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Wholistic Approach to Dental Health

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WHOLISTIC APPROACH TO DENTAL HEALTH

Submitted in Partial Fulfillment
for Master of Science Degree in
The Lindenwood Colleges

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February 4, 1980



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PART I

INTRODUCTION

The purpose of this paper is to bring about a change in our present dental curriculum. There is a need for a more wholistic approach toward the patient than the technical approach which is so prevalent in our education system today.

The wholistic health approach is broad and deals with all phases of the health professions. For the purposes of this paper, I will concentrate my efforts on the wholistic approach to dental health.

What is wholistic health? In this paper I will attempt in detail to answer that question. Wholistic or holistic, is a Greek word derived from holos and means simply, whole; to treat the entire body; to consider the patient as a complete person, not as bits and pieces of a collection of organs and symptoms.

In discussing a relatively new concept, it is almost always necessary to create new terms; or, to avoid misunderstandings in such cases, it is indispensable that I give the definition of the term to be used, as I see it.

I will use the word with the letter W (wholistic) throughout the paper due to a personal preference; I like the look of it because I can see part of the word, whole.

I have been a dental hygienist for sixteen years. Out of that sixteen years, I have been a Clinical Instructor for dental and dental hygiene students in Junior College and a State University, for eight years and in private clinical practice for five, which explains my involvement and interest in dental health. During this time, I have become aware that something is missing in the dental schools, and thus, in the dental professions. Patients are not being treated like people. Dentistry, like other professions, has specialized so much that patients are being treated in bits and pieces. The dental schools are divided into departments, each representing a speciality branch, diagnosing and treating that particular specialty. The dental student learns to view the patient in bits and pieces early in his* education. Therefore, his patients become an Endodontic patient, Periodontic patient, Prosthetic patient, etc. I heard a student talking to a fellow classmate concerning a patient he was treating, and the dialogue went something like this: "You know that denture case I was working on? The jerk died. Can you believe that? It was my last denture to deliver. Can you believe he did that to me? He had the nerve to die; now I have to start all over looking for someone else." I interrupted at this time to ask what was

*The pronoun he or his will be used throughout this paper, but it does not refer to the male gender only.

the patient's name and the nature of the illness that caused his death. The student's reply was "I don't know, oh yeah, James --- this or that, who cares!"

I was so shocked at this attitude that I was virtually speechless. This was not the first time to hear or see a student react in a manner similar to this. It was an extreme case and reaction. Generally the student's reactions are: "my periodontic patient is late;" "my gold foil cancelled;" "I could axe him," etc.

All of the above people have names and feelings, but the students perceive them as bits and pieces of requirements from the different specialties of dentistry. I do not want it to sound as if only the student reacts this way. In my years of practice and teaching, two-thirds of the dentists have reached and referred to patients in the same way. It becomes a vicious cycle.

I have asked students questions such as: "Did you notice Miss Jones' beautiful green eyes, Mr. Jones' hearing problem, Mrs. Jones' gingivae (gums) are dry and inflamed, is she a mouth breather?" Invariably, the answers are, "I don't know," or, "you meant the lady I did the Class II amalgam on?"

The above cases represent a lack of treating the patient as a whole, a lack of understanding of human behavior, a

lack of management and concern. By the end of this paper I shall have offered some solutions to these problems.

I believe that physicians and dentists should work cooperatively; if either of them is confronted with a patient that is in need of treatment outside his own profession, he should refer that patient so that he may obtain specialized treatment. For example, if a physician is treating an epileptic patient with dilantin, he should alert the patient about the oral manifestations and recommend seeing the dentist in order to learn how to take care of his oral health, while being treated for his epilepsy. There are many instances I could relate, where quality assurance would be better if the health professionals would work together in a wholistic fashion.

PART II

WHOLISTIC VERSUS PRESENT DENTAL HEALTH CARE

Health care delivery is the focus of much discussion today, and is of considerably concern to consumers, lawmakers, health planners and practitioners (physicians, dentists, dental hygienists, nurses, etc.). Change in the present delivery is a definite component of the health care system, but change is moving at a slow rate as far as self care and disease prevention are concerned.

The dental profession and its auxiliaries are responsible to the public to disseminate helpful information that will enable the patient to care for himself. The practitioners must realize that they are educators as well as clinicians. The dental auxiliaries consist of the dental hygienist, dental assistant and dental technician. The hygienist is the only person other than the dentist who is capable and legally licensed to treat the patient.

Years ago, health care (dental medicine) was something that was taken for granted, the consumer (patient) did not question the doctor. In recent years, with the back to nature movements, the consumer is demanding why; he wants to know the "why's" and he asks, "What can I do?"

For example, people thought for many years that cleaning teeth took the enamel off; therefore, they did not seek treatment. This conception is easily explained when time is given. There is a hard deposit that forms on the teeth called tartar or calculus. Calculus, as defined by Shailer Peterson, is: "a hard, calcareous calcium compound material that is deposited on the surfaces of the crowns or roots of the teeth." The majority of all animal forms develop this deposit.

Once this deposit is formed, it can only be removed professionally. The lay patient, not knowing, would naturally assume this hard deposit coming out of his mouth must be his enamel. Many people, because of the lack of education by their dental providers, suffer unnecessarily. The deposit, when left on the teeth, will lead to other dental problems.

The ultimate in patient care is prevention. The wholistic approach is a means of warding off threats of disorder and disease. Traditionally, the treatment begins after the disease occurs. In order to arrive at my solution in this paper, we need to discuss and describe the doctor-patient relationship and alternatives to the present system.

THE DOCTOR-PATIENT RELATIONSHIP

Wholistic is not new, and in most remote areas where technology has not been a major influence, it is still being practiced. The stories I have heard from my grandparents were part of a wholistic practice. People received the benefits of medicine through the ministrations of the family doctor, a general practitioner who focused on the clinical aspects of practice. It's true, there was less technology and we needed the advances made by modern sciences, but we began to rely too heavily on technology. Then the patient was treated as a whole person with fears and feelings. The wholistic physician or doctor, before going through the laboratory tests and clinical examination, would talk to the patient in private, and in this way both could arrive at some intuitive judgment concerning each other.

I have found in my personal profession that the longer I talk to a patient, look into their eyes, listen to their speech, hear the inflection of their voice, watch their posture, the more the patient becomes a person to me. I feel, if this time was taken just to consult or talk, more patients would become people with names, and not just symptoms of disease.

I can honestly say, in my profession, the people I have treated or met, I remember something about them other than the disease. Students ask me constantly, "how do you remember out of all the patients you see?" I remember because I take time to talk, to listen, and I am interested in the patient as a person.

In 1956, Drs. T. S. Szosz and M. H. Hollender described a classification of relationships between health providers and their patients. The first classification is the activity-passivity relationship: the patient is more or less completely helpless and the doctor does something to him or for him.

The second is guidance-cooperation relationship: the patient is aware something is wrong and capable of following directions and exercising some judgment, but is treated with the attitude (by the doctor) because I said so. It is akin to the parent telling a child, because I said so.

The third and more wholistic approach is mutual participation: the doctor helps the patient to help himself. This is an adult to adult relationship with the doctor having specialized knowledge that the patient needs and the doctor employs it upon request. Wholistic medicine recognizes that the patient is his own primary health provider who makes the decisions and takes the responsibility for them after getting full information from the doctor.

SELF CARE

In some aspects of medicine there are exams which the patient can perform at home to help themselves. Some years ago the American Cancer Society came out with how to recognize the early signs of cancer and they also developed an exam for breast cancer so that women can examine themselves for any abnormal occurrence within their body. This exam has helped thousands of women in the early detection and treatment of breast cancer. The diabetes patients can also help themselves at home by testing their sugar level.

The body, like a car, does have warning signals when something is not functioning properly. The consumer must be trained and alerted to watch for early signs of disease. The wholistic doctor-patient relationship exists when the patient has been given the knowledge of how to help himself and is responsible for changing his or her own behavior to achieve long-range benefits. This relationship is more likely to succeed and become effective, than is the classical authoritarian relationship.

I have devised a self test (see following) which can be performed by the patient to recognize early the signs (or signals) of poor dental health. (See Figure 1A)

Figure 1A

Self Help Dental Test for Signs
of Poor Dental Health

YES

NO

1. Stand in front of mirror with open mouth.

2. Cup both hands around mouth and nose and blow breath into hands.

Question: Do you detect an odor?

3. With mouth open rub your index finger all the way around your gums above and below the upper and lower teeth.

Question: Did your finger extract food debris?

4. Press your finger to gums just above each tooth.

Question: Did you notice a secretion ooze out?

5. With your thumb and forefinger place over each tooth and rock back and forth.

Question: Are your teeth loose?

6. Brush your teeth.

Question: Are your gums bleeding?

