

## **IATROSEDATION by Dr. Nathan Friedman, DDS**

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### **INTRODUCTION**

Fear of dentistry is a worldwide health problem of considerable significance. In the United States it is estimated that twenty million people avoid the dentist because of fear. For these people, fear is a more destructive lesion than caries or periodontal disease since it is the major obstacle to their seeking dental health care.

Avoidance of the dentist frequently results in extensive pathology. Consequently, such patients are driven to the dentist by some crisis-like situation; either pain, swelling, acute infection or the last-ditch need to have a badly destroyed dentition repaired. However, the dentist cannot "get to" the teeth until the barrier of fear is removed in some way. Attempting to ignore the wall of fear usually leads to great frustration and stress for the dentist and a higher fear level for the patient.

A recent survey of dentists indicates that 57% of those responding considered the "difficult patient" to be the most stressful single factor in their practices. It is clear that for both the doctor and the patient, fear must be viewed as a significant syndrome requiring treatment. In a sense, each time the dentist is faced with a fearful patient, he is dealing with an emergency; not a dental emergency, but the emergency of fear. For the dentist, facing the fearful patient may create considerable stress, a sense of inadequacy and frustration unless he is equipped to deal with the problem expertly.

The dentist has a variety of ways to help the fearful patient. The use of drugs is the traditional modality. The techniques of inhalation, intravenous, intramuscular and oral sedation have been taught for years in dental schools and, postdoctorally, through continuing education channels. The techniques are well structured, the goals quite clear and the dentists using these modalities are confident of their effectiveness. However, it must be recognized that pharmacosedation does not reduce or eliminate fear; it temporarily circumvents it. Its value lays primarily in making dental treatment approachable for the patient by diminishing awareness and producing a temporary state of tranquility.

Treatment of the fear syndrome requires a different technique, one with which the fear is eliminated or significantly reduced by means of a relearning process. The relearning process is the result of interactions initiated by the doctor designed for this purpose.

Traditionally, sedation has been equated with the use of drugs to induce calmness. Although in a vague way it is conceded that the behavior of the doctor is helpful in calming the anxious patient, it is considered a haphazard, intuitive effort. The concept of fear treatment to be developed in the following pages is based on a system of simple behavioral techniques designed to accomplish the goal with maximum efficiency and minimum use of time. This system is **iatrosedation**.

## **TERMINOLOGY**

Iatrosedation is defined as: the act of making calm by the doctor's behavior. Behavior, in this sense, includes a broad spectrum of verbal and non-verbal communication (behavior). The word was formulated by combining the prefix "iatra" (pertaining to the doctor) with sedation (the act of making calm).

Pharmacosedation is defined as: the act of making calm with the use of drugs. Psychosedation is defined as the act of making calm through psychology. It is distinguished from organ sedation wherein some part of the body is calmed, e.g., cardiac sedation. Psychosedation, then, is the generic term for psychological calming and includes:

1. Iatrosedation
2. Pharmacosedation

In treating the fearful patient, iatrosedation is primary and pharmacosedation secondary. The fear is reduced to the lowest level possible with iatrosedation. If this level is not sufficiently low to permit the patient to cope with the dental experience, pharmacosedation is used supplementally. In most instances, however, iatrosedation alone will reduce the fear to a functional level.

## **Components of Iatrosedative Process**

Iatrosedation has two components:

1. An iatrosedative interview
2. The iatrosedative clinical encounter

1. The Iatrosedative Interview: The first meeting of doctor and patient is an interview in the literal sense of the word; that is, a view between two people. If in the course of this interchange the patient indicates either verbally or nonverbally

that he/she is anxious, the doctor responds by initiating an iatrosedative interview. The procedure is designed to identify the fear problem, make a diagnosis and initiate treatment. The fear level will drop as the interview progresses so that a substantive decrease will be achieved at its completion. Usually, the interview does not complete the relearning process in which the fear is eliminated or maximally reduced. This occurs during the second phase of the iatrosedative process, the iatrosedative clinical encounters.

2. The Iatrosedative Clinical Encounters: The first clinical encounter is crucial. This is the "firing line." The patient and the doctor are going to face together what the patient perceives as dangerous. The doctor's behavioral technique must be structured to blend with his clinical techniques to provide the maximum feeling of safety for the patient. Often this first clinical interaction will result in a successful learning experience, eliminating the fear entirely; that is, dropping the level to what is considered within the normal anxiety range. If this does not occur, subsequent clinical encounters will continue to decrease the fear until the maximum effect of iatrosedation is achieved.

There are instances where the iatrosedative interview does not drop the fear level sufficiently and the patient requires some pharmacosedation to face the first clinical encounter. The choice of modality is worked out together, based on the patient's previous experiences and feelings about the use of drugs and the methods of administering them. Many people have anxieties about inhalation sedation because of imagined threat to breathing, some about intravenous sedation based on a feeling of loss of control, while others object to the use of drugs in any form.

## **DENTAL FEARS**

Every dentist is familiar with the more obvious fears patients may have, for example:

1. Fear of Pain
1. Fear of the "Drill" – There may be several components besides that of producing pain, e.g. mutilation due to slipping, the sense of cutting, the noise, smell, etc.
1. Fear of the "Needle" – The most common fear is that of pain of injection. There are others however, such as fear of deep penetration, tissue injury, numbness, etc.
1. Fear of Surgery – Periodontal and oral surgery may be feared because of fantasies of mutilation, threat to body image, pain, etc.
1. Fear of the Loss of Teeth

This partial list will suffice. However, other fears invariably are combined with the above obvious ones. Frequently these are the more important fears that are not apparent to the patient or the doctor until they surface during the interview. These are fears that all people have normally but which are exaggerated when bound up with the dental fears listed above. They are:

1. Fear of the Unknown
2. Fear of Helplessness and Dependency
3. Fear of Body Damage and Body Change

Each of these heightened fears, when they exist must be dealt with in the iatrosedative process. As we shall see, there are specific techniques designed to deal with these components of the problem.

## **HOW DENTAL FEARS ARE LEARNED**

Basically, fear of the dentist is learned. It can be learned in a variety of ways and is expressed in seemingly limitless kinds of experience. However, irrespective of how the fear was learned and what the central focus is, be it pain, the drill or needle, the ultimately important element in defusing that fear will be the behavior of the present doctor and the feelings generated in the patient as a consequence of such behavior.

Fear may be learned as a consequence of direct or indirect experiences. A direct experience is one in which the individual has suffered some traumatic incident or threat of trauma in a dental or medical therapeutic situation. Traumatic experiences not related to medicine or dentistry can spread to the dental situation if there is some triggering reminiscent occurrence.

An indirect experience is one in which the fear is learned vicariously. The most frequent vicarious source is the family: father, mother or sibling. The child may learn to be fearful as a consequence of observing a parent's experience or hearing of it. The same would hold true for those of siblings or friends. Other vicarious experiences result from viewing motion pictures, television skits and cartoons portraying painful or threatening dental scenes.

These experiences most frequently occur during childhood. The memories of the events and the feelings associated with them may persist throughout life unless relearning occurs. Fortunately, the ability to unlearn and relearn is resident in each individual.

## **The Conditioning Aspect of Dental Fears**

Classical conditioning Heightened fear of the dentist and the dental experience may be viewed as a conditioned response in some instances, similar to the response found in Pavlovian classical conditioning. A brief review of this paradigm is:

Pavlov offered food (unconditioned stimulus) to dogs and this resulted in salivation (unconditioned response). Pavlov then presented food to the same dogs, but simultaneously paired it with a bell tone (conditioned stimulus). After a critical number of pairings, the sound of the bell became a sufficient stimulus to produce salivation (conditioned response).

