

Factors influencing patients' satisfaction with complete dentures: a qualitative study

Fatores que influenciam a satisfação dos pacientes com prótese totais: estudo qualitativo

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ABSTRACT

Objective: The treatment most used worldwide for edentulism is conventional complete dentures, and the most important factor for the success of denture treatment seems to be patient satisfaction. The present study aims to use a qualitative approach to investigate factors that were previously associated with patient satisfaction with dentures by quantitative techniques (correlational studies). **Material & Methods:** twenty patients (12 women and 8 men, age 59-87) participated in open and semi-structured interviews, both pre- and post-treatment. All the interviews were recorded, listened to, and transcribed verbatim, after which the content was analyzed thematically. **Results:** for most respondents, tooth loss represented, first of all, difficulty chewing and eating. Some patients have not accepted the loss of their teeth and felt sadness and shame. Other patients have adapted to their dentures, through acceptance. Regarding expectations, patients expressed very high expectations, especially for the stability and adjustment of dentures, and also for a better appearance. The majority of respondents showed great satisfaction with treatment outcomes; their expectations were met, and the dentures did provide functional benefits. Patients also believed that a trusting relationship between the dentist and the patient plays a fundamental role in treatment outcomes, and they reported that currently dentists are more open to dialogue with their patients. **Conclusion:** confidence between the dentist and the patient plays a fundamental role in their evaluation of the treatment outcomes.

KEYWORDS

Patient expectations; Edentulism; Tooth loss.

RESUMO

Objetivo: O tratamento mais utilizado em todo o mundo para o edentulismo são as próteses totais convencionais, e o fator mais importante para o sucesso desta terapia parece ser a satisfação do paciente. Este estudo tem como objetivo utilizar uma abordagem qualitativa para investigar os fatores que foram previamente associados (em estudo quantitativos) com a satisfação dos pacientes com as próteses totais. **Material e Métodos:** vinte pacientes (12 mulheres e 8 homens, entre 59 e 87 anos de idade) participaram em entrevistas abertas e semi-estruturadas, tanto antes quanto após o tratamento. Todas as entrevistas foram gravadas, ouvidas e transcritas, e o conteúdo foi analisado tematicamente. **Resultados:** para a maioria dos indivíduos, a perda dos dentes representa, antes de tudo, dificuldade em mastigar e comer. Alguns pacientes não aceitaram a perda do dentes, e sentiam-se tristes e envergonhados. Outros pacientes adaptaram-se às próteses, por meio da aceitação. Os pacientes expressaram expectativas bastante altas, especialmente quanto à estabilidade e adaptação das próteses e também quanto à aparência. A maioria dos pacientes demonstrou grande satisfação com os resultados do tratamento, suas expectativas foram atendidas e as próteses ofereceram benefícios funcionais. Os pacientes também acreditam que uma relação de confiança com o dentista é de fundamental importância para o resultado do tratamento. Os pacientes reportaram ainda que atualmente os dentistas são mais abertos ao diálogo com os pacientes. **Conclusão:** a confiança entre o dentista e o paciente tem papel fundamental na avaliação dos pacientes quanto ao resultado da terapia.

PALAVRAS-CHAVE

Expectativa dos pacientes; Edentulismo; Perda dos dentes.

INTRODUCTION

Edentulism can have several causes, among which are trauma, lack of oral hygiene, alcohol consumption, stress, and smoking. The absence of teeth can have a negative effect on nutrition, phonetics, aesthetics, and therefore self-esteem, reducing the quality of life of elderly edentulous individuals [1].

The most common treatment for edentulism worldwide is complete dentures, which can restore some of the functions that were lost along with teeth. Although there is a current trend of conservation of natural teeth throughout life [2], there is still a need for complete dentures in a worldwide aging population [3, 4].

In addition to the rehabilitation of the masticatory system, the most important factor for the success of denture treatment is patient satisfaction, which is regarded as one of the most difficult tasks for the dental practitioner to achieve [3]. Several quantitative [correlational] studies [5-9] have sought to better understand the factors influencing patients' satisfaction with their dentures.