7. Do your gums and/or teeth hurt when you brush?

If you answer yes to any of the above you may have poor dental health and you need to contact your dentist.

Figure 1B



This test can be performed daily in front of the bathroom mirror just prior to brushing your teeth.

This test is written in seven steps to bring to your attention signs of disease or infection. The smelling of the breath for halitosis, foul mouth, or bad odor can indicate the beginning of gum disease (gingivitis) or decay (cavities). The cavities or sulcus (normal space between the gum and the tooth) are areas which will harbor decomposing food remnants. Halitosis may also indicate the presence of an underlying systemic condition.

"Breath comes from the lungs and is exhaled through bronchi, trachea, larynx, and nose or mouth. Therefore, bad breath may arise in any of these areas: the lungs, the breathing passages, the nose, or the mouth. Among breath odors originating in the lungs are the smell of garlic and of alcohol. These odors are caused by the excretion into the lungs of the volatile oils flavoring these foods. Similarly, there may be acetone on the breath of uncontrolled diabetics. In addition, bronchiectosis, advanced malignancy, and some other diseases in the respiratory tract may impart bad odor to the breath"¹ "Bad mouth odors are also found in the leukemias and the terminal stages of cirrhosis of the liver; these are due to the decomposition of blood oozing from the hemorrhagic gingiva."²

If you are able to extract food debris or a secretion from your mouth this is another indication of poor dental care and not brushing well. Food debris is occasionally

¹ Grant/Stern/Everett, Periodontics fifth ed. C.V. Mosby 1979 (a book)

² Mossler, M. Emslie, R.D. and Bolden, T.E.: Feto ex ore, Oral Surge, 4:110, 1951 (a journal)

seen as a loose deposit removable by lip, tongue and cheek movements, brushing mouth or spraying. If food particles are impacted, they may decay and frequently contaminated with bacteria."³ The ability to rock your teeth back and forth indicates they are loose and have lost some of the supporting tissues, indicating periodontal disease (or pyorrhea). "The teeth are surrounded by the periodontal tissue (Greek peri- "around" odont-, "tooth"), which provide the support that is essential to function."³

The gingiva covers the alveolar bone and surrounds the neck of each tooth. The ability to chew normally with one's own teeth depends in part on the health of the periodontium. periodontal diseases affect the health of the periodontium and may lead to a loss of alveolae bone and the loosening of teeth. The gingival attachment to the tooth may move apically (toward the root), while the gingiva seemingly remains in place or becomes enlarged, resulting in a loose sleeve of diseased gingiva lying against the tooth. The space between this detached gingiva and the tooth is called a pocket. The ultimate result of pocket formation, bone loss, and tooth mobility is the loss of a tooth or teeth.⁴ In fact, 20 million adults have

³ Grant/Stern/Everett, Periodontics fifth ed. C.V. Mosby 1979.
(a book)

⁴ Ibid, pg. 12

lost all their teeth, and periodontal disease is believed to be the chief cause of this loss."⁵

Bleeding gums and pain also indicate inflammation.

"Inflammation may be defined as the normal response of living tissue to a sublethal injury. It is characterized by specific physiologic and biochemical alterations. The inflammatory process mobilizes the resources of the body at the site of injury as a defense against microbes and microbial products. The cardinal signs of inflammation are redness and swelling, with heat and pain and loss of function."⁶

If brushing your teeth causes pain and bleeding and you answer yes to all or some of the questions, you need to see your dentist or hygienist to warn off pending dental disease.

PLAQUE CONTROL

"A healthy mind in a healthy body", the power of positive thinking, you are what you eat. According to wholistic attitudes: these little adages are true.

In the present dental system a patient will arrive at the clinic complaining of pains in the temporo-mandibular joint (TMJ, the joint formed by the lower and upper jaw allowing the mouth to open, close and chew). After examining the teeth, the dentist finds that the patient

⁵ Allen, E.F.: Statistical study of the primary causes of extraction. J. Dent. Res. 23:453 1944

⁶ Grant/Stern/Everett, Periodontics fifth ed. C.V. Mosby 1979 (a book)

grits and grinds the teeth at night during sleep or when there is stress. The immediate therapy is to adjust the occlusion (teeth coming together sometimes), surgery of the TMJ, and/or a prescription for pain. At no time is there any indication of trying to find out why the stress exists, what causes the stress or tension in the patient's life style which resulted in night grinding of the teeth. Another patient comes in with rapid interproximal decay (decay found in between the teeth) heavy plaque and food stuffs present in the mouth. Some dentists will immediately begin to restore the teeth, without putting the patient on a plaque control program and/or nutritional analysis.

Microbial Plaque or bacterial plaque, a word we see and hear constantly, is an invisible sticky substance that accumulates on the teeth, composed of mucin derived from the saliva and of bacteria and their products, and is the precipitating cause of caries and periodontal disease, known to the lay person as pyorrhea in which the supporting structures of the teeth are destroyed. This disease and caries can be controlled through cooperation between patient and dentist or hygienist.

The rationale for periodontal treatment is to arrest the process of breakdown, which may otherwise lead to ultimate loss of teeth, and to establish oral conditions

conducive to good periodontal health. Microbial plaque is the main factor of clinical importance in the etiology of gingivitis. It has been stated previously that an undisturbed plaque around the tooth will eventually cause a breakdown of the attachment apparatus. The dentist and hygienist must keep in mind that treatment must be primarily directed toward elimination of microbial plaque and the prevention of its recurrent formation. The patient's cooperation determines the success or failure of a plaque control program.

Plaque control is a program by which the dentist or hygienist instructs the patient on how to take care and control the plaque on one's teeth (mesial, distal, facial, lingual surfaces). The program consists of a series of appointments instructing the patient on tooth-brushing and dental flossing.

Bacterial plaque is difficult to see, particularly to the untrained eye. "Disclosing agents" can be used to demonstrate the location of plaque and they permit patients to evaluate their own performance. For evaluation of the amount and distribution of plaque, various indexes have been devised permitting the expression of the plaque status of all the teeth, as a single numerical value.

The index provides a picture of the patients' mouth and where the plaque accumulations exist. The pictorial

record allows the patient visualization of the effectiveness of one's oral hygiene regime. Patterns of plaque accumulation become readily apparent, and therapeutic decisions can be based on this information. Progress of the patient can be assessed by himself and the dentist or hygienist and necessary modification in the plaque control practices made.

I will use the O'Leary Plaque Control Index which was developed by Timothy J. O'Leary.

At the initial control appointment a suitable disclosing solution such as Bismarck Brown is painted on all exposed tooth surfaces. After the patient has rinsed, the operator, using an explorer or the tip of a probe, examines each stained surface for soft accumulations at the dentogingival junction. When found, they are recorded by making a dash in the appropriate spaces on the record form. Those surfaces which have soft accumulations not at the dentogingival junction are not recorded. Figure 1C shows a form filled out at the patient's first appointment for learning plaque control. No attempt is made to differentiate between varying amounts of plaque on the tooth surfaces. Scoring the extent of accumulations requires more decision making, prolongs the procedure and does not add appreciably to its clinical usefulness. After all teeth are examined and scored, an index can be derived by dividing the number of plaque-containing surfaces by the total number of available surfaces. The same procedure is carried out at subsequent appointments to determine the patient's progress in learning and carrying out the prescribed oral hygiene procedures. When an assistant records the findings of the examiner, the initial examination and recording can be completed in approximately five to six minutes. By the time of the third or fourth assessment, the number of surfaces with plaque accumulations is normally reduced to the point that the procedure can be carried out in three to four minutes.

Our goal in teaching oral hygiene procedures is to reduce plaque accumulations until they are found on 10% or less of the available tooth surfaces. Figures 1C and 1D show a patient's progress from the initial assessment to the point (fifth session) where plaque control is deemed satisfactory. Further assessments are carried out during the course of active therapy and at each preventive maintenance appointment.⁷

For example, if significant amounts of plaque are recorded in between the teeth and not on the lip and tongue side of the teeth, more stress can be placed on the use of dental floss to treat the patient. (See Figures 1C and 1D) Plaque control is an essential part of the dental treatment and must be employed if you plan to treat the patient effectively and wholistically. The patient must be educated how to prevent the disease, how to take care of the mouth, otherwise the disease will continue to occur.