An example of a direct dental experience that can be likened to conditioning is as follows:

A child is taken to a dentist. An aversion stimulus such as pain elicits a response of high fear. The pain may be caused by the drill or the needle, but it is the dentist that is paired with the instrument that produces the pain. The dentist then may be likened to a conditioned stimulus and the fear associated with the appearance or thought of the dentist may be likened to a conditioned response.

Although the above example is likened to classical conditioning, an overlay of interrelated variables may be conceptualized. The histories of many patients reveal fear-learning patterns, leading to an assumption that more is involved than the simple pairing of the dentist with the pain or the instrument causing the pain. The behavior of the dentist seems to be a powerful component of the traumatic experience. The normal fears of helplessness, dependency and the unknown are markedly intensified and become, with the pain, a part of the conditioned response that includes all of those fears. Yet the fear will be labeled simply "fear of pain."

A simple example of such conditioning is reflected in the behavior of a 45-year-old male patient who visited the dentist for an examination. He was extremely anxious and had been for two days prior to the visit. His history revealed that when he was about five years of age, he was taken to the dentist by his father to have a tooth extracted. He had a vivid memory of pain and of being pinned down by his father and the dentist. During the struggle the overwhelming experience of force, pain, injury and the total violation of trust and denial of any protection against frightening danger was imprinted on the child's brain. His father's behavior compounded that of the dentist's and the conditioning was magnified in intensity. The fears of helplessness, dependency and the unknown clearly are integrated with the painful experience.

One such traumatic event can result in a life-long conditioned response of high anxiety unless relearning or counter-conditioning takes place. Introsedation is designed to reduce or eliminate high anxiety through relearning (counter-conditioning).

## **Generalization**

Conditioning also results in generalization; that is, its effects spread from the original traumatic circumstances to situations which have similar elements, e.g., medical experiences generalize to dental situations if similar cues are involved.

Childhood experiences with surgery such as tonsillectomies are a common source of fear learning that may be generalized to the dental scene. This is true not only in relation to mutilation or pain but the experience with general or local anesthesia.

Injections for immunization, for the administration of antibiotics or local anesthetics to dress or suture traumatic wounds may be originating circumstances for the heightening of fear and anxiety. An example of generalization is as follows:

J.B., a muscular, vigorous looking man, 30 years of age during the initial interview, stated that he did not want local anesthesia for any restorative procedure. When asked if there was some reason for this he said that he feared injections; that in the past he reacted to them with nausea, palpitations and would turn white even at the thought of a "shot". Pain was not a factor but in the course of the interview it became apparent that the deep penetration of the needle, as in a mandibular injection, seemed to have been a disturbing experience. Pursuing this cue precipitated an association with childhood experiences. Between the ages of 7 and 10, Joe had suffered a number of accidental injuries such as scalp wounds and deep cuts about the face and legs. Each time these emergencies arose he was rushed to the physician or hospital amidst considerable anxiety and would have an injection for local anesthesia to permit suturing, followed by an injection of an antibiotic. Consequently, injections became associated with body injury, crisis, fear and pain, and a locked-in conditioned response developed. Each time Joe had to face an injection of any type, or in the area of the body, he would suffer acute anxiety. This was generalized to an intra-oral injection for dental anesthesia. In an attempt to avoid this anxiety when having dental restorative procedures, he refused to have injections of local anesthetics.

## **Modeling**

Another method of learning is through modeling. This is an indirect or vicarious learning experience. Fears often arise in children because of their observations

of traumatic experiences of parents, siblings, or friends, or hearing stories of these experiences. This kind of learning also may take place as a result of seeing traumatic dental scenes portrayed in television skits, motion pictures or cartoons.

The parental scene is a common and powerful learning arena for fear as evidenced by the following history. Here the patient refuses injections for local anesthesia just as J.B. did (above), but the fear is based on a modeling learning experience rather than a direct one.

A woman, 45 years of age, refused injections for dental treatment stating that she feared them tremendously. When asked what there was about the injection that she feared, she responded that she didn't know. She had not had any traumatic experiences at the hands of dentists or physicians as a child or as an adult. Seemingly, there was no reason for the fear. When questioned about blood tests she replied that she would not have them. When asked about immunization injections as a child she said that neither she nor her sister had them because her mother, a nurse, "didn't believe in them." The dentist interpreted this to indicate that a small child being told this by her mother (a nurse as well) would feel that "shots" were dangerous and must be avoided. He approached the solution to the problem using this interpretation as the starting point.

In the above history, the fear was not linked with the behavior of a doctor or some other authoritative figure. This usually is not the case. In most instances the tales heard from others or scenes viewed on television will include the dentist's unsympathetic behavior linked with the traumatic event. A small child accepts these impressions as real and universal and consequently may face the first dental experience with fear.

A dentist who is cognizant of the symptoms of fear example of modeling based on observation of events portrayed on the screen is as follows:

A 47-year-old male stated, "I have a terrible fear of the dentist." He characterized his mouth as a "disaster area", not having had attention for a number of years. He stated that he tolerated pain well and that he has had pain all his adult life since he was injured and disabled in service. "It's probably more the anticipation than the actual act that worries me...I tolerate pain fairly well." The learning to fear the dentist started as a child because, as he stated, "...it seems to be part of our social syndrome to be afraid of dentists. I remember I used to see movies ... comedies, you know ... the guy gets in there, 'this isn't going to hurt' and wow! You know. It's supposed to be funny but it scares you and you're supposed to overcome that fear..." The story unfolded in a way that suggested that when he did go to the dentist he had high anticipatory anxiety, indulging a heightened fear of the unknown which he characterized as, "the strangeness of having a hand groping in there with sharp instruments and cutting away at things that normally are not cut upon..." Interrelated with the unknown was the potential body damage that the "strange hand" may create.

Knowledge of the learning paradigms is essential to the effective use of the technique of iatrosedation. Similarly, it is important to understand the significance to the patient of the doctor's behavior in all aspects of dental care. The significance of such behavior becomes even more consequential where anxiety is a dominant factor and its treatment can dispel this type of anxiety quite easily. If on the other hand, he is unaware or ignores it, a more powerful fear learning experience will occur, precipitated by the dentist's inept behavior when trying to treat the teeth of a frightened child.

### **The Patient's Perception of the Doctor**

Fearful patients require a specific kind of behavior from doctors. Janis constructed a blueprint of such behavior based on his results obtained from a five-year study of the psychological stress endured by patients preparing for and undergoing major and minor surgery, including operative dentistry.

He explored, in great depth, the emotions, needs and responses of these patients relative to the doctors who were caring for them. The behavior of the doctors was determined to have a powerful influence on the patients' fear and stress levels. What they needed from their doctors became apparent. To begin with, Janis concluded that the patient perceives his doctor in 2 important ways as:

1. A Danger Control Authority, and
2. A Protective Authority.

Surrounding the perception of the doctor in these roles were strong feelings and needs. Janis summarized them as follows:

The doctor controls what the patient perceives as threatening or dangerous and is the only one able to protect him from that danger. The patient facing a threatening situation becomes anxious and looks for emotional support. The Danger-Control Authority, able to protect him from that danger, becomes invested with strong emotional significance. His behavior and communications assume greater importance than would ordinarily be expected. The patient's ability to tolerate stress and learn to cope with this fear depends upon his being able to develop a sense of trust and maintain high confidence in the Protective Authority figure. In order to do this and develop a feeling of safety, there must be a "working through" before the patient is exposed to what he considers dangerous. This "working through" is the iatrosedative interview, the first interaction between the fearful patient and his doctor. Skillfully performed from a base of knowledge, it ordinarily should not exceed five to ten minutes. Janis'

findings suggest 2 questions that must be answered in order to solve the problem. They are:

1. What does the patient perceive as threatening or dangerous?
1. What can the doctor do to make the patient feel safe, that he will be protected from the danger?

