

Patient' satisfaction with dental care: an integrative review

Leonardo Turra*; Pablo Zanetti*; Lilian Rigo**

* Student, Dental School, Faculdade Meridional

** Professor, Dental School, Faculdade Meridional

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ABSTRACT

The objectives of this study were to understand patients' perceptions and respect for the quality of dental services provided and to evaluate their satisfaction with professional dental surgeons, by considering the relationship between the professional and the patient, trust in use, satisfaction with the treatment performed, understanding, and intention to return for future procedures. A literary review, considering publications from 2005 to 2020 in English and Portuguese, was conducted. The following sources of information were used: Medline/PubMed and BVS/Bireme. For the survey, we used the terms 'patient satisfaction with dentist' and 'patient satisfaction with dental treatment' and the descriptors 'dentist', 'dentistry', 'satisfaction', 'dissatisfaction', and 'healthcare' in two languages; consulted in the plural and singular and in synonyms; and used the Boolean terms OR to distinguish them and AND to associate them. Fifty-seven articles from publications from different countries were included according to the inclusion criteria. The findings revealed that people with the lowest socioeconomic status were the most dissatisfied with professionals. Satisfaction concerning their needs and the quality of care provided by the dentist was related to good interpersonal interactions. In addition, the physical characteristics of the facilities and cost of treatment could lead to dissatisfaction with dental services. We conclude that aspects of affectivity, such as trust and a good relationship with the professional and their team, increase the degree of satisfaction.

Descriptors: Patient Satisfaction. Trust. Dentist. Outcome Assessment, Health Care.

1 INTRODUCTION

User satisfaction is an indicator of healthcare quality based on the patient's perception¹. In addition, it describes the degree to which patients' needs are met and an

acceptable standard of service is provided, based on their expectations².

The most common way to understand the concept of satisfaction is in terms of expectations and the perception that users have

of services received. What is often measured is not satisfaction itself, but the perception of services and the prior expectations of users³.

Satisfaction with a certain aspect of a service can be assessed by the user as being positive or negative, and satisfaction level can be measured by the difference between expectations and what is obtained. Satisfaction is generated by the feeling of having been well attended to and the fulfilment of expectations. Dissatisfaction results when performance is below expectations⁴.

Many factors influence the level of patient satisfaction. In dental care, these include competence as well as interpersonal factors, convenience, cost, and facilities². When professionals provide information with ease, clarity, and good communication, they are perceived as having good interpersonal qualities⁵. Patient satisfaction and well-being are criteria for successful treatment⁶.

Some studies have found that trust and a good relationship with the professional increase the degree of patient satisfaction^{7,8}. A complex process of trust and satisfaction balances consumer expectations with perceptions of the service or product in question⁹. The difference between satisfaction and trust is that the former refers to the evaluation of an experience already lived, whereas the latter has the propensity for instability oriented towards the future¹⁰.

Two large groups of factors related to satisfaction stand out: One is related to the service and its providers, and the other is inherent to the users themselves⁴.

One of the main goals to be achieved by health service providers is patient satisfaction¹¹, because, in addition to better adherence to treatment, satisfied patients represent revenue, a good reputation, their

return when in need of services, better results for the company, and a positive image of the professional¹². On the other hand, dissatisfied patients can result in a bad reputation, difficulties when prospecting new customers, loss of revenue, and trouble remaining in the labour market¹³.

Many studies have been carried out in the social and health areas that have aimed to determine the expectations of patients and the degree of satisfaction with services^{7,14-16}. Health professionals, in general, are not good judges of patients' actual preferences¹⁷, in part because patients often do not express their expectations and needs¹².

Thus, with the purpose of offering subsidies that allow reflections focused on the analysis of the dentist-patient relationship, from the perspective of social and behavioural issues involved, evaluating the satisfaction with the dental service provided and the satisfaction with the dental surgeon by their patients, justifies the relevance of carrying out this work, based on an integrative literature review.

The objective of this study was to understand patients' perceptions of the quality of the dental service provided and to assess their satisfaction with the professional and dental surgeon, considering the relationship between the professional and the patient, and the established trust and satisfaction with the treatment performed.

The study hypotheses were: (1) patient satisfaction with dental service will depend on the physical structure of the site; the speed of the appointment scheduling and wait time for assistance, and (2) patient satisfaction with the professional will depend on trust established between them; good communication by the professional, skills and competence in solving dental procedures.

2 METHODS

The method performed was an integrative literature review^{18,19}. A protocol for conducting the work was created: identification of the research problem, hypotheses, search strategies, study selection, data extraction, data analysis, and presentation of results.

The research question was focused on the following dentistry scenario: what is the level of patient satisfaction with the dental care provided and with the professional who attended to them in a dental office or clinic?

The databases used were PubMed/MEDLINE and the Virtual Health Library (BVS)/Bireme. The terms were consulted in the plural and singular, as synonyms and antonyms, and with the Boolean terms OR to distinguish them and AND to associate them, in order to cover the totality of publications. The search strategies are listed in chart 1.

Cross-sectional observational, retrospective case-control, and prospective cohort studies were included, in addition to studies with a qualitative approach in English, Spanish, and Portuguese, published between 2005 and 2020, which presented individuals who reported satisfaction with the dental service or dental professional.

Case report studies and literature review articles as well as consensuses, official notes, letters to editors, guidelines, and conference abstracts were excluded.

The titles and abstracts were read in the first analysis. Studies that met the inclusion criteria were subjected to a full-text analysis.

A standardised extraction form was used to collect the following data: author/year of publication, year of research, country of conduct, methodological approach, study design, sample size.