PATIENT ATTITUDES TOWARD DENTAL CARE

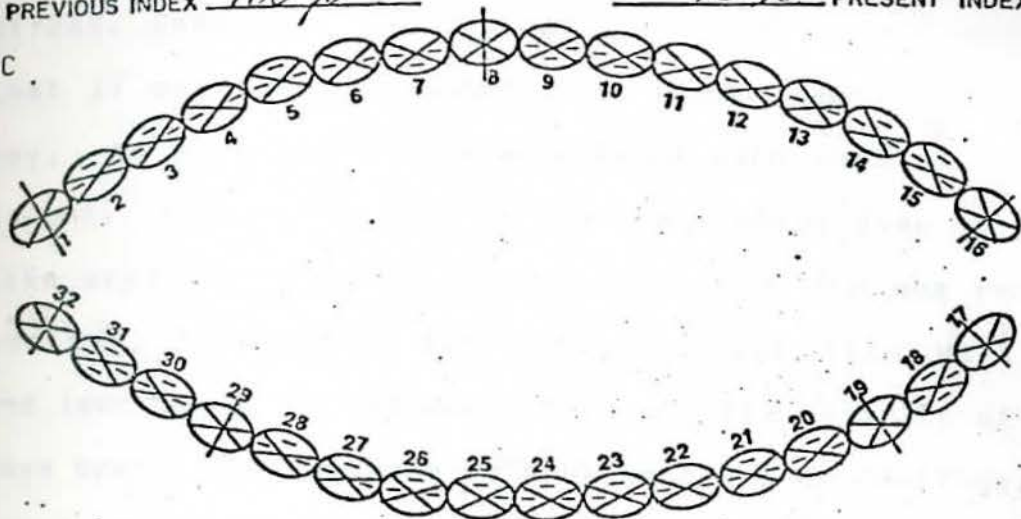
In the beginning of this section of this chapter, I quoted a few old adages about self health care. The mind does conjure such thoughts and has the potential for creating good health. If a patient feels ugly and useless about himself, there isn't any way you can improve the dental care until you improve the self concept. From early childhood, we are programmed to respond and cope with life experiences using a set of values planted in us by parents

⁷ O'Leary, I. J., J. Periodont, 43-48, January 1972.

PLAQUE CONTROL RECORD

PREVIOUS INDEX 100% PRESENT INDEX 70%

Figure 1C



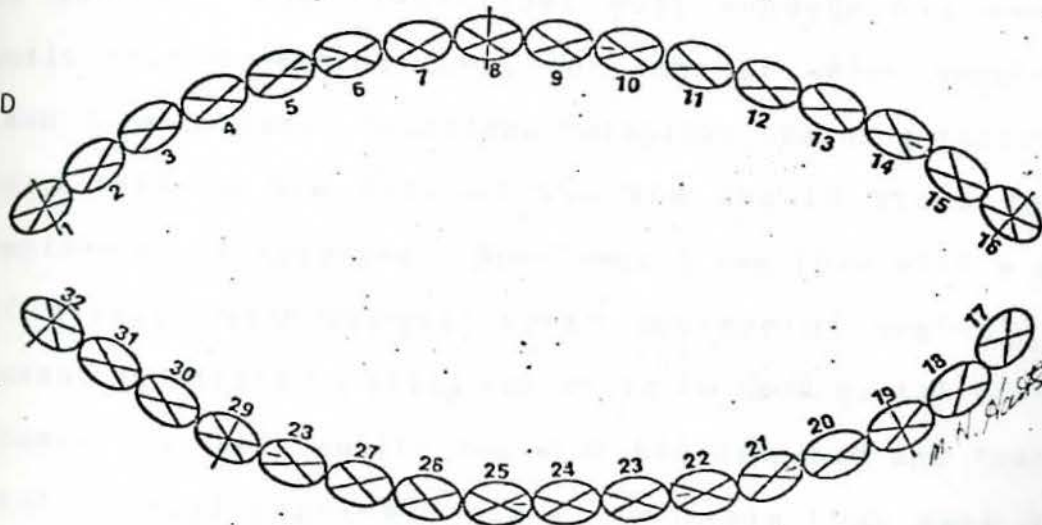
NAME Mrs. Plaque DATE 9-23-70

Plaque accumulations recorded at initial control appointment.

PLAQUE CONTROL RECORD


PREVIOUS INDEX 13% PRESENT INDEX 8%

Figure 1D



NAME Mrs. Plaque DATE 9-29-70

Plaque accumulations recorded at fifth session.

M  D — Represents a tooth and four surfaces.
L

and siblings. it sets the pattern for our responses to stress. Observing the reactions of others, we soon learn that if one has an argument, he should react in a certain way. We show emotion in accordance with what we have been taught. Thus, in a way, we are programmed, even if we feel like crying for joy or sadness we do not for one reason or another, "big girls don't cry," "your face will swell and look ugly," "a man doesn't cry." The majority of people have been taught to hide or mask emotions or feelings. Many people will ignore signs of ill health because they do not want their family to know they are in pain.

In many instances, illness arises from a sense of sin or guilt, making unreal thoughts real. With sin and guilt, we know there must come punishment of ourselves or others. Each individual must assuage his sense of guilt from something done, not done or which should have been done better. Sometimes religious training fosters the idea that we are full of sin and should atone for it. Punishment is required. Sometimes I see this with a parent of a child with decayed teeth and dental neglect. The parent is afraid to bring the child to seek dental treatment because he feels guilty for what has happened and fears the dentist will reprimand him or he feels that poor dental health is some sort of punishment because all he can remember is that his parents, grandparents, etc., had soft teeth and this is some punishment for which the family has to suffer.

Erroneous perceptions such as these must be altered before any permanent healing can take place. That is the reason drugs and surgery are merely superficial means of dealing with disease. Again, it is my goal in this paper to change the approach to dental health toward a behavioral approach rather than depending exclusively on technology.

Dental schools are teaching the technical phase of dentistry, but they are not teaching students how to function with their patients on a human level (see dialogue, page 38 and 39). Dentists are becoming too technical and forgetting that the teeth they treat belong to a body, a person with emotions, and that they have to be concerned with the person as a whole, not just a part. Dental schools should have in their employ a behavioral scientist or a psychologist. The students need some background in what makes a person tick. They need to know how a person's life style, his attitudes, his daily being,, can affect his dental health. They need to be able to recognize signals other than toothache and poor oral hygiene. "Moulton, Ewen and Thiemon suggest that oral hygiene may be neglected during depression, deep anxiety and rebellion against authority".⁸ Dependent individuals may exhibit chronic neglect as if they were expecting such care to be the

⁸ Moulton, R., Eweny, S., and Thiemon, W.: Emotional factors in periodontal disease: Oral Surg 5:833 1952

responsibility of others. The dentist's instructions concerning oral hygiene may be ignored as a form of "parental defiance".⁹

*"Necrotizing ulcerative gingivitis (trench mouth) is a disease of special interest because it may have an emotional basis. Some evidence exists to indicate that the suggested relationship between emotional stress and NUG is more than conjecture."¹⁰ Mellois, N.W., and Herms, F.W., in their article "Investigation of Neuropathologic Manifestations of Oral Tissues, found in the Journal of Orthodontics Volume 32:30 1946", stated the acutely mentally ill were more prone to NUG than were the chronically mentally ill. "The disease among military personnel may be related to fatigue, nervousness and unusual dependence".¹¹ That is why I say it is the goal of this paper to change dental health toward a behavioral approach rather than depending exclusively on the technical aspects.

In order to change distorted thinking and develop positive self concepts, there are some techniques which can be employed. They are:

⁹ Sword, R.O., Oral Neglect - Why. J. Am. Dent. Assoc. 80:1327 1970

¹⁰ Grant/Stern/Everett Periodontics, C.V. Mosby fifth edition 1979 St. Louis MO

¹¹ Carter, W.J., and Ball, D.M. Results of a Three Year Study of Vincent's Infection at the Great Lakes Naval Dental Dept. J. Periodontal 24:187 1953

1. Biofeedback - The training technique to enable a person to gain some element of voluntary control over autonomic body functions, based on the learning principle that a desired response is learned when you receive information (feedback) that a specific thought complex or action produced the desired response.
2. Hypnotherapy - A practice that causes the patient to have a relaxed, detached, suggestible state of mind, used for habit and phobia control.
3. Color Therapy - The properties of healing that are emitted by particular colors, derived from the wave-lengths of colors that stimulate cones in the retina of the eye.
4. Light Therapy - The use of sunlight to quicken the metabolism and increase blood circulation, to revitalize sluggish cells as they quicken the pace of exchanging nutrients for waste.¹²

Health professionals who apply wholistic concepts direct their patients to the means to shed stress and tension. Techniques of mind development, visualization, uncovering of the unconscious, and positive thinking all come into play to reverse thought distortion and bring it back to normal.

The wholistic concept, or holistic spelled with an H, has a spiritual reference and I have mentioned it as another alternative to the present health system. The search for something to believe in is old as history. The traditional path has been to seek a salvation outside oneself through faith in some God. Spiritual strength

¹² Walker, Morton, Total Health, Everest House, New York, 1979.

provides a faith that stirs healing into action and brings about physical and mental equilibrium. It permits one to call on inner resources for help. For example, I have heard people say when "medicine fails there is only one other thing to do: call on the Lord."