The answers to these questions are the heart of the iatrosedative process.

## **THE IATROSEDATIVE INTERVIEW**

The iatrosedative interview has been fashioned after the traditional open-end interview. It begins with a question such as, "Are you having any difficulties?" The question provides the patient maximum opportunity to reveal what is uppermost in his/her mind; it permits the patient to establish his/her priority of "difficulties." If the patient elects to begin with a statement about sensitive teeth or bleeding gingiva or a need for examination because he suspects caries, the doctor responds to each particular cue. He will go on to get information about the problem or need until he is satisfied that he has all that is required to help make a diagnosis and treatment plan.

Most patients are not inordinately fearful and manage their anxieties well, hence the iatrosedative interview is not needed. However, should the patient respond with any of the many statements of anxiety such as, "I am a coward about teeth" or "I'm the worst patient you'll ever have" or "I'm scared to death," the interview should be put on an iatrosedative course immediately.

### **Strategies of the Interview**

Two strategies are involved:

1. A verbal, fact-finding, interpretative strategy, and
2. A non-verbal, empathic strategy

The verbal fact-finding strategy is divided into 2 major categories:

1. gathering information
2. giving information

Gathering information has a Sherlock Holmes quality about it. The objective is to ferret out pertinent information quickly and concisely. The first question, as suggested from Janis' findings, the doctor (Danger Control Authority) must have answered is, "What is it that the patient perceives as threatening or dangerous?" Once the patient's fear is determined, the second step is to determine how the fear was learned.

Knowledge of the learning paradigms mentioned above can be helpful at this point. Again, this information can be elicited quickly and concisely in a matter of four or five minutes, or less. This is not meant to be an in-depth, prolonged inquiry.

Good information gathering requires an adroit questioning technique, the ability to listen and "hear" what is central in the patient's communication and to respond in a way that will facilitate the unfolding of the story.

After gathering information, the doctor switches to giving information. It is his turn to talk and the patient's turn to listen. In giving information, the doctor (Protective Authority) answers Janis second question, "What can the doctor do to make the patient feel safe, protected from danger?"

The gathered information is valueless unless it is sorted out and interpreted. It is then fed back to the patient in a way that will give him insight into the specifics of the fear, how is/was this learned and how it can be unlearned. The doctor then states his commitment as to how he will behave and what effect he expects his behavior to have on the patient's ability to relearn.

This verbal communication, coupled with empathic non-verbal communication will initiate a feeling of trust. If the trust is maintained and subsequently deepened by the latrosedative clinical encounters, the fear may be eliminated because fear is **soluble in trust**.

### **Model of the latrosedative Interview**

A simple four step model of the above strategy is:

#### Gathering Information

1. Recognizing and acknowledging the problem
2. Exploring and identifying the problem

#### Giving Information

3. Explaining (your interpretation of) the problem
4. Offering a solution to the problem (commitment)

The following is a brief explanation of each of these steps:

1. Recognizing and acknowledging the problem: To respond both non-verbally and verbally to the expression of fear. In a way as to communicate understanding and acceptance of the fear and the intent to explore the problem in order to help. The dentist may say, "I'm sorry, this must be difficult for you. Let's look at this first because we can do something about it." This is a crucial point – a sort of "moment of truth".

*Fearful patients are very perceptive and sensitive to a dentist's behavior. If the doctor feels threatened by the fear either because he does not know how to deal with it or does not want to, he is apt to communicate the message [nonverbally]. This will either intensify the fear or terminate the relationship.*

2. Exploring and identifying the problem: To gather information through the use of questioning and facilitation skills in order to determine:

- The specific fear and its intensity
- The origin of the fear
- The behavior of the doctor(s) or authoritative figure(s) that may have been involved if traumatic conditioning had occurred. This usually is revealed with the origin.

Determining the specific fear and its origin enables the doctor to offer a specific solution and aids in formulating a plan of effective behavior. The goals of giving information are:

3. Explaining (your interpretation of) the problem: To provide feedback of the information gathered in order to validate it and to explain:

- How the fear is learned. Some fears, although on a conscious level, are not apparent to the patient and require explanation and interpretation. An example will follow.
- The specific fear and associated fears of helplessness, dependency and the unknown leading to some discussion of control.
- Patients have the ability to unlearn the sense of danger and relearn a sense of safety.
- With supportive statements that other patients with similar problems have relearned.

4. Offering a solution to the problem: commitment: To provide a commitment through explaining:

- How the doctor will perform the procedure that is feared.
- The kind of behavior the patient can expect from the doctor, for example:
- Offer of control so that the treatment will be stopped if the patient feels threatened.
- Being kept informed as to what to expect as treatment progresses (Preparatory communications)
- Keeping a two-way line of communication open in the event the patient needs to discuss feelings or emotions.

### **Technique of the Introsedative Interview**

Although the verbal, fact-finding interpretative aspect of the technique is discussed and exemplified below, I wish to emphasize that the separation of the verbal and non-verbal aspects is artificial. Obviously the verbal and non-verbal communications are, in reality, united and inseparable. However, looking at the techniques separately simplifies the presentation.

Once a patient responds to the opening question with a statement of anxiety or fear such as, "I'm petrified of dentists", a simple but precise tactical design should be operative. The doctor must progress from the general statement of fear to the determination of what the patient specifically fears. Eliminating or reducing the fear level is thereby made much easier; it is virtually impossible to make a commitment of behavior if the specific fear is unknown. Once the specific fear is known, the next step is to learn the circumstances of its origin.

Graphically stated: General statement --> specific statement--> origin of fear

The most economical and expeditious technique of moving from the general to the specific to the origin is by the use of brief, highly specialized questions in responding to the patient's statements. We will label these questions as:

1. "What" questions
2. "Can you tell me" questions

These "on target" questions are succinct. The doctor at this stage of the interview does a minimum of talking and a maximum of listening and responding. This will be reversed when the time comes for him to give information. Examples of these "what" and "can you tell me" questions can be illustrated briefly as follows:

- Patient: *"I'm petrified of dentists."* (general statement)
- Doctor: *"What is it that you are petrified about?"*
- Patient: *"The drill"*
- Doctor: *"What is it about the drill that bothers you?"* The patient may respond to this question with the specific aspect of the "drill" by stating it is the pain; that the patient had always had painful experiences. An appropriate response would be, "Can you tell me more about it?" The objective is to have the patient elaborate on the history of her experiences. Another such question is: "Can you tell me what happened?"

### **Example and Analysis of an Introsedative Interview**

The doctor initiates an open-ended interview, unaware that the patient is fearful.