Previous correlational studies [5,6,9,10] have demonstrated a variety of factors that seem to play an important role in patients' satisfaction with their dentures: patients' expectations and previous experiences with dentures, the patient-dentist relationship, and the discrepancies between the ratings of dentists and patients regarding treatment results. However, quantitative studies fail to present a deeper understanding of complex psychosocial interactions [11] that may influence patient satisfaction. They also did not give useful clues on how health professionals can modify their methods to achieve more patient satisfaction.

Alternatively, the use of qualitative research methods may help to elucidate how those psychosocial factors influence patient satisfaction with their complete dentures. The semi-structured interviews have attracted

interest and become widely used [12,13]. This interest is associated with the expectation that the interviewed subjects can better express themselves in an open interview than in standardized interviews or questionnaires. Thus, the qualitative findings may facilitate the interpretation of the correlations previously encountered in quantitative data sets.

Considering this, the present work aims to evaluate the factors that may influence patient satisfaction regarding their complete dentures using a qualitative approach.

MATERIAL & METHODS

Subjects

The sample was comprised of twenty patients (n = 20) who are edentulous patients undergoing complete dentures treatment at the Dental Clinic of the School of Dentistry, the University of Taubaté, in Taubaté, Brazil, during the year of 2012.

The sample selection was made through patients' charts to be more comprehensive, and included patients of both genders with a variety of ages, marital, and occupation statuses. Some patients had never used dentures and were undergoing treatment for the replacement of old dentures, those some had removed all remaining teeth recently, and some have been edentulous for a long time. Patients that did not consent to participate or those with previously-diagnosed cognitive impairment were excluded.

All volunteers signed an informed consent form agreeing to participate. The research was approved by the Ethics on Research Committee of the University of Taubaté and run under the protocol CEP/UNITAU No 079/12.

Interviews

This study used exploratory and descriptive content through open and semi-structured face-to-face interviews [12]. Our goal was to obtain broader and more subjective information about patients' feelings and concerns toward making

new complete dentures, allowing a better comprehension of the socio-emotional issues among this sample. The data were collected by means of a script, which was divided into pre- and post-treatment. The script was based on previously identified factors that may interfere with patients' satisfaction with their dentures.

To start the interviews, the single interviewer (JCMS) gathered data about patients, such as age and sex, and achieved a good relationship and mutual understanding between the interviewee and interviewer.

In the pre-treatment interviews, we sought to investigate the major difficulties patients faced after tooth loss: difficulties caused by missing teeth and/or the use of inappropriate dentures in their daily life. We also tried to understand their feelings associated with edentulism, feelings and expectations regarding complete dentures, and what patients think about their relationship with their dentists. During post-treatment interviews, we also made an attempt to understand the degree of satisfaction with their new dentures, if expectations were met, and if their relationship with the dentist interfered with their satisfaction. Each interview took an average of 50 min. The sample size showed to reach data saturation along the interviews. The interviews were tape-recorded, listened to, and transcribed verbatim, then the collected data were read by the investigators individually and subsequently thematically analyzed by all investigators as a group until consensus was reached.

RESULTS

Twelve women and eight men were interviewed, the ages of the patients ranged from 59 to 87 years, with an average of 68.8 years. In relation to the degree of education, 19 patients had not completed elementary school. Fifteen patients were undergoing treatment to replace inadequate dentures, three patients wished to replace the upper dentures and would use lower dentures for the first time, and two patients had never used complete dentures before.

The thematic analysis of the data led to five important themes:

Problems and difficulties related to edentulism

For most respondents, the loss of their teeth represented, first of all, difficulty chewing and eating.

"I had difficulty with chewing, some stuff I am not able to eat. I am just able to eat soup, stuff like that."

"Of course being without teeth isn't good, huh. You don't chew, you can't eat at all. It is like going to a barbecue and then you cannot eat."

Another patient believed that his problems were due to bone resorption caused by loss of teeth.