"While starring in the play "Irene" during the fall of 1976, in Dallas, Texas, actress Debbie Reynolds experienced severe pain in her left shoulder. "The pain existed for about four months and I couldn't get rid of it," Debbie said. After one session of being exposed to the healing powers of Greta Alexander, age forty-six of Delavon, Illinois, the pain disappeared. It happened by the use of prayer and the laying on of hands. "It was just ten minutes", said Debbie. "We prayed together and Greta touched my feet and she rubbed certain points of my body. Greta has a gift through God". "It was very hard for her to play the part in the play because of the pain in her shoulder", the psychic healer explained. "After we talked about it, I massaged her feet and asked God that she be healed. I felt the surge of the love of God coming through. Suddenly Debbie said she felt better. And there was no pain from then on."¹³

¹³ Walker, Morton D.P.M. Total Health Everest House first edition 1979

This is one approach to spiritual healing or natural healing. It is called psychic healers. It seems Debbie's faith in Greta Alexander helped rid her of the pain.

PART III

INTERRELATIONSHIP OF ORAL AND GENERAL HEALTH

The mouth is the gateway to the body. Poor dental health can lead to disturbances in other parts of the body and vice versa, poor physical health can lead to poor dental health.

If a patient has rampant decay and exposed pulp, there is difficulty masticating food and the patient's diet excludes the fibrous food which the body needs for digestion and excretory function. Without teeth, you are unable to masticate, your face loses its muscle tone, your speech is impaired, and social acceptance is thwarted. Even when dental treatment has been employed, one still may have problems. A complete denture will interfere with the taste buds and speech, and will not allow the person to eat or taste a variety of foods. In some cases, the person is just not able to tolerate the prosthetic appliance.

In 1973, hundreds of thousands of people died prematurely from causes primarily related to their lifestyle.

33,350 died from cirrhosis of the liver
25,118 from suicide
7,482 from hypertension

In dentistry, a recent survey of a probability sample of the adult population of the United

Stated projected that 20 million people have no natural teeth. Among the 90 million others there were 855.4 million missing teeth and 127.4 million teeth with unfilled carious lesions. Every individual should visit a dentist by three years of age and should return for periodic re-examinations and treatment. In contrast to this idea, a national survey has shown that only 47% of the population claimed simply to have visited a dentist within the previous year.¹⁴

The dentist and physicians can cooperate by insuring that he or she should seek examination frequently. If a patient comes in for dental care, his blood pressure should be checked and if it is found that the blood pressure is elevated, that patient should be instructed to see the physician as soon as possible. Likewise, it would be beneficial to the patient, if all medical and physical examinations included examination of oral soft tissues. Patients with disease that exhibit oral manifestations should be instructed and educated what to expect in their oral hygiene.

In the beginning of this chapter, I mentioned that the mouth is the gateway to the body. It serves as a focal point of more specialties than any other single part of the body. It is of concern to the anesthetist in gaining access to the respiratory system. It is within the domain of the laryngologist, the maxillofacial, the

¹⁴ Brown, William E., Oral Health Dentistry, and The American Public Library of Congress, 1974.

plastic and oral surgeon. It is the special territory of the speech therapist and an area of much significance to the nutritionist, the dermatologist, hemotologist, and allergist. The expressions portrayed by the mouth are subject to the scrutiny of the psychiatrist. Above all, the mouth has contributed toward a whole host of subspecialists; periodontists, endodontists, prothodontists, orthodontists, dental pathologists, restorative dentists, oral surgeons, general dental practitioners, dental hygienists, all have a stake to claim in the maintenance of oral health.

With so many specialties for oral ills, it would appear that much goes wrong with the mouth, and in fact, it does. Yet, despite this apparently intense interest focused upon the oral cavity by numerous specialists, its total health is the concern of no one specialty or profession.

Paradoxically enough, the average physician considers the mouth as an orifice through which to examine the tonsils and pharynx, and the average nurse considers it a convenient opening in which to pop a thermometer. This failure to perceive the mouth not only as an integral part of the body, but also as a key element in the development and maintenance of the organism has led to the poor state of oral health that prevails in all too many of our populace.

There is a little evidence of some of the multi-specialist groups combining their skill in a holistic approach, they are the cleft palate centers. Here, plastic surgeons, orthodontists, prothodontists and speech therapists combine their resources.

There are many other facets of the oral cavity where the physicians and dentist may work together. My grandmother used to say, "I can tell if you're sick by your tongue, the tongue is a tattle-tail." It made us laugh, but there was truth in her statement. The mucosa of the oral cavity is the tattle-tail. It is unrivalled as a portrayer of conditions prevailing in other parts of the body. The proximity of the blood capillaries to the mucosal surface allows immediate evaluation of the color of the blood; the pallor of the anemic, the yellow of the jaundiced, the blue of the cyanosed, and the purple-red of the hypertensive, the Koplik's spots of measles, the red strawberry tongue of scarlatina and the tender parotid swelling of mumps.

The oral cavity may suffer from other side effects, such as the results from certain systemically administered drugs, gingival (gums) hypertrophy from dilantin, the drug used in the treatment of epilepsy, the discoloration of developing teeth from tetracycline, the black hairy tongue of antibiotic therapy are but a few examples of interconnection between oral and general health.

The oral mucosa is also very sensitive to nutritional deficiencies. The initial lesions of ariboflavinosis, pellagra and scurvy manifest themselves respectively as a painfully reddened tongue, a desquamation, and inflammation of the lips and bleeding and hypertrophy of the gingiva. The buccal epithelium will eventually reflect the hyperkerotosis of prolonged Vitamin A deficiency. A number of hormonal disturbances also have oral repercussion, the most frequent is gingival hypertrophy during pregnancy.

Whatever the changes that may occur in the oral structures as a result of nutritional or hormnal derangements, and I have only related a few, there are many more. The signs and symptoms that present themselves in the mouth are often striking and moreover, are readily accessible and painlessly procured.

PART IV

DENTIST AND PATIENT STRESS

How many times have we heard that we live in a stressful society? At one time or another we all have experienced some stress. What is stress? According to Donald R. Morse:

Stress is any physical, social or psychological factors, events, or conditions that have the potentiality to induce certain physiological and psychological changes in a given individual at a particular time.

It's 8:30 a.m., the first patient's appointment is 9 o'clock. It's Mrs. Pie with her screaming, kicking, precocious child, Joe. It takes two assistants, the receptionist, the dentist and Mrs. Pie to hold him just to get the mirror in his mouth. And you hear her exclaim as she carries him out, "you'll see, you're gonna wind up with plates, just like your father, you stupid brat!" At 10:00 Mr. Greene arrives, he spits up ten times while you put in the occlusal amalgam and you dirty up four towels. Ten thirty, Mrs. Wiggley can't stay still, you accidentally cut her and use up appointment time trying to stop the bleeding. The telephone rings, it's your son and he has totalled the car on the way to school.

Eleven o'clock, maybe a breather. Now it's Mr. Steep, you finally accomplished something, two teeth restored, so what if he needed nitrous oxide, valium, hypnosis and two carpules of xylocaine. Lunch time finally, but you can't eat because you told a patient with a toothache you would fit him into your schedule. Well, you delay your lunch, the patient doesn't show up until five minutes before lunch is over. You take one bite of your sandwich and now you realize the entire schedule is off because of the toothache patient who really doesn't have a toothache, he just wanted to come in because they were going out of town on the day of the actual appointment. You explain that it is impossible to treat him because it's not a real appointment and the non-emergency patient leaves screaming that he'll never come back and he is not going to pay a \$380 bill. Now it's 1:30 p.m., your 10:00 patient is waiting. You call her into the room, seat her, place the towel on her and as soon as she sees the syringe, she faints, etc.

Although this may be exaggerated in one dentist's typical day, it can happen and all the above situations are stressful to both parties, the patient and dentist. This stress is brought on or accompanied by fear. Fear as we know is a response to the unknown, to expectations of danger, pain, disaster, etc.

People often get a bad image of dentistry from talking with others. This generally occurs in the family situation. The parent's unpleasant oral experiences are related to the child, or the child might be present while his brother or sister has had a negative dental experience. Other reasons for dental fears are based on stories read, the news media, movies.

In William Goldman's 1974 novel, Marathon Man, the villain was a retired Nazi dentist that inflicted pain on the hero. Through the movie media, the movie did not do very well financially because of some of the dental scenes. Movie goers stayed away in droves because of the descriptive stories they heard from others about the dental "torture" scenes. Dental fear is very widespread.