- Doctor: *"Are you having any difficulties?"* **The usual open-ended question; the doctor knows nothing of the patient's feelings. This question permits the patient to establish the priority of "difficulties."**
- Patient: *"Doctor, I'm terribly afraid of anything to do with my teeth."* **With this general statement of fear, the doctor signals his recognition and acceptance of the problem by responding with the first of the "what" questions. This also sets him on course to determine the specific fear.**
- Doctor: *"What is it that you are afraid of?"* **The first of the basic "what" questions.**
- Patient: *"I hate needles."* **This is more specific but not specific enough. There are many reasons people fear injections, i.e. deep penetration, pain, sense of body damage, etc.**
- Doctor: *"What is it about injections that bothers you?"* **Another "what" question designed to pinpoint the specifics of the fear.**
- Patient: *"It's the pain of the shot that bothers me."* **This is the specific threat. Now the questions should be directed toward revealing the origin of the fear and the behavior of the past doctors which may be responsible for this learning.**

- Doctor: *"Have you had painful injections in the past?"* **This is a precise question repeating the word "pain" (painful) is to get to the origin.**
- Patient: *"Yes, I have ... many times and I'm really afraid of them."* **Sometimes the patient will continue the story, particularly if facilitation [by the doctor] is used by nodding the head. If not, then...**
- Doctor: *"Can you tell me what happened?"* **This brings the patient closer to the origin.**
- Patient: *"As a child I had shots for fillings and the needle hurt a lot ... they were awful..."* **This pairing of pain with injections may be traumatic enough to set up a conditioned response. But if the doctor's behavior is traumatic as well the threat increases.**
- *Patient continues: "I cried and squirmed and they got angry which frightened me even more..."* **The sense of helplessness is magnified here, the danger is intensified by the doctor; he offers this girl no protection... the distrust is compounded by his anger... in all creating a traumatic experience of considerable power.**
- *Patient continues: "It got worse because sometimes the shots didn't take, but he drilled anyway, it was terrible."* **The fear of the unknown is added to the other fears... she did not know if she would have protection from the pain or not... again compounded by the doctor's not caring.**

At this point the strategy shifts from gathering information to giving information. The elements of the conditioning are painfully clear: the pain, the distress, the fear of helplessness and the unknown coupled with a nonprotective, angry authority figure. The counter-conditioning process begins with an emphatic statement of support followed by your interpretation of the effects of the experience on the patient and an explanation of why you believe she can relearn. Suggestion is used in conjunction with a commitment of how you will behave when both of you face the first injection together. This commitment will state:

1. How you will behave
1. What you will do
1. How you will do it

### **The "Third Ear" and the Interview**

The above interview is a reconstruction of a relatively uncomplicated exchange. It seems simple, merely a matter of "common sense". However it is technically highly structured, proceeding in an arrow-like projection straight to the target.

More complicated histories require additional skills. The ability to be effective will depend upon how well one "hears" what is being said. One may listen but may not "hear". "Hearing" relates to the picking up of obscure cues; words and phrases that contain the clue to the fear being expressed, cues less obvious than "pain", "drill" and "needle". Hence they may go "unheard". Success will depend on the doctor's knowledge of these cues and the development of his "third ear" which permits him to "hear" the subtle and less obvious statements of fear.

What follows is an example of an interview in which some obscure cues are put forth by the patient. She is not aware of their meaning, yet without knowing the significance of these cues, the patient is compelled to give them. The interview was performed by a relatively inexperienced third year dental student as part of a course on iatrosedation. He did quite well up to a point, but his "third ear" was not developed sufficiently to enable him to pick up the more obscure cues.

**Student:** "Are you having any difficulties?"

**Patient:** "Yes, I have a tooth that has been aching and I need to have it fixed ... but I can't take novocaine... and the whole idea makes me nervous."

**Student:** "Is there some reason why you cannot have a local anesthetic?"

**Patient:** "My doctor said I am allergic to all of the 'caine' family and therefore I must have a general anesthetic to get my work done."

**Student:** "How did your doctor come to the conclusion that you are allergic? What happened?"

**Patient:** "Well, I had to have a tooth pulled that was in my palate, an eye tooth. The dentist gave me several shots and then left while it took effect. All of a sudden I couldn't breathe. It felt like something terribly heavy on me. My heart started palpitating, pounding and I was choking and having a terrible problem. The dentist came back, was upset and said that I had to have an EKG immediately... he wouldn't work on me... so I went to see the doctor he called. There was nothing wrong with my heart... he said I can't take local anesthetics."

**Student:** "Have you had dental work since then? What did you do?"

**Patient:** "I had all my work done without a local... even the rebuilding of a tooth with spikes in it... I so dread it... it's worse than having a baby which I also had without a local."

**Student:** "How did you feel when you did get injections?"

**Patient:** "There's a little tenseness... but not bad. The needle doesn't bother me... but I'm kind of scared... I think most people are anxious, don't you? It has nothing to do with the dentist as a person... I don't know... there's just something about it... it's a sort of a frightening experience... you don't know if you're going to choke or something. It's more a matter of being able to control the situation."

This interview had been videotaped as part of the course on iatrosedation. A teacher reviewed the tape with the student and pointed out that the patient had repeated a cue three times to which he had not responded. She had said, "...I couldn't breathe... I was choking.... you don't know if you're going to choke or something..." and then added, "It's more a loss of being able to control the situation."

Generally speaking, when a patient reacts to a dental situation with a sensation of **not being able to breathe, or feeling like he/she is choking**, the cue suggests some previous experience that was a threat to breathing. The student was advised to resume the interview with the patient, stating that during the review of the tape it was noticed that she mentioned having had difficulty with breathing and choking. He was to ask the patient if she had ever had an experience that was a threat to her breathing. Her response was, "Yes, now that I think of it, when I was a young girl I almost drowned." So indeed, she had suffered the harrowing experience of suffocation and the assumption can be made that any sensation which suggests interference with the airway may trigger the feeling of panic that accompanies suffocation. The suffocating experience was generalized to the dental scene.

The probable sequence of events was reconstructed in order to offer the patient an interpretation of the origin and cause of her fear. Working with such an interpretation is helpful to the patient in diminishing the fear and permits the doctor to plan for the clinical phase of the iatrosedative process.

The evidence was pieced together in the following manner. The dentist had given several injections to produce palatal anesthesia. This undoubtedly extended to the soft palate producing a numbness and a feeling of largeness that so many patients report with a posterior palatal injection. This feeling of intrusion on the airway triggered off a feeling of panic, resulting in the acute anxiety the dentist faced on his return to the operating room.

The student was advised to have the patient tested for tolerance to one of the local anesthetics. Results of the testing indicated that she was not allergic. Armed with this information and the reconstruction of the past events, he proceeded to explain and interpret what he thought was the origin of her anxiety, suggesting that she could unlearn the feeling involved and learn a new way to respond to the situation. He suggested that by starting with treatment where no palatal anesthesia was involved she would undoubtedly tolerate it very well. This is indeed what happened. The treatment phase started with the use of infiltration injections for anesthesia. The patient tolerated this very well and the relearning process expanded as treatment continued, to the point where palatal injections did not set off a high anxiety response.

Another indirect cue that must be "heard" and understood is the word "gag" or "gagger". **Gagging** frequently is a panic response, related to a feeling that some threat to breathing or swallowing is about to occur. This feeling has its roots in the past, similar to the cue discussed in the previous history, due to an experience of actual or anticipated suffocation, a traumatic surgical experience involving the threat or a choking incident.

In the following iatrosedative interview, this type of cue arises. The "what" questions are used to track down the specificity and origin of the fears, but in addition, the cues are facilitated by the use of reflection.

"Reflection" is a major method of facilitating cues. The word or phrase is reflected or repeated, either exactly as stated or in a similar form. This echoing or repeating the patient's word or words acts as an invitation to continue talking about that subject. It is the most economical and productive facilitating tactic in the repertoire.

In the exchange that follows, the key words (cues) are underlined as are the reflective responses of the doctor. In addition, the "what" questions are underlined.

**Doctor:** "Good morning, Mrs. Caswell. How are you?"

**Mrs. C:** "Good morning, Doctor. I'm fine, thank you."

**Doctor:** "Tell me, are you having any difficulties?"

**Mrs. C:** "Well, yes. I'm a terrible coward about anything to do with my teeth."

**Doctor:** "You are? In what way are you a coward?"

**Mrs. C:** "I'm terrified. I guess that sums it up. I really get very jittery."

**Doctor:** "Have you had any idea what happened to terrify you?"

**Mrs. C:** "Yes, well, I ... when I was a little girl I had very bad baby teeth I guess, and the dentist I went to see was kind of mean. ... and also ... I'm a gagger ... those two things... when I was 18, I made about 3 appointments, showed up and then ran out."