"When I lost my teeth, I lost the bone, too, so that was the biggest problem, it is difficult to hold the dentures."

Another problem revealed by the respondents was social in nature.

"The biggest problem was the work, I've lost several jobs because of the lack of teeth. . . . People have prejudice."

But other patients reported that they did not encounter any problems.

"I had no problem, since I always eat quietly, slowly."

"Actually I had no problem, no shame, it was so normal"

The feelings

Some patients have not accepted the loss of their teeth; their feelings were negative, and they felt sadness and shame.

"I was too sad. Whenever I was alone I cried."

"I was sad, yes, I was very ashamed."

"Embarrassed to talk and dentures fall out... ."

Other patients have adapted to their dentures, mainly through acceptance.

"I was not sad. It doesn't happen only to me. Life moves on."

"I was not sad, it was normal. This kind of stuff may happen."

"No, my teeth just annoyed me, took me many hours of sleep, so I wasn't even sad, I saw it as a solution."

The expectations

Regarding patients' expectations, it was observed that the most frequent expectations were about the denture quality, especially about stability and adaptation and also a beautiful appearance.

"I'm sure it will be fine. . . . The most important thing is to feel confident, and my confidence is related to eat well."

"I'm very excited, I'm going to be born again. Because before I only thought about dying. But now, after I got the treatment I was encouraged even more. "

"I smile a lot and I think with the new dentures I'll smile twice, so happy."

"I can chew better, huh. And it will do just good to my health."

"I hope it is going to be perfect, complete, right, and will fit well on me."

Due to an exchange of experiences with other denture users or even their own previous experience, patients tend to plan strategies to overcome the potential problems arising from the use of dentures.

"Hopefully, I will not need to use the product that holds the denture. And this will greatly add ease now."

"After receiving the new dentures, it will be a new life. I will tolerate that, I know some people do not tolerate. I am sure I can tolerate."

"I can't wait. But they put fear in me, that I cannot tolerate, that it is so bad. But I made a promise to God, so I will tolerate."

Another patient sought to have better social conviviality after insertion of the new dentures.

"I want to go to church with my wife . . . and I want to get a better job, that's why I'm here."

The dentist-patient relationship

Patients believed that the trust between the dentist and the patient is important and has a fundamental role in the outcome of the treatment.

"I think if you don't have confidence there is no work, there's no way to pursue things."

"So dentists, like any professional, we have to trust each other, there has to be mutual confidence."

"Of course it influences the outcome. Because if the denture is not that good, at least by the friendship it will be fine."

"I have much faith in them. They are very affectionate with me, they comfort us."

Patients reported that the dentists are nowadays more open to conversations. Dentists help their patients feel confident and talk about the treatment, clarifying patients' doubts.

"I think they are more aware of people's needs. They do not just extract teeth, they advise people, dialogue more, and at that time it is not like that."

"They explain everything right, and then they make you feel confident."

Satisfaction after treatment

Some respondents showed total satisfaction with the result of the treatment and expressed happiness and optimism. They highlighted functional and aesthetic satisfaction.

"Worth the wait, because the result looks great, huh, it is very good."

"I can eat well and it is comfortable too. . . . It is very beautiful."

"It was good, very good, I liked it. It was quite different, everybody liked it when I switched."

"Oh I love it, when I smiled for the first time I ever fell in love with the teeth, it is very beautiful."

"My wife liked it and me, too."

Other patients were satisfied with their dentures but mentioned that they needed more time to adjust and that the dentures hurt at first.

After a few days and adjustments made by the dentist, the discomfort was solved.

"It was good, I liked it, you know, they are to be congratulated. But it was a little bit difficult to get used to it. It hurts a little bit sometimes."

"It took me a bit to fit with the bottom one, but I was kind of expecting it. . . . Now I can smile more and I can eat whatever I want."

"They repaired where I told them to and now it is ok. . . . Now I can smile."

"Now it is stable and doesn't hurt, but if I have to adjust it more, I will turn back."