The sudden discovery of a cavity means a trip to the dentist or alternatively, the agonies of a toothache. And you are in a quandary because you do not know which is the lesser evil. There is a chance you will sit home and suffer for a time rather than make that fateful call to the dentist. By the time you get to the dentist you are already in pain and in a stressful situation.

Periodic visits to the dentist before pain occurs will alleviate much fear and stress. Dentists could periodically have open house or discussion sessions with members

of the community to discuss scientifically various aspects of treatment.

If someone wants to threaten you and institute the idea of pain, he threatens you orally, "I'll hit you in the mouth," or "I'll knock your teeth out," or "I'm gonna knock your teeth down your throat." When one is hit in the jaw, bleeding occurs and many people associate blood with pain. Very seldom do you hear the threat: "I'll knock your heart out." The oral cavity seems to suffer much abuse from society. It may bring a laugh or two, but many times the intent of the joke will remain in the subconscious.

Psychological, physical, and social stresses can result in stress and repeated stress can lead to diseases (some have been mentioned in earlier portions of the paper). The two principal groups of dental diseases are caries (cavities) and periodontal diseases (pyorrhea). One of the physiological effects during stress is decreased salivary secretion (xerostomia). People under stressful situations who have xerostomia have a higher caries rate. According to American Dental Society and studies, the period of greatest dental decay is during adolescence and pre-adolescence. These are also periods in a person's life when conditions for emotional or other psychological problems are most prevalent.

Of the various types of periodontal disease, the one with the closest association to stress is necrotizing ulcerative gingivitis (NUG, Vincent's disease or trench mouth). Stress is an important etiologic agent here. Students and military personnel have a high incidence of NUG.

Other oral habits related to stress are thumbsucking, lipcheeck and nail-biting and tongue thrusting. These habits occur under stressful situations and lead to malocclusion and thus, a dental problem.

Stop the world, I want to get off! That is not a bad idea and in order to improve and treat dental health, that is exactly what has to happen. People must be encouraged to visit the dentist and physician regularly before symptoms occur. Not only must health professionals be available for community education and interaction, but also, they must lead the way in setting up plans for community education and must actively push and participate in such plans. Health professionals must set up lines of communication to develop the necessary linkages among themselves. This is the greatest contribution to improved public health that health professionals can make.

The typical exaggerated day of a dentist showed the dentist under stress; how can he approach a wholistic practice? His patients were scheduled too close, he did

not eat a proper lunch, and more than likely he did not eat an adequate breakfast. In order to relax himself, he administered an excessive amount of anesthetic to a patient. If this kind of day persists throughout the year, no wonder dentists are making headlines as a high suicide profession. Dr. Ken Olson, a psychologist, said that "dentists have surpassed psychiatrists as the profession with the highest suicide rate. Patients have tremendous fears, and that gets to the dentist."¹⁵

This fear reaction which has been mentioned previously can be devastating to the dental practitioner, and it would affect anyone who had to work in such a negative setting. Dr. Omer K. Reed stated that dentists are, "quickly burned out by the emotional trauma of dealing with fearful patients," and that the "average American dentist dies at age 52."¹⁶

What contributes to the lifestyle of a dentist? We have mentioned one item and that is the ever present fear the patient has about the dentist, and the negative way the dentist is perceived by the news and movie media.

¹⁵ Wall Street Journal, January 29, 1974 A Study of Stress in Dentistry.

¹⁶ Vancouver Sun Times, February 7, 1975, Stress and the Dentist.

Finally, there is a bittersweet paradox in this "doctor-dentist" thing. Many dentists are financially more successful than many of their medical counterparts, but are not able to enjoy the fruits of their labor. Most dentists do not come from professional families. Dentists can handle the hard work of dental training, but not the arrival of success in practice. Their professional life moves them up the ladder financially, but many times they are not accepted into the upper social stratum. Surveys have shown that "almost 10 percent of those who entered dentistry were sons (or daughters) of dentists, about 25 percent had parents who were professionals, and about 85 percent had fathers who were white collar workers. Almost 70 percent of the entering students had college educated fathers. With family backgrounds such as these, there is usually the family "push" for educational advancement and excellence. Minority students who may be the first potential doctor in the family, might have an even greater family drive for them to succeed. And "Dentistry was a second choice to medical school. It was easier to enter dental school. This is known as the "frustrated physician syndrome."¹⁷

¹⁷ Morse, Donald R., Fuerst, Merrick L., Stress and Relaxation, Thomas Publications, Springfield, IL 1978.

PART V

WHOLISTIC APPROACH TO DENTAL HEALTH

Today's health services, in general, are not providing the quality and quantity of service they should. This is undoubtedly due to a variety of factors among which are certainly a lac of professionals, lack of health facilities, lack of education, and lack of efficiency in service delivery. Many things must be done, such as creating new facilities and public health programs, as well as expanding the supply of professionals and paraprofessionals. Perhaps the most formidable task is the improvement of service by taking into consideration and possibly changing the behavior of the provider as it relates to treatment. This is the process of treating the whole being as opposed to treating part of a being as a disease entity.

There are several facets to be considered in a wholistic approach to dental health. They include the education of provider and consumer, nutrition, health planning, interpersonal relationships, and management. I will discuss each facet below.

EDUCATION

The dental education that students receive should not be limited to oral health care, but should be con-

cerned with the overall health of the patient. In most dental schools the clinics are set up in specialties so the student initiates his career seeing bits and pieces of dentistry, instead of dentistry as a whole. Specialization is a mixed blessing. It limits the vision of the specialist and detracts from the general practitioner. For example, the general practitioner tends to overlook or ignore the periodontal aspect of the patient's welfare. Periodontics embraces all aspects of day to day practice. It is absolute folly to initiate any restorative procedure, orthodontic treatment or prothetic replacement without first considering the repercussions this might have on the periodontium. The engineer does not construct on a poor foundation. To fragment oral health into separate discipline is a complete repudiation of the body's unity of function.

At the completion of a student's education, he is expected to be proficient in all aspects of dentistry. However, in school where the education is presented in specialties, some students will show a marked interest in one aspect or another due to interpersonal relationship with the instructor or lack of requirements. Or, instructors may emphasize one specialty over the other and the student graduates with a lopsided view of dentistry. I am not saying there is no room for specialization, but each aspect of dentistry should be taught and treated with equal concern.

Then dental and medical students should also be educated and made to understand the inter-relationship of medicine and dentistry. The ideal situation should be a teaching program where a physician and dentist could work together. The dental and medical student would learn to take and evaluate a medical history, organize and evaluate laboratory data, recognize and evaluate existing medical problems, and determine their influence on the provision of dental care, knowing when and how to obtain medical advice.

The wholistic team dispenses humanistic medicine that is more person oriented than disease oriented. The treatment arises from the idea that health care should take full consideration of human needs and be humane in attitude, ethic, and behavior. The team informs patients of everything related to their bodies and minds. The wholistic team functions as health educators and facilitators of healing procedures. They are not locked into the mainstream of orthodox dentistry, and they are not fearful of what their colleagues think when they try a different procedure. Thus, the wholistic team does not confine their thinking to traditional methods alone. Other kinds of activities are recognized and put into service. These include instruments and sources to accomplish a therapeutic goal, specialists such as nutritionists, maxillary facial, behavior

scientists, acapuncturists, bio feedback technicians, etc. Any technique is allowed that provides valuable treatment and prevention of disease and that safeguards health upkeep for the patient.

Dental students should also be taught: (1) to evaluate the systemic effect of drug reactions and interactions as they effect dental care and the production of oral lesions; (2) to anticipate ad prevent most medical emergencies, be able to provide appropriate treatment, including cardio-pulmonary resuscitation (CPR), and know where and how to seek medical assistance; and (3) to admit a patient to a hospital and be able to use its facilities to the greatest advantage in providing dental care. The dental hygienist, as a part of the dental team, should be familiar with a program of this type also.

The dental schools should also keep the student alert to advances in medical practice that affect dental care. These include hemodialysis, renal insufficiency, pregnancy, diabetes mellitus, thyroid disorders, diseases involving the central nervous systems, treatment and recognition of hypertension. Other courses should teach care of the hospitalized patient, and the students should be familiar with the hospital setting and routine. This will enable them to give advice on oral health care for hospitalized patients. In addition, the early involvement of dental

students and medical students together will enhance their chances of working more effectively together in the future.

Nutrition

The science of nutrition is contributing and playing a major role in the practice of medicine and dentistry today. The dentist is in an excellent position to view the oral manifestations of the first appearance of systemic reactions to drugs and of systemic disorders. The dentist can emphasize to his patients the importance of a proper diet, and should be well versed in nutrition.