Reflecting the words "coward" and "terrified" accomplished several objectives swiftly. The doctor communicated his recognition of the patient's fear and invited her to tell him more about it. Simultaneously, he moved from the general statement of fear toward the specific fear. The past doctor's behavior was stated in a general way ("he was mean") and an indirect cue was sprung ("gagger"). The doctor then combined a "what" question with the reflected word "mean" to continue the facilitation.

**Doctor:** "In what way was he mean?"

**Mrs. C.:** "I have a horrible memory of the nurse grabbing me and holding me while the doctor worked on me... and not being able to get my breath."

The vivid image of the behaviors of the doctor and his assistant, though briefly stated, expresses the patient's feelings about that behavior. In addition, an important indirect clue is uncovered: the "not being able to get my breath". Gagging is the physical expression of panic; in this case, the panic associated with "not being able to get my breath". This is the specific fear. If the interviewing doctor did not "hear" the cues "not being able to get my breath" and "gagger", and if he did not know that there was an important relationship between them, he probably would have gone off on a time-consuming and unproductive tangent. Instead, he moved straight to the target of determining the origin:

**Doctor:** "Did you ever have an experience where you were not able to get your breath?"

**Mrs. C:** "That's a very interesting question, Doctor. I'll tell you why. When I was a child I had diphtheria. I remember fighting trying to get my breath, and the memory of a band of fire around my throat... and faces coming very close to me. I remember my breath, you know... they were trying to decide whether or not to give me a tracheotomy... my grandmother told me. They didn't, but I do remember all those faces and even now, if anyone gets too close to my face, I feel like my breath is being cut off. It's the memory of that fear and the distrust of my first dentist."

The specific fear apparently stems from this experience - it's generalized so that any doctor coming close in a therapeutic situation triggers the associated feeling of panic. This presumably is what occurred with her first dentist. Using this as a basis for initiating a relearning process, reducing the anxiety and offering support, the doctor at this point switches from gathering information to giving information he interprets and explains past events and suggests change can follow.

**Doctor:** "Yes, the heads coming close to your face became associated in your mind with the choking and the panic you felt when you were gasping for air. When your first dentist approached you, you panicked. He ignored this, had you held down and intensified your fear. But this can be changed. What we have to cope with is the present."

**Mrs. C:** "You sound very psychologically oriented."

The doctor accepts this recognition of expertise and uses it to expand on his interpretation of suggestion, finally leading to commitment:

**Doctor:** "I am, and for an important reason. What we have to deal with here, the dominant issue, is your fear, not the condition of your teeth. If I cannot assure you that I will take care of you as a person, then you'll run away from me in the same way you did from other dentists. And you'll not get what you want and need."

**Mrs. C:** "Yes, that's right ... and as you pointed out, I would not really be reacting to the fear here... the reality of the situation... but rather to the earlier fear rooted in my childhood."

**Doctor:** "Exactly. Just as your mind can record and retain a vivid image of something that happened thirty years ago, so it has the capacity to relearn. And that's what we're going to talk about now. You are not that child, you do not have diphtheria, you are not going to choke. I will keep you informed in advance at all times what I plan to do and what you may expect in the way of discomfort or lack of it. I will ask for feedback from you as to how you feel about it. In short, you will have a great deal of control over the situation. I believe that my approaching you will not set off the panic button and we will be able to accomplish what you want. Just remember, I will keep in mind at all times how you feel."

**Mrs. C:** "All right. Thank you, Doctor, I do feel better now."

This statement by the patient infers that she feels less anxious. It remains for the clinical iatrosedative encounter to determine this and to continue the fear reduction process.

The concept of determining the specific fear, its origin, interpretation, explanation, suggestion and commitment is a general one. It is used here in a particular manner. Each individual will use it in a way peculiar to himself. The principles are sound. The manner of implementing them is individualistic.

A common thread seems to weave through most histories of fearful patients. It is an unholy quartet of feelings consisting of:

1. The specific fear (needle, pain, drill etc.) invariably combined with:
  1. distrust
  1. an intensified fear of helplessness and dependency
  1. an intensified fear of the unknown; a sense of being unsafe and unprotected from the perceived threat or danger

The variations on this theme seem endless. The following history is quite typical. It is not as obscure as the last two, but more complicated than the report preceding them.

**Doctor:** "Good morning, Mrs. Brown."

**Mrs. B:** "Good morning, Doctor."

**Doctor:** "Are you having any difficulties?" **Open-ended question.**

**Mrs. B:** "Yes, my gums bleed and I think I have pyorrhea."

**Doctor:** "You think you have pyorrhea?" **Facilitation by reflection**

**Mrs. B:** "Yes, I've heard that bleeding gums is the beginning of pyorrhea and can cause teeth to loosen and they have to be pulled. And this makes me very

nervous." **It is best not to take for granted what "makes me very nervous" means, therefore facilitate the cue.**

**Doctor:** "What is it that makes you nervous?" **The "what" question is combined with reflecting "makes me nervous".**

**Mrs. B:** "Well, the idea that I might lose my teeth and the kind of treatment I might need."

**The "what" question yields a new clue ... closer to the specific fear we want to uncover.**

**Doctor:** "What kind of treatment are you referring to?"

**Mrs. B:** "Surgery... that some cutting might have to be done." **This seems to be the dominant problem and more specific.**

**Doctor:** "What is there about the surgery that disturbs you?" **The "what " is an attempt to learn the specific fear.**

**Mrs. B:** "The whole idea... I was told to have a gall bladder removed 3 years ago and I refused to do it." **What is behind "the whole idea?"**

**Doctor:** "Is there some reason why you feel this way about surgery?" **An "on target" question designed to uncover the specific fear or fears surrounding the surgery. It may elicit information of its origin as well.**

**Mrs. B:** "Yes there is. When I was about 5 or 6 years old I had my tonsils removed. Although I do not remember anything specific about it, I was not prepared for this and the experience left me fearful. **(The origin begins to unfold as does an important element of the fear - the unknown)** When I was 8 years old I went to an orthodontist who looked at my teeth but nothing was done. A few months later my mother said she was going to take me to a party the orthodontist was giving for all of his patients. I put on my party clothes and we went. **(Distrust of the mother ... authority ... based on deceit)** When we arrived I was immediately grabbed, forced into the dentist's chair, held down and given gas. I was terrified. When I came to, I found that I had wet myself and was crying bitterly. **(Distrust of the dentist, exaggerated fear of helplessness and dependency, and fear of the unknown probably are intensified.)**

Fear of surgery is not the totality of the problem. It may be viewed as a vehicle carrying the powerful feelings of distrust, helplessness and the unknown with it. For this reason the maxim, *"Fear is soluble in trust"* seems credible. The promises, therefore, made in the commitment are important since they tend to initiate a feeling of trust and security with an attendant drop in the fear level. It remains for the iatrosedative encounter to fulfill the promises made and the hopes raised.

## **IATROSEDATIVE CLINICAL BEHAVIOR**

The clinical encounter begins the moment you pick up an instrument, whether it be a mirror or a probe. An important commitment should be made at this time, to wit: the quality of your tactile behavior. How delicately or roughly you use your instrument tells the patient something of your involvement with him; your awareness, concern and skill. The more threatening an instrument is, the more significant is your manner of wielding it and the more important are the verbal communications made in conjunction with its use. What you are about to do with it and what you anticipate the effects on the patient will be are two important happenings that should be shared with him/her. In short, you should communicate in a way that will prepare your patient for what is about to occur. Skill in the use of such preparatory communications is essential in iatrosedation.

