearful patients can have problems with:
   a. gagging
   b. holding their mouth open
   c. achieving adequate local anesthesia
   d. all of the above

3. It has been shown that fearful patients:
   a. take longer to treat than non fearful ones
   b. can be treated in a shorter length of time than non-fearful ones
   c. take about the same length of time to treat as non-fearful ones do
   d. seldom cancel or miss appointments

4. Which of the following stress-related health problems are more prevalent among dentists than the rest of the general population?
   a. coronary artery disease
   b. hypertension
   c. psychoneurotic disorders and suicide
   d. all of the above

5. The most likely etiology of dental fear is:
   a. previous traumatic dental experience
   b. influence of peer or family members
   c. dislike of the dentist
   d. both a and b

6. Surveys indicate that approximately of the population experience some anxiety about dental treatment.
   a. 25%
   b. 50%
   c. 75%
   d. 100%

7. Which of the following beliefs might contribute to the patient’s fear and avoidance of dentists.
   a. the belief in the dentist’s abuse of power
   b. the belief in the dentist’s incompetence
   c. mistrust of the dentist
   d. all of the above

8. High levels of anxiety can result in:
   a. hyperventilation
   b. fainting
   c. tachycardia
   d. all of the above

9. Of the following, the most common item patients mention when asked what they fear in dentistry is:
   a. pain
   b. the dental drill
   c. radiation from x-rays
   d. the syringe

10. Dental fear can be manifested by:
    a. missed or broken appointments
    b. an exaggerated gag reflex
    c. patient inability to get numb
    d. all of the above

11. _____ has shown a long term benefit in reducing dental anxiety in one study.
    a. Oral valium
    b. Nitrous oxide
    c. Hypnosis
    d. Audioanalgesia

12. The single most powerful tool that a dental professional can have when working with fearful dental patients is:
   a. good listening techniques
   b. a gentle touch
   c. an adequate knowledge of drugs to treat these patients
   d. a competent dental staff

(Quiz continued on next page.)
13. All of the following items are part of the “Gradual Approach” method except:
   a. the feared stimulus is clearly identified
   b. steps for approaching the feared situation have been worked out
   c. the patient is aware of his or her anxiety level and feels free to communicate to the dentist
   d. the fear situations are approached as quickly and intensely as possible

14. The pace of anxiety treatment should be solely determined by:
   a. the patient’s anxiety level
   b. the patient’s desire to proceed more rapidly
   c. the dentist’s idea of how quickly or slowly to proceed
   d. any of the above

15. The most powerful way to change negative dental beliefs in a patient is through:
   a. exhibiting a positive attitude
   b. demonstrating a caring attitude
   c. positive dental experiences
   d. hypnosis

16. Most anxious patients will:
   a. call the dentist’s attention to their anxiety
   b. attempt to conceal their anxiety from the dentist
   c. discuss their anxiety openly if questioned about it
   d. never discuss their anxiety unless properly sedated

17. The treatment of dental fear should be performed by:
   a. the patient only
   b. the dentist only
   c. both the dentist and patient
   d. the entire office team

18. Approximately what percent of the population is so frightened by dental procedures that they do not receive any dental treatment and are considered dental phobics?
   a. 10%
   b. 25%
   c. 40%
   d. 60%

19. Patients should understand that all of the following are true about fear treatment except:
   a. dental fear is uncommon
   b. improvement is possible
   c. treatment can be relatively brief
   d. the pace of treatment is individualized on how the patient feels in each situation

20. The deeper the patient’s sedation, leading up to general anesthesia, the ____ likely it is that he will learn something about his ability to tolerate dental procedures without sedation.
   a. more
   b. less
THE AMERICAN DENTAL INSTITUTE FOR CONTINUING EDUCATION

ANSWER SHEET

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Please mark the best answer to the questions found at the end of each article with a pen. Return this answer sheet to the below address. Upon successful completion, you will receive a Certificate of Completion.

TEATMENT OF DENTAL FEAR

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