Food has played a major role in advancing health care for patients. The addition of Vitamin D to milk, for example, has been responsible in large measure for the prevention of rickets and the addition of iodine to table salt has eliminated almost complete endemic goiters due to iodine deficiency. Vitamin A, riboflavin, thiamine, niacinamide and iron are added to bread and cereals in order to replace these elements which were lost as a result of the milling process; fluorides are added to the water supplies of many communities with the result that millions of children have fewer cavities than a decade ago!

In the past decade the dental profession has become much more impressed with the fact that the oral hard tissues represent more than inert structures occupying space in the mouth. This has been summarized nicely by Leicester:

The development of the teeth involves a large number of processes and mechanisms closely integrated with one another and dependent upon a large number of external factors. A normal tooth can be formed only when the composition of the body fluids from which it is formed is normal and all physiological mechanisms concerned are functioning properly. Hence, almost any disturbance in body function will be reflected in some external factors, such as nutritional deficiencies or internal factors such as hormonal disturbances or interference with body function by infection or malfunction of an internal organ, may affect the growing tooth.¹⁸

It is evident that what affects one part of the body will definitely affect the other. This fact has been emphasized in a study which demonstrates that dental caries itself can be used as an indication of a person's health in general. Manhold and Izard:

examined the eight month cumulative medical histories of 1019 naval aviation cadets, in which the complaint, diagnosis, treatment and disposition of the case were tabulated for each month. Similarly, the complete dental records of this group were collected. It was found that 15 percent made five or more visits to the dispensary, and if one assumes frequency of medical complaints as a health index, this group (178 subjects) could be assumed to represent the "poorest" on a general health evaluation. When the subjects in the "poor health" group were compared with the group as a whole, it was found that there was a significant difference in the degree of dental caries. The mean DMF of the whole study population was 27.2 whereas in the

¹⁸ Leicester, H. M., Biochemistry of the Teeth, St. Louis, C. V. Mosby Company, 1949, p. 149.

group comprising the "poor health" members the DMF was 31.1. The difference is significant and represents good evidence suggestive of a relationship between general health and oral pathology. Furthermore, this data suggests that oral pathology as well should be considered in any complete medical or physical examination that attempts to assess the general health of a person.¹⁹

The well nourished American is a myth. Despite the high level of education and the abundance of available food, many people make poor food choices and are badly nourished...Undiagnosed subclinical malnutrition of trace elements and protein may exist and subtly cause such significant physiological damage to body and brain as stunted growth, premature aging, and early death. Using nutrition as preventive medicine, we can check the destructive course of malnutrition.²⁰

Many times I have seen patients, adults and children, in our reception area at 8:30 a.m. with a soft drink, candy, chips, sweet rolls and the like while waiting to be treated in the dental clinic. It is senseless to treat a patient with these habits until we discuss and bring about a change in the nutritional behavior. Some of the excuses for eating the above are: "we were in a hurry;" "I did not have much money." But the real reason is the patient does not know what is available to eat that is nutritious and economical.

¹⁹ Manhold, J. H. and Izard, C. E. Relationship of Dental Committees to General Health, Science, 120:892, November 26, 1954.

²⁰ Pfeiffer, Carl C., Ph.D., M.D., Mental and Elemental Nutrients, 1975, Keats Publishing, Inc., New Canaan, CN.

The majority of patients treated in school clinics and government funded clinics are from lower socio-economic backgrounds and have not been educated on what to eat to stay healthy. The health centers and school clinics should not have junk vendors and should patrol what is being eaten in the waiting rooms. We must begin to be conscious of what we are trying to teach and practice. Patients will not listen if you are not practicing what you are teaching. For the patient that states he doesn't have time to eat at home before the appointment, and he arrives at your office and the vending foods machines with only juices, fruits, and milk, instead of junk foods, he is forced to select something healthy and eventually he gets into the habit of eating fruit, juices, etc., and will begin to store-up such foods and drinks at home.

I have one example of this. A patient would arrive, which I will call Miss X, at the school clinic every Wednesday for a dental appointment with a headache. The headache would become so bad she could never stay the length of the appointment. Of course, the student would be furious and I have already described some of their attitudes. I started to converse with Miss X on what she ate. "Did she eat breakfast, and well balanced meals each day?" Her story went like this, breakfast - coffee (black) and a donut, maybe soup for lunch or no

lunch, dinner - some type of meat, vegetable and salad, her only real meal. She had put off her body's requirements for nourishment to break the long fast during sleep. Her diet was lacking in fiber and remained too high in purified starches. She had courted carbohydrate intolerance by heaving either no breakfast or just coffee and sweet rolls. Her blood sugar jumped up and then down and such blood sugar fluctuations can cause headaches and other symptoms.

The name of the resulting condition is hypoglycemia, meaning the blood sugar level is lower than normal. I explained this to Miss X and told her the importance of eating properly and relieving herself of headaches, and asked that she eat something for breakfast of value, such as fruits, boiled egg and coffee with cream. A definite lunch, if only a salad, but the most important was to start the day off with some nourishment. I also showed her that a dozen eggs were cheaper than sweet rolls and could last a week or more. Because she trusted me, she did what I suggested and showed up a Wednesday later, free of headaches and with a much lower plaque index. Her improved physical condition also improved her dental condition.

Good nutrition is basic to good health and is one of the primary therapeutic tools of wholistic medicine. Dr. Hoffer, who is director of the Institute of Science and Medicine in Menlo Park, California, states that:

The available evidence indicates that through improved nutrition, the age specific incidence of disease and mortality from disease can be decreased to one-quarter of the present value, and that other health measures taken in conjunction with these could lead to further decrease. The length of the period of well-being of men and women might well be increased by sixteenth to twenty-four years through improved nutrition and other health measures. Additional research is needed to determine with reliability the amounts of various nutrients that lead to the best of health.²¹

In dentistry, cause and effect relationships between nutrition and periodontal disease have been established. Gingival can be induced by nutritionally inadequate diets. Healthy tooth and gum disease has been delayed by protein-deficient diets. The formation of dental plaque closely associated with periodontal disease and caries can be varied by altering the composition of the diet.

A change in nutrition habits can greatly effect the health of the entire population, but to change the nutrition habits we would have to change the way food is processed and sold in supermarkets and restaurants.

To augment, we have to start advocating at an early age that apples, oranges, fruits and vegetables, should be offered in pre-schools instead of cookies and lollipops. Nutrition should be in the curriculum at a

²¹ Hoffer, Abram and Walker, Morton. Othomolecular Nutrition: New Lifestyle for Super Good Health, Keats Publishing, Inc., New Canaan, CN.

level of understanding which makes nutritious foods just as appealing as junk food.

Food stamp recipients should be given nutritional counseling before receiving the stamps or the stamps should only be allowed to purchase nutritious foods. I bring out food stamp or Medicaid recipients because this is the largest segment of the population which is affected by poor dental health and cannot afford treatment. I do not mean to imply that only the lower economic class has poor dental health or poor nutrition. Any segment of the population may have poor dental health and nutrition.

Megavitamin Therapy

Megavitamin therapy is the use of vitamins to supplement the diet when well balanced nutrition is absent.

Leaders in the development of megavitamin therapy are Humphrey Osmond, a psychiatrist and Dr. Abram Hoffer, M.D., Ph. D., who in 1952 discovered the therapy for schizophrenia which relies on the simple, harmless, inexpensive, and highly effective Vitamin B₃. From this discovery, orthomolecular (preventive, wholistic) medicine and its counterparts were born.

About forty-five nutrients are required in optimum quantities daily to maintain excellent health. Your only

personal requirement is to give preference to high quality foods and eliminate junk! If one cannot do that or chooses not to, you can take doses of vitamins in order to get the body the food it needs. Just as Dr. Osmond and Dr. Abram found that B₃ was an essential part of treating the psychotic patient, in dentistry we find that patients with a diet low in fruits will have a greater tendency towards gum disease, or a diet high in carbohydrates will have a higher incidence of tooth decay.

While many of us speak of vitamins and know that we need them for sustaining our health, few people understand what they are and what makes them important. Vitamins are food substances that are part of living things. They are utilized in the human body as co-enzymes, catalysts for psychological response by the body to stress. In effect, vitamins regulate body processes, and we need them to function well and when not in the diet the body will react negatively.

In a wholistic dental effort, when a patient is being examined nutritional analysis should be part of the examination.

Interpersonal Skills

I see interpersonal skills as part of an approach to wholistic dental health. the dental team must be able to relate and communicate with each other and the patient.

The dentist is not unlike the manager or administrator. He wears many hats (doctor, lawyer and Indian chief). In these hats he must be able to direct, plan, listen, delegate duties, relate affective to the auxiliary and have a good self concept.

One of the reasons the dental student has problems with patients is that the present curriculum is not based on the behavioral science approach. The dental curriculum is set up on an authoritative basis. Students learn that the dentist is "Big Daddy" who orders patients to do this or to do that.