### **Preparatory Communication**

Let us consider preparatory communications in relation to the "normal" patient first. The non-fearful patient is subject to normal anxiety which is an anticipatory state of expecting threat or danger and preparing for it. We all tend to be apprehensive when dependent on another whose actions hold the threat of pain and /or body damage. We have no control and are helpless. The unknown is disturbing: that disquieting sense of not knowing what the other person is going to do, the threatening silence when the "needle" or other potentially painful or cutting instrument is picked up. All of these feelings are exaggerated when the person in control gives us no information with which to brace ourselves psychologically, no assurance that he is aware or concerned about us.

Preparatory communications are brief communications made to the patient prior to using an instrument or performing an action which could be perceived as threatening. The communication is intended to prepare the patient for what is about to happen or may be experienced; such as discomfort, pain, noise, pressure, etc. Such preparatory communications tend to dispel the fear of the unknown and the sense of helplessness through the simple act of foretelling. The patient receives an additional sense of control over his situation because he knows what to expect.

Control through knowing (cognitive control) tends to increase with the use of preparatory communications. When the Danger Control and Protective Authority shares knowledge with the patient, it tends to reduce anxiety significantly. Egbert's studies clearly demonstrate this.

Egbert and his colleagues demonstrated the effects of preparatory communications on the anxiety level of patients scheduled for major surgery. A number of clinical experiments were performed by his group of anesthesiologists to determine the effects of the doctor's behavior and communication on the anxiety level of surgical patients. One such study measured the effect of the anesthesiologist's pre-operative visit with his patients in producing calmness versus the effect of pentobarbital for pre-anesthetic medication. They summarized their findings this way:

*"Patients who had received a visit by an anesthetist before the operation were not drowsy but were more likely to be calm on the day of the operation. Patients receiving pentobarbital one hour before an operation became drowsy but it could not be shown that they became calm. If the purpose of pre-anesthetic medication is to allay anxiety, our data suggest that pentobarbital, causing drowsiness does not achieve the desired result alone."*

Their data also suggested that the psychological impact of the pre-operative visit made the effects of the pentobarbital seem inconsequential. In their comment, Egbert et al stated:

*"At first sight it would seem surprising that an anesthetist, in a 5-10 minute interview, would be able to exert a psychologic effect demonstrable the following day. The patient's interest in knowing about anesthesia would not seem to be an adequate explanation. A better explanation is provided by Janis. He found that persons facing a frightening situation became anxious and looked for emotional support ... an authority supposedly able to modify the dangers, becomes invested with strong emotional significance. The statements made by this authority assume greater importance than would ordinarily be expected."*

## **Iatrosedation on the "Firing Line"**

The patient whose iatrosedative interview revealed she feared painful injections is now on the "firing line" - the first clinical encounter in which the injection will be given.

**Doctor:** "How are you feeling this morning?"

**Patient:** "Fine, thank you... I'm a lot less nervous about the shot than I was before we talked, but I'm still somewhat nervous."

**Doctor:** "Well, I would expect that... but I think you will learn today to be a lot less nervous than you are now. As I told you I am confident that I can give you an anesthetic with very little, if any, pain. Should you feel anything I think it will be something you will be able to handle very well. I will keep you informed as we go

along as to what you can expect... I will be responding to you and between us I feel sure you will develop a new set of feelings. Okay?"

**Patient:** "Okay."

**Doctor:** "Is there anything else you would like to talk about?"

A combination of manual and communicative techniques are involved in order to carry out, as succinctly as possible, the promise of an atraumatic experience with this injection. Although we are using the injection as a model, this concept should be carried out in all aspects of clinical treatment. Each doctor must develop his own style of iatrosedative behavior.

### **The Manual Component (Infiltration)**

The syringe is prepared beforehand with a needle that has been tested for sharpness and a warm cartridge. It is kept out of sight behind the patient, to be passed over the shoulder below the line of vision. The objective of penetrating the tissue noiselessly and painlessly (or with the minimum amount of pain) is achieved by:

1. painting a topical at the site of penetration (in this case the reflection of the alveolar mucosa);
1. making the mucosa as taut as possible by pulling the lip or cheek out without discomfort;
1. establishing a firm finger or hand rest to provide maximum stability and control of the syringe;
1. delicately penetrating the taut mucosa, the bevel toward the tissue, to the depth of the bevel (1-2mm) only
1. very slowly injecting a drop or two of anesthetic. After a few moments, penetrate 1-2mm and deposit a few more drops. Move slowly into an anesthetized area until the target area is reached.

This manual technique is combined with preparatory communication in the following manner:

- "I am going to put a surface anesthetic on your gum to numb it so that you will be more comfortable." **This is said as you approach with the topical. The mucosa is pulled taut with syringe poised to penetrate.**
- "I don't expect you to feel this." **The needle is inserted to the depth of the bevel, stopped and a few drops injected.**
- "Do you feel it?" **If the patient indicates that he does not, the doctor answers:**
- "Good, I will be injecting very slowly ... it may take longer than usual. I won't be using any more than the normal amount, but it will be easier

for you. Do you feel anything?" **If the patient indicates "No", reply: "Good."**

- **If the patient indicates in any way that she does feel something it is wise to respond by saying, "I'm sorry, but I don't think you will feel anything from now on. I will be going very slowly." This is not said defensively, but merely to let the patient know that you care.**

These simple preparatory communications carry much more weight for the patient than one would suspect. An interpretation of what they may mean follows:

1. Using a topical anesthetic communicates the concern of the doctor and the wish to minimize pain.
1. "I don't expect you to feel this" states, *"I am about to inject and will do all I can to do it without pain"*.
1. "Did you feel it?" *I have already started injecting and I want to know how it is with you. This is a continuing involvement and I want feedback from you.*
1. "I will be injecting slowly, no more than usual ... etc." *I am keeping you informed, explaining in case you get upset because you may think I am using too much anesthetic, etc.*

Communications of this kind should be used consistently with all operative procedures. The above interpretation of the doctor's preparatory communications is based on feedback from patients with whom these kinds of exchanges have taken place. A patient who had stated that she was no longer fearful was asked why she felt this had occurred:

**Doctor:** "What is it that permitted you to overcome your fear?"

**Patient:** "Well, I think when you first saw me I had this tremendous fear built up because of my past experiences. I'd heard so many stories about the amount of pain I would suffer with your work... but I have to have it done. I've suffered so greatly with other dental work, surely I'll have mountains of pain with this. By the time I came to you and with my own frightening experiences, the thing that calmed me was your ability to work psychologically with me. **(Expertise and Recognition)** First, knowing my tremendous fear. I had made just a couple of comments, you know, about one dentist and how I should have been here many years ago. **("Hearing" and responding to critical cues during the interview.)** The method you used to tranquilize me by words **(Interpretation, explanation, suggestion and commitment)** logically, something for me to accept within my fear, so strong that I automatically began to relate and listen to what you had to say instead of closing my mind; logically you approached me and tranquilized me... I don't know how else to explain it. In other words, the very words that you used put me at ease enough to say, 'listen, maybe he is telling the truth...' and I

gained more confidence as you talked to me... as you explained. (**Trust developing**) I felt very confident; then when I came in for the surgery, I only had a slight apprehension. (**Introsedative interview dropped fear level, but was still higher than normal**) Yet I figured I might suffer the tortures of the damned ... but I felt no pain whatsoever."

