ORAL SELF CARE STRATEGIES FOR PREVENTIVE DENTISTRY



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Third Edition

Oral Self Care:

Strategies for Preventive Dentistry Third Edition

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Lots of folks confuse bad management with destiny.

E. Hubbard

Introduction to the Third Edition

As we enter the 1990's it is appropriate that we welcome back into print one of the most up to date handbooks available to the conscientious dental professional. For the person who desires stateof-the-art guidelines for creating the highest quality preventive dental care, the source would be the revised text of *Oral Self Care: Strategies for Preventive Dentistry* by Weinstein, Getz, and Milgrom. The behavioral approach actually works and, happily, the book is easy to understand.

Earlier editions of Oral Self Care may have been ahead of their time. Today patients demand a higher standard of dental care and dental consumers are more knowledgeable of the quality of care being delivered to them. Consequently, it is the obligation of providers to deliver the services that research has proven to be most effective. Oral Self Care provides a comprehensive plan for these services.

Unlike some didactic publications this is a participant-action book. Even if you are new to behavioral techniques, as you read these chapters you are encouraged to incorporate the principles into your life as well as your practice. The chapter on stress management and coping was very valuable for me.

The section on patient assessment contains recommendations that help identify when a patient is and is not "ready" for prevention; it also presents sound practice management principles that will maintain your enthusiasm. Time saving hints for maintaining progress records are an unexpected plus in this book.

The sections incorporating the newer findings from private practice and dental fears research contain many helpful ideas not generally known prior to the recent research by the University of

I want to change things. I want to see them happen. I don't want just to talk about them.

J.K. Galbraith

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Chapter 1

Why Most Plaque Programs Do Not Work

Nature and Magnitude of the Problem in Prevention

Dentists, dental hygienists, and assistants in the 1960s and early 1970s responded to scientific findings indicating that dental caries and the periodontal diseases are largely preventable by instituting plaquecontrol programs. Initial studies from private practice reported rapid improvement in oral hygiene following home-care instruction. However, by the mid 1970s enthusiasm faded as these enthusiastic efforts failed to produce long-term change in patient hygiene. Studies often revealed regression back to initial levels of plaque and calculus (Lindhe and Koch, 1964). At best, this research has shown that without intermittent professional supervision, most patients who initially follow new home-care instruction do not maintain the behavior.

While a number of estimates of the magnitude of the problem exist, success with one out of two patients in teaching regular brushing and/or flossing is a very good result in primary preventive activities. In a university-based study of chlorhexidine rinsing by periodontal patients, we found that only one-half used the rinse fully as instructed. This closely matches the 50 percent rate of adherence reported for long-term medical regimens. Nonetheless, our success with individual patients in clinical practice encourages us to try to find the principles underlying successful behavior change so they can be applied to more patients in our practices.

Not only is starting a habit change difficult, maintaining longterm gains has proved even more difficult. Research indicates that two-thirds of patients who drop out of preventive programs do so within 90 days. Not only is there a decline over time, but when

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professional attention has ended, effects of the program have not continued. This might explain why in our studies of patients in private practices, most patients on three- and six-month recall had plaque levels no different at recall than they had before treatment and oral hygiene instruction (Weinstein and Milgrom, 1988).

On the other hand, there is evidence that people are capable of altering their self-care behaviors even without professional assistance. Shachter (1982) reports that successful long-term changes in behavior for smoking, obesity, and drug use, initiated by motivated individuals alone, is relatively common. Over repeated attempts, large numbers of individuals have been successful in changing behavior by themselves. It is important to keep in mind that while a single recommendation or specific attempt at teaching a patient a cleaning skill may not be completely successful, the probability of success from a series of well-timed professional efforts is substantially greater.

Compliance and Self-Care

Generally, preventive activities have been viewed from a "compliance" perspective (Sackett and Snow, 1979). The term defines a provider-oriented rather than a patient-oriented frame of reference. The model of the doctor-patient relationship is authoritarian; the doctor gives instructions to the patient, who is expected to comply. The ideal portrayed is that of a passive, submissive patient. Previous or other current self-care behaviors are not usually investigated.

On the other hand, treatment of chronic dental diseases, caries, and forms of periodontal disease requires a high proportion of selfcare relative to professional care. Self-care behavior has been and continues to be a substantial factor in the success or failure of health care. Studies in a variety of settings indicate that many self-care practices are nearly universal and without them any health-care system would be pretty ineffective. However, little research has been conducted in understanding self-care activities and how they interrelate and influence the acquisition of new care behaviors.

Activities of daily living require self-care. Bathing and toothbrushing are examples that often are provided to describe habitual behavior that is self-initiated, self-maintained, and self-monitored. In all, socialization of the child, together with some supplementary formal health education, "contributes a myriad of living . . . behaviors which are taken for granted as a sort of base line of responsible human activities" (Levin, 1977, p. 12).

