Patient Education and Motivation in Periodontics

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ABSTRACT:

It is generally accepted that a motivated patient is a necessity if Periodontics is to be practiced successfully. The reason for this is that unlike patients in other areas of dentistry, the periodontal patient must be an active, knowledgeable co-therapist in treating his own disease. There is growing evidence that the patient's individual behavior is critical for success of periodontal therapy. Chronic periodontitis is an infectious disease characterized by a plaque-induced inflammatory lesion in the soft tissues surrounding the teeth, leading to breakdown of the tooth-supporting structures. If left untreated, chronic periodontitis leads to deteriorating oral health status with a potential impact on the daily life and functioning of the individual. Patients need realistic goals and understand that periodontal therapy is not a "quick fix" so they do not lose motivation over time. Consequently, a key issue is to motivate the patient to efficient self performed periodontal infection control. The present review article highlights the importance of patient education and motivation and its methods for successful treatment outcome.

Key words: Chronic Periodontitis, Dental plaque, Health status, Motivation, Treatment outcome.

INTRODUCTION

It is generally accepted that a motivated patient is a necessity if Periodontics is to be practiced successfully. The reason for this is that unlike patients in other areas of dentistry, the periodontal patient must be an active, knowledgeable co-therapist in treating his own disease.¹ There is growing evidence that the patient's individual behavior is critical for success of periodontal therapy.²

With the increase in understanding about the role patient motivation and compliance has on the periodontal treatment outcome, various methods have been tried to improve it.³ Greene has stated that "perhaps the most important and problem that remains to be solved before much progress can be made in the prevention of periodontal disease is how to motivate the individual to follow a prescribed effective oral health care program throughout his life".⁴

Chronic periodontitis is an infectious disease characterized by a plaque-induced inflammatory lesion in the soft tissues surrounding the teeth, leading to breakdown of the tooth-supporting structures. If left untreated, chronic periodontitis leads to deteriorating oral health status with a potential impact on the daily life and functioning of the individual.^{5,6} The most important factor in both prevention and treatment of periodontal disease is the individual's standard of oral hygiene practice.^{6,7} Consequently, a main issue is to motivate the patient to efficient self performed periodontal infection control.⁸

Oral and Periodontal Health or Disease

Kay and Locker defined oral health as: "A standard of health of the oral and related tissues which enables an individual to speak and socialize without active disease, discomfort and which contributes to general wellbeing. Hence, based on these definitions, oral health is not only the absence of oral disease, but also an important component of general health and well-being."⁹

Healthy periodontal conditions are achieved and maintained, mainly through efficient self performed oral hygiene for infection control but also through a healthy life style, for example, avoidance of tobacco use.⁷ It has been suggested that patients' attitudes towards health issues and treatment regimens are related to the awareness and perceived severity of the disease.¹⁰ With regard to patients' perception of periodontal health/disease, individuals are often unaware of their periodontal status and treatment needs. Airila-Mansson et al showed that only 1.2% of patients diagnosed with periodontitis self-reported awareness of having periodontal disease.¹¹ Symptoms reported by these subjects were mainly bleeding gums, gingival recession and sensitive teeth. This observation indicates that many individuals might very well consider their oral health as good despite having periodontitis of varying severity. In fact, a recent qualitative study by Karlsson et al revealed that patients referred for periodontal treatment had a low degree of awareness of their periodontal conditions and treatment needs.¹² Hence, the concept of periodontal health/disease is multifaceted, and it is obvious that the patients' perception of their oral health and how their oral disease may affect their general life and well-being is of importance when considering prevention and treatment of periodontal diseases.

ORAL HEALTH EDUCATION INTERVENTIONS

A health education programme is claimed to be more beneficial to the patient if it is guided by a theory of health behavior.^{10,13} The results of recent studies suggest that individualized and patient-centered educational interventions, based on health behavior theories, are preferable to conventional educational interventions in order to improve the patient's adherence to self-performed periodontal infection control.^{8,14,15}