**Doctor:** "Well, you were very apprehensive predicated on past experiences. You say the words that I used ... what words?"

**Patient:** "You were willing to go out on a limb in telling me what to expect from what you were doing. (**He made clinical preparatory introsedation communications so that she would know what sensations she may feel, thus minimizing the fear of helplessness and the unknown.**) You have a habit of saying in advance *"You may feel this, but it will not be very much if anything"*, *"you will feel pressure but no pain."* This in itself, when the surgery began, is the thing that puts your patients at ease... because every time a dentist picks up an instrument, just like everybody else, they want to run away... because he sees you picking up all kinds of things. He doesn't know what you are going to do... and it's the not knowing that upsets the patient." (**"Knowing" lessens the fear of the unknown.**)

#### **Doctor Statements:**

- *"I can understand why you would be afraid of injections ..."* **Support, respect, empathy.**
- *"It seems to me that you couldn't trust that doctor to protect you from pain. You were depending on him but he didn't seem to want to help you. These feelings still exist within you and you are still feeling today the same terror and distress you felt as a child."* **Interpretation and explanation of why the patient is still fearful years after the original events.**
- *"But you can unlearn and learn a new set of feelings based on our relationship."* **Suggestion and a promise of a new and different kind of relationship.**
- *"Let me tell you how I think things will go. First, I am confident that I can give you an injection with very little, if any, pain. If there is some, it will not be enough to be upsetting."* **Beginning of the commitment. This offer is based on the ability to give injections in that way. To promise what you cannot deliver would be disastrous.**
- *"I will keep you informed at all times ..."* **This to dispel the fear of the unknown.**
- *"If you feel any concern or discomfort I will stop. I will not do any treatment until you are ready and the area is numb."* **This to dispel**

- **the fear of helplessness and dependency and to create some sense of control for the patient ... as well as a sense of trust.**  
*"I know from past experiences that you can learn not to be afraid."*  
**Suggestion that the patient can learn not to be afraid is coupled with the assurance of the doctor's knowledge and expertise.**

## **EUPHEMISTIC LANGUAGE**

The term "euphemism", derived from the Greek Ew (well) and Phanai (to speak), originally meant "to use words of good omen." The definition of euphemism as we know it today is similar; it is the substitution of a mild or inoffensive expression for one that may offend or suggest something unpleasant. With respect to dentistry, the use of euphemisms is particularly indicated in place of:

1. fear-provoking or threatening words, and
2. technical terms

The use of threatening and technical language is a frequent barrier to communication between doctors and patients. It either creates apprehension and confusion or intensifies them if already existent. In order to prevent potential problems that can result from the use of emotionally-charged language (with which dentistry is richly endowed) or technical jargon, the doctor must develop alternative methods of communicating potentially threatening information to patients.

Euphemistic language should be used with all patients. Since it tends to minimize anxiety, it is an integral part of iatrosedation. An example of its use may be seen in the communications used above for the atraumatic injection. Although these preparatory and explanatory communications are very brief and quite simple, thought has been given to substituting low threat words for threatening ones and non-technical for technical ones. For example, few lay people know what a topical anesthetic is, hence it is referred to as a surface anesthetic. Instead of saying "This won't hurt," the phrase used was, "I don't expect you to feel this." "I will be injecting slowly" is replaced with "I'll be doing it slowly", since some people may have disturbing imagery stimulated by the word "injecting", particularly if the injection is the primary fear problem.

These simple euphemistic substitutions are not earth-shaking. Most dentists seem to be aware of the many threatening words and terms with which the dental vocabulary is laden: drill, needle, shot, cut, clamp etc. What is consequential is the decision to avoid these words, to replace them with euphemisms and to develop the constant, ongoing vigilance required to avoid falling into the trap of

being verbally threatening. When one considers the dilemma of describing, in non-threatening terms, a pulp tester and its use to an anxious patient, one realizes how euphemistically agile the dentist must be!

It is necessary to maintain the iatrosedative posture in all phases of involvement with your patient. Another communication principle for reducing threat in what might be a threatening situation is the use of a preparatory interview.

## **PREPARATORY INTERVIEW**

The preparatory interview is a brief interview conducted with the patient prior to performing a treatment or diagnostic procedure for the first time with a patient which could be threatening to him. The objective is to learn 2 things:

1. Has the patient ever experienced this specific procedure before (e.g. endodontics, injection, periodontal probing, periodontal surgery etc.)?
1. How does the patient feel about it?

The general principle of knowing *how it is* with the patient before taking him into an area of potential threat seems irrefutably sensible and sensitive. Preparing to use potentially fearsome instruments or procedures with no knowledge of the person's experience with and feelings about them seems illogical.

Let us assume that Mrs. X has successfully shed her fear of injections. However, in the course of continuing dental treatment it becomes apparent that endodontics is required. Following the examination, the need for it had been discussed briefly. How should Mrs. X be approached? If the roentgenograms indicate that endodontics had been performed should you assume that no problem would be encountered, tell her of the need and proceed to refer her to an endodontist or set up an appointment to treat her? Or should you learn something of her feelings about having endodontic treatment? The obvious answer to an obvious question: yes.

**Doctor:** "Mrs. X if you recall I had mentioned that you would need to have a root canal treatment. The X-rays indicate that you have had this kind of treatment. How did it go?"

**Mrs. X:** "Well, (hesitantly) I really had a bad time with it."

**Doctor:** "A bad time?"

**Mrs. X:** "Yes, the tooth was very painful, it ached badly and although the doctor gave me several shots, all of which scared me, when he took the nerve out I almost died, it hurt so much."

**Doctor:** "I can see that you did have a bad time of it and I can appreciate how you must feel about considering root canal treatment again. Fortunately, however, we have a different situation now. You see, when the tooth is very inflamed such as yours was last time, it is very difficult to get good anesthesia. This is not the case with the tooth now. As a matter of fact, no anesthesia is needed at all because ..."

The remainder of the discussion need not be pursued here. The example is used to point out the wisdom of exploring potentially threatening procedures with the patient before starting treatment.

## **NONVERBAL EMPATHIC STRATEGY**

It was stated that the iatrosedative interview technique is composed of 2 strategies:

1. a verbal fact-finding interpretive strategy
1. a nonverbal empathic strategy

It was further stated that these were separated for the purpose of discussion but the separation is artificial, since verbal and nonverbal communications are in reality inseparable. The crucial function of nonverbal communication is the transmission of feelings. The major feelings to be communicated to the fearful patient by the doctor are:

1. attentiveness and concern
1. acceptance of the patient and his problem
1. supportiveness
1. involvement with the intent to help

These feelings and nonverbal statements are created through the process of listening, "hearing" what you are listening to, then responding empathetically. Listening is the act of turning your attention to another person and permitting him to speak. "Hearing" is understanding what he is saying. Although these are nonverbal behaviors, they were discussed as part of the verbal fact-finding strategy because the "hearing" is a prerequisite for responding by facilitating the telling of the story, offering support and commitment. Reflecting and reacting to the patient's feelings and story by face, voice and body is responding nonverbally to what one "hears."

The principal factor in listening is being attentive. This requires concentration, discipline and the intentional use of your behavior. Attentiveness is communicated in 2 ways:

1. Through your physical presence (physical demeanor and posture)
1. Through your psychological presence ("hearing" the total communication of the patient, both verbal and nonverbal.)

### **Physical Attending Skills**

The skilled use of one's face, voice, and body will result in a posture of involvement. This is the medium that will communicate whether you really are or are not involved with your patient. The nonverbal signals you send out will either verify your words of concern and support or belie them.