Brushing one's teeth is an activity of daily living and need not be viewed strictly in terms of compliance or noncompliance. Studies indicate that oral hygiene is practiced regularly in all cultures. For example, Smith and Striffler (1963) reported that 86 percent of their sample of American males and 98 percent of the females brushed at least once per day. Similarly, Sheiham (1970) reported that 99.5 percent of adult British females and 90 percent of British males brushed daily. Differences between social classes were not great. Moreover, there is evidence that the majority of the British population brushed two or more times a day.

Blinkhorn (1978) found that toothbrushing is a part of the primary socialization process for the vast majority of British children; 54 percent begin brushing before age 2: mothers play the most important role in establishing the brushing habit. Blinkhorn was dismayed to find that only 20 percent (58) of the total sample of mothers had received any professional advice on how to look after their children's teeth. He concludes that dental health professionals "have failed to assist the mothers who are interested in caring for their children's teeth" (p. 224). This conclusion places primary responsibility on the dental health professional. Other conclusions are possible: that cultural norms for oral self-care behaviors exist and that individuals adopt normative patterns of self-directed health regimens.

The concept of dentist- or hygienist-imposed preventive care activities versus self-initiated care behaviors in the context of cultural or subgroup norms raises interesting questions regarding the role of the professional. It is our belief that professional recognition and help in refining *already existing* self-care patterns leads to higher longterm rates of oral hygiene activities than attempting to get patients to "comply" with prescribed regimens.

In all, the concept of "compliance" has a number of built-in inadequacies, especially when we are attempting to establish longterm preventive behaviors. Approaching the problem by examining the patient's existing self-care habits and his or her special difficulties in altering existing behaviors, is, we believe, more useful and has direct clinical utility.

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Why is it that we seem to have such difficulty improving a patient's oral care when it is performed on a regular basis by the vast majority of individuals? We believe there are several problems which function to minimize the effectiveness of programs designed to improve a patient's home care. We will discuss each in turn and suggest ways to mitigate their effect.

Problem 1. Plaque-control programs begin too early. In most practices, patients are routinely scheduled into a plaque-control program *prior* to dental treatment. Though valid, this approach results in difficulties for plaque-control programs.

To influence patient thinking and actions, dental practitioners must be aware of the individual's perceived dental needs and goals. When plaque-control programs are begun before we learn about the individual, there is no way to personalize our preventive message; moreover, patients often need the repeated visits for dental care to learn about their problems and focus attention on areas that are high priority for attention at home. Oral hygiene instruction during, and especially after, restorative and periodontal care can be very effective.

Problem 2. Plaque control often begins without patient ownership or readiness. This problem is usually closely associated with Problem 1. Basically, dental hygienists and assistants usually do not determine whether or not *the patient* feels he or she has (owns) a problem or desires to work on the problem at this time. Too often it is the therapist who really owns the problem; that is, it is he or she, not the patient, who desires the change.

Though there is little work in this important area, the research of Starfield *et al.* (1981) supports this position. These investigators found that practitioner-patient agreement about problems was associated with greater patient expectation for involvement and better health outcomes than when only the practitioner believed a problem existed.

Not everyone is ready to change self-care habits. At a given moment, many individuals are not willing to consider altering their present self-care patterns. Some are never ready. Social pressure from the dental hygienist may result in superficial acquiescence, but attempts to try out the new self-care behavior may be minimal.

The issue of responsibility for patient behavior must be addressed with a self-care approach. Paradoxically, the professional's responsibility is greater with the compliance approach, where there is no need to determine patient need or ownership of the problem, because the practitioner does all the work. On the other hand, with the self-care approach there is an attempt to determine patient perceptions of need and responsibility. Once the patient "owns" the problem, it is then appropriate for the practitioner to take some responsibility in assisting the patient to change both skill and habit. When the patient does not perceive that a problem worth acting upon exists, or when the patient does not desire to change, there is little that a practitioner can do to help at that time. Such situations can be extremely frustrating and often discourage us from involving ourselves in preventive activities. Nonetheless, contact with the patient over several years may yield a period when even the most resistant patient may become interested.

In all, the therapist should be selective in choosing patients to work with. We believe a major reason for the high failure rate of prevention and the "burnout" of therapists is lack of recognition of differences between patients.

We will discuss the process of assessing readiness in Chapter 2.