Educational intervention programmes directed to patients in treatment for chronic periodontitis have traditionally been given "step by step," including (i) detailed information through pamphlets about signs and symptoms of the disease and their relationship to the presence of bacterial biofilms and the patients' periodontal status, (ii) demonstration of the presence of signs, symptoms and locations of the disease in the patient's mouth, (iii) detailed information about the importance of efficient daily oral hygiene followed by oral hygiene instructions, and (iv) the use of disclosing solution for plaque staining as a pedagogical tool to demonstrate where the bacterial plaque is located. Adherence with the information provided and the patient's oral hygiene status are then monitored at subsequent treatment sessions.¹⁶ Yet, motivating patients to change their oral health behavior is indeed a challenge for dental professionals and a complex issue, which has led to the introduction of Motivational Interviewing (MI) in dentistry.^{14,17-24}

MI is a client centered therapeutic method in which the therapist has an important role in increasing the client's readiness for behavior change and reinforcing his/her commitment to change.²⁵ MI was originally developed for use in the field of drug abuse but has shown to be applicable to initiate beneficial health behavior change within other areas.^{26,27} Several studies have demonstrated that MI can initiate a change in behavior after only a few freestanding interventions (1-2 MI sessions) and that the change in behavior lasts over time.^{25,28} MI also appears to improve outcomes when added to other treatment approaches or conventional methods.²⁷ However, MI is a method that requires considerable skill and its efficacy varies greatly across providers and populations.²⁷

Commonly, MI was used in combination with conventional oral health educational intervention

and/or another intervention, such as (i) telephone interviews, (ii) response cards, (iii) questionnaires, (iv) pamphlets, and (v) DVDs and videos.^{14, 17, 21, 23, 24} Almomani et al reported a positive effect of a brief MI session, as a prelude to oral health education, on oral hygiene behavior in a group with severe mental illness.²¹ Jonsson et al used techniques from the MI method as an integrated part of an individually tailored oral health education program directed to patients receiving periodontal treatment. The intervention comprised seven separate components for tailoring the program to each individual's needs; analysis of knowledge, expectations and motivation, practice of manual dexterity for oral hygiene aids, individual goals for oral hygiene behavior, continuous self-monitoring, generalization of behavior and, finally, maintenance of oral hygiene behavior and prevention of relapse. The results revealed that the individually tailored education programme, with counseling inspired by MI, was efficacious in improving medium-term adherence to self-performed periodontal infection control and was preferable to traditional oral health educational intervention.^{14, 15} Furthermore, Godard et al used MI in addition to consultation and traditional oral health education. The results were promising, with greater oral hygiene improvement, as assessed by plaque index, in a short-term (one month) perspective. Thus, there are different approaches by which MI may be used in oral health communication.²³

Methods of Patient Education¹

Once rapport is established, further learning will occur. Various methods are useful in the dental office. Trial and error is a time-consuming method which we cannot afford in spite of its value. The patient may respond to conditioning, insight learning, repetition, praise or punishment, guidance. He is conditioned to expect pain from dental treatment. This conditioning comes from past experiences, and perhaps from cartoons portraying the dentist as a mutilator of the oral cavity, who is to be feared. Friedman has stated that the psychiatrist is the most feared professional figure in our society and that the dentist is a close second. This type of conditioning can be negated by a new conditioning to positively motivate the patient. As stated previously, one way of accomplishing this is to start the first few visits on examination and personal plaque control programs so as to weaken the strong association between dental treatment and

pain. Insight learning can occur in a properly conditioned patient. This learning occurs when there is an instantaneous association between formerly unknown or poorly understood events and present progress. The obvious example occurs at the moment when a patient realizes the role of plaque in dental disease and understands that plaque, not food, is the prime target for hygienic measures.

Oral hygiene measures, once demonstrated, must be repeated, repetition facilitates mastery of these manual tasks. Praise can be used for good performances and refusal to proceed with treatment can be adjunctive techniques in the learning process. Direct guidance is used when the techniques of oral hygiene are demonstrated.

Education of the patient is a continuous process which should develop from and be based on some additional points:

1. Determine the patient's motives and desire.
2. Make him feel important.
3. Give him some attention as an active partner in treatment.
4. Use audio-visual aids.
5. Be a good listener, especially in the early stages.

To determine areas of patient difficulty in accepting treatment for periodontal disease and responsibility for personal plaque control, Kegeles has suggested a four point scheme.