Man's richest sign system is his head and face. The voice and body have almost as much value as the face in the wordless communication that plays such a powerful role in the creation of an empathic climate in which the doctor and patient will interact. There are many components of nonverbal communication. Some of the significant ones considered here are:

1. Eye contact
1. Facial expression
1. Vocal characteristics
1. Body orientation
1. Trunk lean
1. Proximity (distance)

Haase and Teffer carried out research on the nonverbal components of empathic communication. The intent of the study was to explore the relative contribution of verbal and nonverbal behaviors to the communication of empathy. Their findings were:

1. A verbal message of medium empathic value can be altered favorably by maintaining good eye contact, forward trunk lean, good body orientation, and good distance.
1. Conversely, high levels of verbal empathy can be reduced to unempathic messages when the communicator utters the message without eye contact, in a backward trunk lean, rotated away from the addressee, and from a far distance.

These findings add to the existing knowledge of the power of nonverbal communication, colloquially alluded to as "body language."

## **Eye contact**

Eye contact is a crucial key in the communication system. It is virtually impossible to create a sense of attentiveness and interest in a person if you are not looking at him. "Looking at him" means making eye contact!

This mutual looking tends to increase when the participants like each other and when they are involved in their interaction. It lessens when touchy subjects come up or unpleasantness develops between the interactants. A "noncollision course" is taken, a lowering of the eyes, a "dimming of the lights."

Good eye contact does not mean staring or constant eye contact. This is very disconcerting. It should be varied. You should permit your eyes to drift to an object not too far away and then return to the patient. As in all nonverbal behaviors, this should be done naturally, in a relaxed, comfortable manner. The eyes contribute to the facial expression in many ways. For example, in smiling, they can either lend warmth or put a chill on the smile. If when the mouth expresses a smile and there is no expression around the eyes, the smile tends to be "icy".

## **Facial Expressions**

The face can be the best expression of emotions but it can also be a superb mask. However, it is the most difficult of our nonverbal behaviors to monitor. We are aware of what our eyes are doing, how our voice sounds, what movements we make, but the face is the one expressor from which we get no feedback. Hence, it is the most vulnerable area of our behavior. Many doctors avoid facial risks by wearing a noncommittal mask, a sort of professional "poker face." Generally, unless one has learned to pay attention to his nonverbal communications, he is almost totally ignorant of his facial behavior. Consequently he may be sending signals facially that he doesn't intend to, or may be inadequately expressing what he would prefer to say.

Facial expressiveness in skilled attending is used in 2 basic ways: (1) to send messages and (2) to respond appropriately to messages being received. When the doctor turns his attention to his patient at their first meeting, the facial signals most people would like to see are warmth, interest and alert intention of being involved. Facial responsiveness should mirror the feelings of the patient to varying degrees; that is, concern should be reflected by concern and not by apathy, a faint smile or exaggerated interest. The face is an instrument of wide range from broad to very subtle communication, some almost imperceptible. It is wise to remember the admonition, *"Be careful what you say with your face when talking with your mouth!"*

## **Vocal Characteristics**

The voice can be used like a musical instrument. It alters the meaning of words, either giving the lie to them or making them ring true. In our culture, we ascribe certain characteristics to voice sounds. The voice of authority generally is characterized as being low in pitch, resonant and used with measured tempo. A fast, high-pitched, squeaky voice is often associated with immaturity.

In attending, it is desirable to speak at an even tempo with moderate volume, at as low a pitch and with as much resonance is consistent with your voice. There should be variations of these qualities to reflect and support the meaning of the words. Above all, one must be on guard to avoid mixed messages wherein the voice and the face are saying something different than the words. One of the most common examples of a mixed message is that conveyed by the doctor who, hoping to assure the patient, waxes with disinterest in his voice and looking away, "Don't worry, everything will be all right!"

One of the more penetrating studies performed to determine which message is dominant when 2 incongruent ones are sent was done by Mehrabian. He set up situations in which the facial and vocal expressions were in conflict with the verbal messages. His conclusions indicate that in the communication of feelings, the words were responsible for only 7 % of the impact, the vocal expressions produced 38% of the effect, and the facial expressions 55%. Hence, if your face and voice do not match your words, you would best say nothing! On the other hand, the verbal promises of help and protection assume greater significance if supported by empathic nonverbal communication. In short, it is how something is said, not what is said that builds or destroys relationships.

## **Body Orientation**

Facing patients squarely tells them that you intend to pay attention. If you sit with your body rotated away from the patient, you are "turning away", thus creating an atmosphere of inattentiveness. This inattentive orientation is intensified if your position is at a 90 degree angle or less. In addition, such a position makes good eye contact difficult and strained.

If the interview is taking place in the dental treatment room you should be in a position between 7 and 8 o'clock. Should you use your consultation room it would be preferable not to sit behind a desk. Two armchairs can be used in approximately the same position as above. In my opinion the interviews would take place in the treatment room. If the patient is fearful, the operatory may stimulate the expression of anxiety in which case the issue is confronted. Sitting comfortably in a consultation room, which tends to be a more relaxed and social environment, provides little provocation to discuss one's fears.

## **Body Distance or Proximity**

How close one sits in a situation such as we are discussing influences the communication. The degree of proximity engenders different feelings in different cultures. Hall reports that most Americans tend to deal with space in the following way:

1. Intimate zone: ranging from contact to 18 inches. This is the zone for handling secrets and whispered conferences.
2. Casual-Personal zone: ranging from 1+1/2 to 4 feet. This is the region for normal personal interaction.
3. Social-Consultative zone: ranging from 4-12 feet. This is the area for handling impersonal business.
4. Public zone: ranging from 12 feet to the limits of hearing. This is the region of the public speaker addressing an audience.

A distance between 3-and-a-half to 6 feet is appropriate when conducting the interview in the dental operatory. The distance will vary depending on your comfort with the patient with whom you are interacting. The more your interest rises, the closer you will tend to be. As with eye contact, facial expression and body orientation, there is the matter of a dynamic process; that is, you should not be fixed and rigid about any of these physical attendance components but maintain a moderate degree of fluidity.

## **Trunk Lean**

A forward lean is a powerful message of interest. Somehow it is difficult to be indifferent while leaning forward and listening to another person. The forward lean of the body is an eloquent statement of attentiveness. The reverse of this, leaning backwards and folding one's arms, is a statement of casual interest at best and inattentiveness at worst.

The trunk lean is an effective facilitator. If a patient is speaking and pauses, merely leaning forward slightly will act as a request to "tell me more." Not only does it act as the body language of "tell me more", it also indicates interest and empathy.

Another of the many components of "body language" is tactile communication. During an interview, support, concern, and empathy can be conveyed by touching the forearm of the patient. This is the most acceptable and least intimate area of the body for tactile communication. Needless to say, in the clinical encounter tactile communication is constant. The delicacy or roughness of one's "touch" conveys a great deal of information to the patient about the doctor's presence and, more significantly, the doctor's awareness of the patient's presence.

## **SUMMARY**

Fear is a major cause of avoidance of dental treatment for millions of people. Some of the common dental fears and how they originate are explored. What is presented here is a technique to treat fear with interpersonal skills utilizing simple behavioral principles. The goal is to either eliminate the fear, or to reduce it to a level that permits the patient to cope successfully with the dental experience.

This technique has been termed "iatrosedation" and is defined as the act of making calm by the doctor's behavior. The 2 major categories of iatrosedation are:

1. The Iatrosedative Interview
2. The Iatrosedative Clinical Encounter

The Iatrosedative interview is designed to initiate fear reduction through a relearning process. It is brief and economical, usually lasting no more than 10 minutes. The clinical encounter continues the process, thus dropping the fear level further.