Problem 3. Lack of a personal approach to plaque-control efforts. Communication is critical. Dentist must take considerable care in introducing plaque-control programs. Gold (1974) notes that while many dentists tell their patients about plaque control, most are unaware that how they are relating this information is more important than what they are relating. The "how" of the doctorpatient interaction is defined as the process of communication. Davis (1968) found that "patterns of communication which deviate from the normative doctor-patient relationship will be associated with failure" (p. 287). Such patterns include terse interaction, and situations where the clinician is perceived as formal, rejecting, or controlling, or where he or she disagrees completely with the patient, or talks to the patient at length and does not provide an opportunity for feedback. For example, many patients believe they are already doing an acceptable job of cleaning. They may feel slighted or coerced by the dental professional's comments and suggestions: the comments intimate he or she is "incompetent" in oral self-care. Dentists must be careful in introducing plaque control; merely to raise the topic may cause patients to infer that their care habits are being criticized.

Dental educators usually stress the importance of "cleaning up the patient's mouth" prior to definitive dental treatment. This approach may cause difficulties for plaque-control programs. To influence patient thinking and actions, dental practitioners must be aware of the individual's dental needs and goals. When dentists begin plaque-control programs before learning about the individual, there is no way to personalize our preventive message. Consequently, the motivational appeal to the patient is often "canned," not personalized. The act of motivating a patient involves generating interest, showing concern, listening, and providing information. Our own interest and commitment to prevention are important factors. If we are not enthusiastic and do not believe in the efficacy of preventive activities, we will communicate this attitude to the patient.

Similarly, concern about the welfare of the patient is very important. Patients usually judge concern by the amount of time the therapist spends listening and discussing their health and their problems. Information provided need not be technical, but it must be



relevant. Patients need to understand why the information is important and how it relates to them personally. Directing the patient to examine his or her own mouth and helping the patient observe diseased tissue, plaque remaining after cleaning, etc., is very useful.

However, the research literature firmly indicates that merely giving information, the "why" of prevention, does not lead to altered behavior. As Evans (1978) notes, certain myths permeate our health education efforts. One of these is that if sufficient information is communicated and the patient understands the etiology of the disease and the effectiveness of preventive health practice, his or her behavior will change. However, as an illustration of the fallacy in this belief, consider that by the time they reach seventh grade almost all children have heard that smoking is dangerous to their health, yet about 20% of them are already smoking. Old myths die hard, however, and many practitioners continue to believe that simply providing information to the patient will lead to improved self-care.

Actually, as we have already said, providing information is of secondary concern in motivating patients. Unfortunately, dental professionals tend to provide much too much information. We seem to think that a patient needs to be taught oral microbiology.

In short, to maximize the chances of motivating patients to think and act in different ways, the message must be personalized, not "canned." Listening skills are especially important. Audiovisual materials are helpful in providing information, but they are no substitute for interest and concern for the individual.

Problem 4. Our assumptions about the reasons for patient nonperformance of plaque control are often mistaken. When we find a patient who is not flossing at all, for example, we may hear the therapist state that the patient either does not know how to floss or does not know how important flossing is; otherwise, he or she would obviously be flossing. Such statements talk about solutions, not problems. Instruction in health care is a solution for a lack of information. Frequently, however, lack of information is not the problem. We have found that when there is a gap between a patient's desired performance and his or her actual performance (which we call a performance discrepancy), it is usually a function of a

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lack of skills in establishing and maintaining a long-term habit. Though a patient may be motivated to think differently and try out a new home-care behavior, health professionals both in medicine and dentistry have paid scant attention to helping the patient manage his or her behavior. Have you been motivated enough to try a new diet or exercise program? Did you ever get any help in making it stick? Dental patients also face these problems. In Chapter 5 we will discuss in detail specific skills which can help facilitate change.

Problem 5. Old habits are automatic. This is a very common problem, and one which is difficult to overcome. Most of us have been brushing our teeth since early childhood, and it is something we perform without thinking. We daydream about what we will do next, what we should have done at the office today, etc., as we perform a skill that in fact calls for concentration and attention. The process of teaching cleaning skills is discussed in more detail in Chapter 2.

Problem 6. We assume that the patient has adequate skills to clean adequately. Careful assessment of existing patient self-care practice may be very important. Though plaque-control instruction often focuses on skill training, dentists and auxiliaries often do not systematically evaluate patient skills *prior* to instruction. Though time-consuming, such effort is invaluable in tailoring instruction to patient needs and gaining greater patient acceptance.

Knowledge of how the patient cleans can only come from observation. It is our experience that when asked to demonstrate skills, patients attempt to perform optimally. In such situations, there is social pressure to spend more time cleaning and to clean more thoroughly. As patients attempt to avoid embarrassment, awkward, unfamiliar manipulations of instruments may be evident.

Problem 7. We try to teach too much, too quickly. It is common to teach the patient how to clean all of his or her teeth in one sitting. It is, after all, a small area, and a task which takes a skilled person only 3-5 minutes to perform. However, given the amount of dental disease in this country, it apparently is a task which must be more difficult than it first appears. As we have already discussed, there are several reasons that explain why it is a difficult task. For the person with