Behavioral science approach in dentistry is new and not included in many curricula. One can speculate that the reasons for the slow progress in this area stem from:

1. Lack of understanding by the seasoned tenured instructor on the aspects of behavior science in dentistry.
2. Shortage of qualified and interested teachers due to the relatively low remuneration for faculty.
3. The fact that all dental schools exist solely for teaching and training the students in technical aspects of dentistry.

Another and more poignant reason is that many of the seasoned dentists did not have such courses and resist the change from the old curriculum. They managed to have successful practices, but they were accomplished through trial and error. Why leave it to trial and error?

Another reason is that the schools are very requirement and quantity conscious, instead of being quality and patient conscious. The dental student unlike the medical student has to find his own patients, be responsible for arranging appointments and make sure the patient pays the fees. He also has to make sure that the patient's dental needs meet his school requirement needs. For example, the student may need a certain restoration to fulfill the requirements in a certain dental discipline. He may have a patient that is in need of treatment, but does not have that particular requirement. The student does not have time to do anything unless it is going to count toward his graduation. This is why you get such comments like those mentioned in the beginning of this paper and it is also why the student has such a low self concept. He is so pushed for quantity, he doesn't have time to establish interpersonal relationships.

In order to establish interpersonal relationships and communicative skills, the schools are going to

have to implement total patient care, quality over quantity. This can be accomplished only by use of the wholistic approach.

Take the case of Mrs. X with the headache. She was able to accept my advice because she had confidence in me and wanted to please me. I was genuinely interested in her headaches and wanted her to have some relief so we could treat her conditions. The student, sorry to say, only saw her headaches as a threat to delay his treatment. I was able to do this, but because I am only one person, I cannot do this with every patient. When students see me and my approach, they begin to emulate it.

In order to have a successful practice, the dental team must possess the ability to relate to others. Patients generally do not recognize good or bad dental treatment. Patients do not have the standards or forms to measure the quality of a restoration or any dental treatment, but they do recognize organizational togetherness of an office and the dentist that speaks of the office as a teamwork approach (as "we" instead of "I"). The dentist that makes sure the reception area is as cheerful and organized as the dental operative room and that each member of the auxiliary had a voice in the objectives, the planning and organization of the office,

is the dentist on the way to possessing excellent interpersonal skills and successful attempts toward wholistic dental health.

VI

MANAGING: A WHOLISTIC APPROACH TO DENTAL HEALTH

The dental hygienist with a knowledgeable background and Degree in Health Administration in a wholistic dental clinic will wear many hats, but the hat that will be worn the most is the hat of the educator and the hard hat of the architect. I will elaborate on this concept further along in this section.

The administrator will follow some of the basic roles of the traditional administrator. He must be conscious of how the physical, nutritional, emotional and environmental aspects of life can affect health. He must then ensure through the hiring policies that the employees be just as conscious of these matters in order for the clinic to function together toward the same goal. How can one be assured of the employees? One solution is to have every applicant take a thorough dental check up, go through a plaque control and answer a questionnaire concerning the applicant's attitude toward dental health. Also, one can present the applicant with the philosophy of the clinic and discuss it.

He must possess some of the following qualities along with technical ability:

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He must possess some of the following qualities along with technical ability:

1. Make sound judgments
2. Get along with people
3. Understand people
4. Meet the demands of life with composure
5. Plan and organize
6. Let go (delegate)
7. Manage others
8. Act vigorously
9. Communicate effectively
10. Blend all action with finesse

The hygienist possessing the above qualities would be able to manage a wholistic dental clinic. What then is managing? Managing can be defined as planning, directing, and controlling activities to achieve or exceed objectives. It occurs at any level of responsibility, in any organization wherever a manager is trying to get results through his people (or employee). Let us consider these in order.

1. Planning is the determination in advance of what must be done, by whom it is to be done and when it is to be done. The manager's philosophy and office policies are the basis for planning.
2. Directing includes primarily staffing, training and supervising. It is a pre-requisite to successful management to secure properly qualified individuals for every position.

It is necessary to train these individuals in their duties and responsibilities. Finally, it

is necessary to give day to day guidance to employees to enable them to do a satisfactory job in carrying out their responsibilities. In addition to the three primary duties listed above, dentists must know how to delegate authority to employees; they must know how to motivate their employees; they must lend assistance to employees in solving personal problems. Of course, dentists must coordinate all of the activities of the office work of his employees.

3. Controlling is the manager's method of measuring, evaluating and correcting employees' performance in striving toward stated and understood objectives.

A manager performs the various managing elements for one purpose only, to get results through his people. However, a doer also performs many of the same elements, that is setting objectives, developing standards, staffing and correcting, but the difference in a manager and a doer is the doer does it so he can achieve results as an individual.

The majority of dental professionals today are in the category of doers. They are striving for results as an individual, not through a teamwork approach. They feel as long as their technical ability is satisfactory that should be all the patient is interested in, but that is not enough. Patients generally do not recognize good

dental treatment from bad dental treatment. Patients do not have the standards or forms to measure the quality of a restoration or any type of restorative dentistry, but patients do recognize organization, togetherness of an office, and the interest of the provider. The dentist that speaks of the office as a teamwork approach (as "we" instead of "I"); the dentist that makes sure the reception area is as cheerful and organized as the dental operative room and that each member of the auxiliary team had a voice in the objectives, the planning and the organization of the office, is the dentist on the way to becoming a good manager with a change of a successful dental clinic.

The dental hygienist as a manager must take into consideration two major areas: these are effective utilization of time and the reduction of overhead costs.

Effective Utilization of Time

The manager must organize the clinic so that she is able to make the maximum effective utilization of her time and energies. It is only the time devoted to the productive use of her professional skills and training which brings financial returns. A hygienist in this capacity must hire a full staff that is she should not consider herself as 50% manager and 50% practicing

hygienist. She should hire Dentist, hygienist, laboratory technician, assistant, and receptionist. A Dentist working alone with no auxiliary help spends 60 percent of his time performing non-professional duties. The doctor should be freed of all duties and responsibilities within the dental practice which do not require his professional skill and judgment.

The non-professional duties should be delegated to a competent auxiliary. These tasks are frequently time-consuming and require secretarial and business skills and training which the doctor does not have. It would be foolish for the doctor to waste his time and professional skills performing, not too efficiently, tasks which could be handled more effectively by an auxiliary with specialized training within these areas.

The time which the doctor does spend in the productive utilization of his professional abilities should be organized so that it can be used with maximum efficiency. This would include taking advantage of modern techniques and equipment which can speed operative procedures. It would also include the utilization of time and motion principles which will help the doctor to work with reduced strain and tension while saving time and energy.

By time and motion principles, we mean effective utilization of the auxiliary. For example, the dentist

should not be making appointments or mixing amalgams, developing or processing radiographs (X-rays) or scaling and polishing teeth (cleaning teeth). All the above procedures could be done by a receptionist, assistant and hygienist, and the dentist can spend the time at the chair treating and giving the patient full attention.

Another example is the care of a patient in the dental chair with a full auxiliary staff (that is a receptionist, assistant and dental hygienist). The dentist and the chairside assistant are present and yet the dentist is mixing amalgam and doing the suctioning while the assistant is sitting idly. In an environment of this type the dentist would be under too much strain or tension and would not be able to devote the time necessary to the patient (see section on Dentist and Patient Stress)

The Reduction of Overhead Costs

The overhead costs of the dental practice consist of the expenses for office space, equipment purchase and maintenance, supplies, and salaries. Through good organization and management, the manager should be able to control these costs and to achieve maximum utilization and efficiency in all these areas.

Careful initial planning will help to achieve maximum utilization of the entire office space. Consultation with professional advisors, such as the architect and interior designer who specialize in dental office design, can produce an attractive, well-planned, and smoothly functioning office layout. The proper choice of materials can also help to reduce maintenance costs. The equipment which will best fill the doctor's needs should be selected and then cared for by a good preventive maintenance program, which will help to reduce costly and time-consuming breakdowns and service calls.

The effective utilization of auxiliary personnel enables the doctor to devote his time to rendering professional services; unfortunately, this utilization also brings salaries into the position of being one of the largest overhead expenses in the dental office. The dental profession must compete in the labor market for competent employees. The pay scale for dental auxiliary personnel must be competitive with that offered by other local employers. A good employee is worth and entitled to a decent wage. Any employee who is not worth a decent wage is probably not a valuable asset to the professional office.

If, for the sake of discussion, the secretarial assistant is earning \$400 per month, it can be calculated

that her working time is worth approximately four cents per minute. It is clearly to the doctor's financial advantage to help her work at top efficiency. The utilization of time and motion studies and other techniques, which have contributed so greatly to the improvement of work methods and conditions in the operatory, can also increase efficiency within the business office and other areas of auxiliary utilization.