Before a patient will make a preventively oriented dental appointment or practice personal plaque control, he must believe the following statements about himself:

1. As a member of the human race, I am susceptible to periodontal disease.
2. Periodontal disease is personally serious.
3. Periodontal therapy and personal plaque control are beneficial preventive steps that I may take to control the disease.
4. Periodontal disease is due to natural causes, not, for example, a punishment meted out by God for past sins.

Motivation (Need Creation)

Motivation arises from a state of anxiety which creates a state of disequilibrium in the patient. Stated differently, a patient would have a disquiet

of mind or need regarding his lack of dental health and would tend to take action to relieve this anxiety by accepting proper dental care. Such a patient has a need or motive to take action or change his behavior. A change in behavior of patient is said to have been educated. Therefore, incongruous as it may seem, the desirable end result of the dentist's efforts to educate should be the creation of a state of anxiety in the patient strong enough to compel him to act to relieve the anxiety.¹

Silverman has described two main categories of needs: biologic and social. Biological needs, e.g., oxygen consumption, must be responded to completely or death occurs. Social needs, e.g., acceptance by a peer group, need not be satisfied completely. One of the best ways to motivate a patient to practice better oral hygiene and to accept proper dental care is for the dentist himself to practice what he preaches. Auxiliaries should also be enthusiastic endorsers of such an approach to practice based on personal experience and knowledge.²⁹

Basic Ideas and Principles of Motivation

The discussion has suggested many problems in motivation while suggesting very few positive factors. However, by analysis of the problem areas and trying to solve them, many positive ideas rise. Preventive dental practice should be pursued with enthusiasm and conviction for a fee proportionate to its value. The dentist should introduce the subject of plaque control rather than delegate it to an auxiliary. Only then will the patient be convinced. Periodontal surgery, contrary to the present emphasis in dental education and practice, is not more important than oral hygiene. They are both important if their performance is indicated as a means of controlling the disease. However, it should be obvious that daily plaque removal alone can significantly reduce the active disease process in the absence of surgery, but surgery can never eliminate the disease process in the absence of plaque control.¹

A second important concept is that patients almost never really want to lose their teeth. They do, however, desire to be rid of the problems associated with teeth. Often patients will agree to lose their teeth because they are unaware of any other solution to their problem.

Third, the dental profession is teaching preventive plaque control measures too late in the

patient's life for maximum effectiveness. This is also true of dental education, which quite consistently presents its basic science courses and preclinical restorative laboratory courses before presenting preventive dentistry. Ideally, this should be the first exposure of the dental student to dentistry in his first week of dental school.¹

Fourth, most dentists unconsciously make their patients completely dependent upon them for all dental treatment. This includes plaque control through oral hygiene measures for which the patient should be completely responsible for on a daily basis. This very important point emphasizes that the dentist should act out of objective empathy for the patient rather than subjective sympathy and place responsibility for oral hygiene squarely on his patient. Only in this way can the patient be helped on a long-term basis.¹

Fifth, never forget that the typical periodontal patient is an adult with a mind crammed with all kinds of dental health information. Some of it is subconscious but nevertheless able to be recalled in times of stress. Some of this information gleaned from mass media, family, friends, must be carefully discounted and new, more accurate concepts substituted. All of this must be done in an ethical, professional manner. Some patients may have to experience a few painless appointments at first to break the chain of pain built up over many years as a dental patient. These appointments may be used advantageously to present a personal oral hygiene program. This will emphasize the importance of plaque control and allow the patient to see and feel what oral hygiene alone can accomplish in his own mouth.¹

Sixth, if a dentist recognizes his basic role in society as a psychological one based on our present need for teeth and the psychological significance of teeth, he will anticipate the patient's responses and deal with them effectively and atraumatically.¹

Motivational Principles¹

One of the basic requirements in motivating a patient is communication between patient and dentist. An informed patient will be motivated more easily than an uninformed patient. Therefore, motivation and learning proceed together. For either of these phenomena to occur, good communication between dentist and patient is a must. Communication especially depends on the

establishment of rapport with the patient. The patient may be reciting his symptoms and concerns but underneath this facade he is assessing your competence and receptiveness. Meanwhile, the doctor should be establishing that emotional bond with the patient. Other obstacles to the formation of rapport include the following:

1. A patient with no motivation at all.
2. A dentist who appears to be selling his services for personal gain alone.
3. A dentist who talks down to the patient.
4. Judgmental attitudes regarding past performances of the patient.
5. Using both the logical, intellectual approach and the emotional approach to educate and motivate the patient.