Two patients did not demonstrate total satisfaction because their dentures were not as adapted and stable as expected. But the denture aesthetics satisfied them.

"Everything is still the same. I like it, you know, it's not that I didn't enjoy it, it was beautiful, but I am not easy, it will be difficult for it to hold on."

"I hoped it would be different. I thought it was going to hold more."

DISCUSSION

For most patients, the loss of all teeth represents, first of all, difficulty chewing and eating. However, other patients reported they did not have any functional or esthetic problems, and highlighted how much they benefited from tooth extraction and use of dentures. One patient reported he has been a victim of prejudice due to lack of teeth, and then faced social problems, such as unemployment. A previous study also noticed the same perception about functional difficulties for chewing and eating. The same study included the existence of psychological factors, trauma, and rejections in interpersonal relationships as a result of the lack of teeth [13].

The feelings relating to tooth loss were quite negative, making it clear that these feelings are not only due to aesthetic or functional problems that tooth loss brings, but also because the teeth and mouth have important psychological significance. However, other respondents demonstrated their feelings through acceptance, showing that some patients

can see the positive side of negative health events, overcoming their difficulties instead of succumbing to the negative focus on impairment and disease usually associated with quality of life measurements [11].

Nonetheless, expectations for the new dentures are quite high, as noted in several previous studies [7-9]. Patients expect the prosthetic rehabilitation to solve problems related to edentulism and also give them some comfort for the negative feelings brought by edentulism. Those feelings explain the higher expectation rates found on previous quantitative data [7-10].

In the course of the interviews, the individuals said that dentists are more open to conversations nowadays, clarifying patients' doubts and allowing patients to feel more confident with the treatment results. This feature was considered very positive, as it provides more emotional comfort to help overcome the negative feelings related to edentulism, as previously reported [2]. Patients believe that the trust between the dentist and the patient is important and has a fundamental role in the treatment outcome, as noted previously [3, 9].

It was possible to verify that 11 patients were satisfied with the functional aspects as well as the aesthetics of their dentures. Four respondents felt more benefit from denture function than with aesthetics, and five were more satisfied with the aesthetics than function.

Sixteen patients were satisfied with the appearance of their new dentures, and 15 with functional aspects. This result corroborates earlier studies, in which most patients were satisfied with the appearance and masticatory function of their new dentures [7-9].

Some respondents showed total satisfaction with the result of the treatment and expressed happiness and optimism. Other patients were satisfied with their dentures, but mentioned that they needed more time to get used to them. They also reported that their dentures hurt at first, but after a few days and with proper adjustments made by a dentist, the discomfort was resolved. This brought a sense of comfort, attention, and acceptance of their complaints.

Only two patients were not satisfied with their dentures, which are consistent with previous reports [3]. The patients that were not satisfied with their dentures (regardless of the denture quality) might be a very interesting sample for further investigation about the factors involved with their dissatisfaction and how these factors may be modified to achieve higher satisfaction rates.

A patient's satisfaction is almost synonymous to his/her ability to adapt to dentures. Patients generally expect their dentures to cause them no pain, let them talk, chew, and look good. However, the patients also are typically prepared to accept the limitations, since those limitations are explained to them and all procedures are meant to assist them in adapting. This is the reason the dentist's attitude helps a lot in the adaptive process. Achieving a trusting relationship in the very beginning of patient care by explaining the limitations and possibilities of denture treatment helps patients to fit their expectations to a realistic level. During the treatment, having a dentist show patience and acceptance of the patient's claims, rather than labeling him as a "difficult patient," helps with the adaptation process and seems to be key in achieving higher satisfaction rates.

CONCLUSION

The patient's expectation is one of the most important factors that influence the success of therapy. For the sample interviewed, the expectation of the treatment generates great anxiety, especially in relation to denture stability and function. Respondents related that confidence between the dentist and the patient plays a fundamental role in their evaluation of the treatment outcomes. Improving patient-dentist relations may help to achieve higher satisfaction rates.

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