The control of overhead costs is important, however, low overhead figures do not necessarily indicate good management. The investment in equipment, supplies, or services, which all improve the efficiency of the clinic, and the investment in adequate salaries for well-trained personnel, are all important for effective management.

Not all things in life can be measured in terms of dollars and cents. It is equally important that the doctor be happy and satisfied in the practice of dentistry. The practice must be planned and controlled to help achieve both personal and professional goals in life.

The doctor and staff spend most of their waking hours in the professional office. The physical surroundings and general atmosphere of the entire professional

suite should be designed to be pleasant and comfortable not only for the patient but also for the doctor and the staff.

I must add, where and how dentists and patients consult is important. Psychologists have found colors, fabrics, and textures play an important part in the relaxation and feelings of people. For example, the consultation should take place away from the dental operatory and the foyer. The room should be furnished with warm colors and sofa-chair arrangement, (not a desk, a chair, a clock, and no telephone or telecommunications system) likely to be found in one's home.

In my experience I have found people relax more and talk freely if they have the feeling of not being disturbed or taking up your time and, of course, in a wholistic environment, the auxiliary knows when private talks are in session, to take all messages and not to disturb.

Money saved by not spending for equipment or improvements which would increase the efficiency of the operation, or which would simply remove a petty daily annoyance, is a false saving. The minor but constant irritations are in reality expensive, for each day they take time which can be used better for other tasks; they also claim a constantly increasing emotional toll.

Planning the Dental Clinic

Clinic Location

In the planning of the clinic, you must consider these essentials: location, equipment, color and light and materials. This is the hard hat of architecture.

In a wholistic environment, location is important. You would not want the clinic in the middle of the metropolitan area of the City. The ideal place would be away from pollution and the hectic hustle and bustle of the city. You would not want the dental clinic in a decaying portion of the City. This would tend to make the patient more aware of his decayed and poor neglected mouth. Farfetched idea, huh?, but possible. A new concept moving rapidly is starting dental clinics within discount stores. This certainly attracts people; they can seek dental treatment and shop in the same place and shopping is a great American past time.

Materials

All materials selected for use throughout the dental clinic should be chosen for both appearance and ease of maintenance. The dental office is not the place to use fragile materials which cannot withstand wear without rapidly becoming soiled and worn.

Secretarial Desk Organization and Reception Area

The reception area is the first place the patients see. As the word implies, it is a place of receiving -- it should be spacious and uncluttered, the reception desk and furniture should be placed so that it is not in the way of patient traffic flow. You want to be sure that the colors are warm and conducive to relaxation. The interior decorating should not give any negative feelings. For example, I visited a nursing home for the elderly recently. In the reception area there were several dying and unattended plants. A picture on the wall showed a barren field of wheat and a black old frame house falling apart. I was greatly depressed. There was not a sign of life in that room and all too often people in nursing homes tend to feel that way. In a wholistic office one would attempt to create relaxation - a home-like environment.

The Selection and Recruiting of Office Personnel

In a wholistic dental clinic, the manager should do the hiring because at this point only she knows what she is looking for. The first person to be hired, if the manager does not wish to do all the hiring, is a

personnel director. This person will be interviewed and subjected to the routine as described in the second paragraph at the beginning of this section of the paper. If this person satisfies the goals that the manager is looking for then the personnel manager will hire the receptionist, secretary, and assistant. The manager will hire the dentist. The manager and dentist will interview and hire the dental hygienist, the above three will interview and hire the laboratory technician and the same process until all of the professional team is hired.

The lack of a clearly defined program of employee salaries, benefits, and periodic increments is one of the causes of much unnecessary disharmony within the dental office staff. Each individual employee reacts differently to the pay situation. To some, money is the most important factor within the work situation; however, other employees may quietly seek the recognition and implied praise which come with a periodic raise. One employee may be loud in her demands and will continue to demand as much as she thinks she can get, while another, though smoldering because she may feel that she deserved a raise months ago, may suffer in silence.

How Does One Locate Employees

The manager of a wholistic dental clinic would seek attention to herself and her concept through the news media, appear on talk shows, television and radio, write articles, and whenever possible, expound her philosophy of her wholistic attitude toward dental health or she would follow the traditional route.

Classified Advertising

Within the local newspapers, the manager or doctor usually places a blind ad with a box number. In this manner, his office is not disrupted by telephone calls and he is able to do a preliminary screening to eliminate obviously unqualified applicants before he schedules any interviews. The wording of the advertisement should be as specific as possible to attract the best suited applicant.

Employment Agencies

When the doctor is able to give the employment agency a specific job description which includes the skills and characteristics he is seeking, plus an idea of the pay scale and fringe benefits, the agency is then able to do the preliminary screening of applicants and send only the most qualified to the doctor for further interviewing.

SCHOOLS

Local high schools and postgraduate training programs can often provide applicants either from their recent graduates or from those who will soon graduate.

OTHER SOURCES

Word of mouth, through patients, family, other employees, and local organizations, will often locate possible employees who would not have been registered with an agency or one may read the classified advertisements.

Writing the Job Description

The first step in developing a job description is to list all the basic areas and varieties of duties which the employee is expected to perform. A list of exact duties is not needed here. Rather, a generalization, which includes the entire range of duties so that the necessary characteristics and skills for each area can be noted. From the general, it is possible to draw a list of the exact skills and characteristics most needed to fill the job.

In some clinics, the manager or doctor may devise a questionnaire.

Example of Job Description

Outline of Job Requirements

This outline has been prepared in order to acquaint you with the duties of the hygienist in my office, and to enable you to arrive for your preliminary interview with a clear understanding of the job requirements.

1. Prepare the hygienist's operatory (15 minutes before the arrival of first patient).
2. Responsible for taking and developing X-rays.
3. Responsible for the maintenance of the X-ray room and her own room.
4. Gives prophylaxis. Scales - polishes (root planes when necessary).
5. Responsible for patient education.
6. Schedule of eight patients daily for 50 minutes per session.

HOURS: 9:00 A.M. to 5:00 P.M., Monday through Friday.
Saturday and legal holidays off.

Now there is a full dental staff, each with her or his own duties and responsibilities and as little overlapping as possible.

The manager will conduct educational seminars periodically and keep abreast of new knowledge and research and make certain she exposes the staff to any and every new wholistic concept in dental health.

The wholistic dental clinic will focus on these areas: patient education, illness prevention, and condition correction, and in this order.

With education, the patient becomes a partner of the health professional whom he is consulting in taking responsibility for health maintenance. A patient is merely a person who seeks advice from a health professional. By becoming education, the patient learns that good health

isn't swallowed from a bottle, but means avoiding past mistakes, bad habits and destructive personal practices. He/she must be taught instead to institute beneficial lifestyle changes.

In illness prevention, health professionals adopt a team approach when they confront a patient's weaknesses in daily living and do everything possible to take the weakness out of his or her way of life. They (team) evaluate each patient from different therapeutic viewpoints and assist each other in making plans for preventive approaches. Although each practitioner is trained in a certain discipline, all are concerned with caring for the whole person through integrating the different healing techniques in a complementary way.

The third area of concentration, one that is most likely to have brought in the patient, is condition correction. Pain or disease is a signal warning of an existing imbalance (TMJ pain). From the team standpoint, the health professionals look past the presenting signs and symptoms to the root of the problem. They identify the source of body imbalance and use the most natural and efficient techniques to bring the body back to harmony.

CONCLUSION

In conclusion, the wholistic approach is simply a matter of relying on common sense, judgment and faith and not placing so much emphasis and reliance on technology. In this paper I have tried to show some solutions to improving the current system. I also recognize there are forces working against wholistic dental health. The main one is economics. If people stop taking prescribed medicine and over-the-counter drugs, the economy will suffer drastically. If people started growing their own vegetables, eating nutritionally, the dental profession will think they suffer from lack of patients to treat.

The dental team should see themselves as health providers, not just dentist and hygienist. They are psychologist, counselor, nutritionist, and administrator.

The wholistic manager of the future will combine everything possible in medicine that can be utilized towards keeping a person whole or getting him well. The wholistic manager will serve as a bridge between current organized, conventional, traditional thinking and some of the unorthodox healing concepts.

They should not be taught only one way to skin a cat. It should be obvious that something needs to be changed

when it is necessary to restore the same tooth every six months. The dental team should be willing to try another approach, instead of constantly drilling and filling. We should take time to find out why this tooth is in constant need of repair. We should be in tune with the entire patient, and his lifestyle, etc., not just his teeth. This is the wholistic approach and its time has come.

The seven alphabets in the spelling of DENTIST depict the concerns of this paper:

D - iet

E - nvironment

N - ature

T - aste

I - deal

S - toma

T - eeth

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