A patient then should be highly motivated for the following purposes:

1. He should accept the responsibility for daily preventive plaque control.
2. He should accept dental treatment and periodic recall examinations as a follow up to his plaque control measures.
3. He should accept the treatment and instruction for a fee that is agreeable to both himself and his dentist.

Factors Influencing Motivation

Despite the fact that motivation must spring from within the individual patient, many outside factors play a role in influencing him to take a particular action relative to his oral health

The Dentist Himself and His Role in Society¹

It is of utmost importance that the dentist handle patient hostility in the proper way for his own sake and so that he may properly influence the patient to make the correct decision for treatment and to take the proper responsibility for oral hygiene through plaque control. Another aspect of motivation as it relates directly to the dentist is his role in modern society. Some might state that his role is to preserve oral health by extracting, filling or replacing teeth but the prime role of the dentist is still more basic which is to maintain the psychological well-being of the patient. This is accomplished by well established dental techniques.

This concept in no way reduces the ultimate goals of modern dentistry, but forces them still higher to a plane where we may truly minister to body and mind.¹

The patient¹

Anxiety in this context means having a disquiet of mind relative to one's present state of health. In other words, a person feels uncomfortable and seeks out the dentist for treatment to reduce his anxiety.

However, many patients have conflicting anxieties which counteract the one previously mentioned. Some of these latter anxieties would prevent a patient from following through with his original intentions stem from unconscious conflicts that center around the oral cavity. These conflicts manifest themselves as hostility toward the dentist, the dependent situation in which the patient finds himself, and the possible loss of teeth with all of its psychological implications. To understand these conflicts better, the unique emotional significance surrounding the oral cavity should be noted.

Additional Factors Which Influence Patients¹

Periodontal disease is quite painless in the initial, treatable stages and therefore, pain doesn't serve as a great motivational purpose in causing people to act in a positive manner. Because old age is dreaded in our society, anything that will preserve the illusion of youth is valued rather highly. The loss of occluso-vertical dimension is one of the greatest single factors in creating the effect of aging in the face. Vertical dimension may be restored by full dentures, but the possible loss of teeth is one of the strongest motivating factors that impel a patient to seek dental care.

The consequences of bad breath are heavily promoted by the manufacturers of mouthwashes. Mouthwashes are quite useless in the control of periodontal disease because their use gives the illusion of cleanliness, thereby preventing the patient from seeking any real help for his problem. Another factor which may be a barrier to successful motivation is the fact that most periodontal patients are adults. Adults are more difficult to change from their habits of neglect because their previously held concepts must be overcome before learning can take place. The other aspect is that an adult can learn from another's experience and can accept long-range goals better than a younger patient can.¹

Removal of bacterial plaque from the teeth and gingival sulcus is the major preventive measure in the treatment and control of periodontal disease. The attainment of oral cleanliness is made infinitely difficult the following factors:³⁰

1. Lack of social pressure to have a plaque-free oral cavity.
2. Absence of pain in periodontal disease.
3. Pleasures of eating food.
4. Physical features of the oral cavity.
5. Physical features of the plaque.
6. The methods available which are inefficient.
7. Excessive time consumption.

The first two factors have already been discussed, and both almost encourage poor oral hygiene. The gratifying taste of food during and after a meal certainly is a deterrent against cleansing one's mouth immediately after eating. Furthermore, the time-worn admonishment to brush after each meal may only reinforce the well-accepted but erroneous concept that the object of tooth cleansing is food removal. Patients and dentists laboring under this concept will have difficulty in appreciating the fact that it is the plaque which must be removed at least once a day as a minimal requirement of oral cleanliness for disease control.¹

CONCLUSION

Patients need realistic goals and need to understand that periodontal therapy is not a "quick fix" so they do not lose motivation. Patients should feel positive that their efforts will be rewarded and as the name suggests, they will be supported in those efforts. Motivation is much easier when the task is shared. In the same way that the golfer achieves his aims with the help and support of his caddy, so we can help our patients achieve their dental aims. It requires effort, caring and persistence and then we can celebrate their successes.

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