

Review Article

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Patient Education and Motivation



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Abstract

It is generally accepted that a well 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 partner or co-therapist in treating his own disease. There is ever-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 need to 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. This review article highlights the importance of patient education and motivation and its methods for successful treatment outcome..

Keywords: Chronic Periodontitis; Dental plaque; Health status; Treatment outcome; Motivation

Introduction

It is generally accepted that a well 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 partner or co-therapist in treating his own disease [1]. There is ever-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 difficult 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 daily self-performed oral

hygiene [6,7]. Consequently, a key issue is to motivate the patient to efficient self performed periodontal infection control [8].

Oral and periodontal health or disease

Kay & 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 or embarrassment 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. [11] showed that only 1.2% of patients diagnosed with periodontitis self-reported awareness of having periodontal disease. 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 [12] revealed that patients referred for periodontal treatment had a low degree of awareness of their periodontal conditions and treatment needs. 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 [8,14,15] 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.

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-/patient-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 several 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 seems to last over time [25,28]. MI also appears to improve outcomes when added to other treatment approaches or conventional treatment methods [27]. However, MI is a method that requires considerable skill and its efficacy varies greatly across providers, populations, and target problems [27].

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 education [1]

Once rapport and communication are established, further learning will occur. Several methods are useful in the dental office. Trial and error is a time-consuming method which we cannot afford in spite of its possible value. The patient may respond to conditioning, insight learning, repetition, praise or punishment, direct guidance. Conditioning has already been operative in the past experiences of the patient. 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 perhaps 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 spend 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 developments. 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 by both instructor and patient. Repetition facilitates mastery of these manual tasks. Praise can be used for good performances and reprimand or refusal to proceed with treatment can be adjunctive techniques in the learning process. Direct guidance is, of course, 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 as well:

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

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 to assess where the patient is having difficulty.

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 tension or 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 and practicing good oral hygiene. Such a patient has a need or motive to take action or change his behavior. A patient demonstrating a change in behavior 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. The need for dental health resembles a social need in that a patient may sink to almost any level of dental health without threatening his life. Whether the dentist will accept a largely unmotivated person as a patient is, of course, an individual matter. 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 foregoing 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 emerge. Preventive dental practice should be pursued with enthusiasm and conviction for a fee proportionate to its value. The dentist himself should introduce the subject of plaque control rather than delegate it to an auxiliary. Only then will the patient be convinced of its importance. 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. They welcome preventively oriented treatment plans rather than a philosophy which says, "You will lose your teeth someday, why not today?"

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]. Allport suggests the term "functional autonomy" for habits which if formed early in life becomes so automatic that they continue to be followed long after the primary reason for their establishment is forgotten. Dental curricula should be changed to take advantage of this principle and put maximum emphasis on prevention and control, rather than repair and restoration [30].

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 co-therapist, the 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 erroneous and must be unlearned. Some of it is subconscious but nevertheless able to be recalled in times of stress. Some valued opinions of authority figures in whom the patient believes implicitly may have to be challenged and changed. 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 a traumatically [1].

Motivational principles [1]

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. But, before much learning can occur, the patient must be somewhat motivated to learn. Therefore, motivation and learning proceed together. For either of these phenomena to occur, good communication between dentist and patient must be established. Communication especially depends on the establishment of rapport with the patient. Rapport is an emotional state in which logical, intellectual factors play but a small role. 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. Rapport is distinct from transference because the latter is a unilateral action on the part of the patient and is an obvious block to rapport.

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. Once you have selected which method to use, do not switch back and forth. Choice of the approach is dependent upon knowledge of the patient's values and needs.

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 and as a worthwhile investment of time and effort in himself.
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 part in influencing him to take a particular action relative to his oral health.

The dentist himself and his role in society [1]

It is of utmost importance that the dentist handle patient hostility in the proper manner for his own sake and so that he may properly influence the patient to make the proper 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. While this is a description of some of the methods used, the prime role of the dentist is still more basic. Therefore, the basic role of the dentist is one of helping to maintain the psychological well-being of the patient. This is accomplished by dental techniques which are well established. 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].

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 physician or dentist for treatment to reduce his anxiety.

However, many patients have conflicting anxieties which counteract the one previously mentioned. Some of these latter anxieties which 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 or tooth structure with all of its psychological implications. To understand these conflicts better, the unique emotional significance surrounding the oral cavity should be reviewed.

Additional Factors Which Influence Patients [1]

Periodontal disease is quite painless in the initial, treatable stages and therefore, pain serves no great motivational purpose in causing people to act in a positive manner. In fact, periodontal patients are often comfortable when they come to the Periodontist and become uncomfortable temporarily after treatment. 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. On the other hand, 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 by one or more of the following factors [31]:

1. Lack of social pressure to have a plaque-free mouth.
2. Lack of pain in periodontal disease.
3. Pleasures of tasting and eating food.
4. Physical features of the oral cavity.
5. Physical features of the bacterial plaque.
6. The inefficient methods available.
7. The excessive time required.

The first two factors have already been discussed, and both almost encourage poor oral hygiene. The gratifying taste of good 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 mouth and 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 acceptable level 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 over time. Patients should feel positive that their efforts will be rewarded and as the name suggests, they will be supported in those efforts (as opposed to the previous term of "being maintained" which was rather passive). 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. We can then celebrate their successes.

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