Chart 1. Search strategies

Data Base	Key words
PubMed	("Patient" [Mesh] OR "Patient" OR "Patients" OR "Patient Satisfaction" [Mesh] OR "Patient Satisfaction" AND "Satisfaction" [Mesh] OR "Satisfaction" OR "Trust" [Mesh] OR "Trust", OR "Trust In The Professional" [Mesh] OR "Trust In The Professional" OR "Trust In The Dentist" [Mesh] OR "Trust In The Dentist" OR "Dental Care" [Mesh] OR "Dental Care" OR "Health Care" [Mesh] OR "Health Care" OR "Quality of Health Care" [Mesh] OR "Quality of Health Care" OR "Attitude of Health Personnel" [Mesh] OR "Attitude of Health Personnel" OR "Consumer Behavior" [Mesh] OR "Consumer Behavior" OR "Dissatisfaction" [Mesh] OR "Dissatisfaction" OR "Confidence" [Mesh] OR "Confidence" AND "Dentistry" [Mesh] OR "Dentistry" OR "Dentist" [Mesh] OR "Dentist" OR "Dentist-Patient Relations" [Mesh] OR "Dentist-Patient Relations" OR "Doctor-Patient Relations" [Mesh] OR "Doctor-Patient Relations" AND "Public Dental Service" [Mesh] OR "Public Dental Service" OR "Private Dental Service" [Mesh] OR "Private Dental Service" OR "Private Office" [Mesh] OR "Private Office" OR "Private Consultant" [Mesh] OR "Private Consultant" AND "Case-control study" OR "Case-control studies" OR "Cross-sectional study" OR "Cross-sectional studies" OR "Cohort study" OR "Cohort studies" OR "Observational study")
BVS	("Patient" OR "Patients" OR "Patient Satisfaction" AND "Satisfaction" OR "Trust" OR "Trust In The Professional" OR "Trust In The Dentist" OR "Dental Care" OR "Health Care" OR "Quality of Health Care" OR "Attitude of Health Personnel" OR "Dissatisfaction" OR "Confidence" AND "Dentistry" OR "Dentist" OR "Dentist-Patient Relations" AND "Public Dental Service" OR "Private Dental Service" OR "Private Office" OR "Private Consultant" AND "Case-control study" OR "Case-control studies" OR "Cross-sectional study" OR "Cross-sectional studies" OR "Cohort study" OR "Cohort studies" OR "Observational study").

3 RESULTS

The last search was performed in May 2020, and the search strategy resulted in 1,206 eligible articles (582 from PubMed/ MEDLINE and 624 from VHL). A total of 545 articles were excluded through the filters: publications between 2005 and 2020 in English, Spanish, or Portuguese, resulting in a search of 659 titles and abstracts.

Of the 659 articles found among the titles and abstracts read, 593 studies were removed as duplicates, or because they did not address the proposed topic. A total of 66 of the pre-selected articles were obtained and submitted for a full analysis of their content. After a critical and thorough reading, nine articles were excluded because they did not meet the inclusion criteria. Of the 57 that were part of the final sample, six used qualitative methodological approaches, and 51 used quantitative approaches.

A flowchart was built to facilitate the selection and inclusion process as well as the reasons for excluding articles, and the final number of articles that underwent qualitative and quantitative analyses. Figure 1 is based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flowchart used for systematic reviews²⁰.

As for the year of publication, the years 2019^{6,8,11,16,21-27} and 2018 had the highest number of articles²⁸⁻³⁸, with 11 per year, followed by 2015 with seven articles published^{14,39-44}, 2020 with five⁴⁵⁻⁴⁹, 2017 with four^{1,50-52}, 2010⁵³⁻⁵⁵, 2012⁵⁶⁻⁵⁸, 2014^{2,59,60}, and 2016^{15,61,62} with three articles each; 2005^{63,64}, 2011^{65,66}, and 2013^{7,67}, with two articles per year, and 2008¹² with only one article published.

Regarding the methodological approaches used, in 51 studies, the quantitative methodological approach^{1,6-8,11,15,16,21-31,34,36-57,59-63,65-67} was used; in four studies, the qualitative methodological approach^{12,35,58,64} was used; and in

the other two studies, a mixed approach (qualitative and quantitative) was used^{32,33}. Therefore, studies that used quantitative approaches were more frequent than those that used qualitative or mixed approaches, with a predominance of structured questionnaires and scales.

Several variables seem to be associated with satisfaction with dental care; however, the most reported in the studies were: type of service used, demographic characteristics of users (age, gender, socioeconomic status, education), contextual variables of the place of care, and dentist-patient interpersonal variables. This study revealed that the vast majority of users were satisfied with the service provided as well as with health professionals^{7,15,21,27,31,44,48,59}.

Martensson et al.⁷ reported that having confidence and a good relationship with the professional increased the degree of satisfaction. For Armfield et al.,⁵⁹ the most common reason for satisfaction with dentists was the interpersonal characteristics of the dentist and team. In addition, it was observed that socioeconomically disadvantaged users were more satisfied with oral health services and that satisfaction increased with age^{21,24,36,37}.

In some contexts, slightly higher dissatisfaction with service was reported, especially in groups with more serious illnesses and who expected more targeted care, i.e., the user's health status was taken into account in the answers about satisfaction^{11,25,30-32,34,39,51-52,59}. Epstein et al.³² reported dissatisfaction rates in cancer treatment groups of 29% before therapy and 21.0% afterwards. The lack of clarity on how, when, and from whom oral cancer patients should receive oral health education contributed to this high rate of dissatisfaction. Hanisch et al.³⁴ reported that most users with rare diseases were dissatisfied with the German health

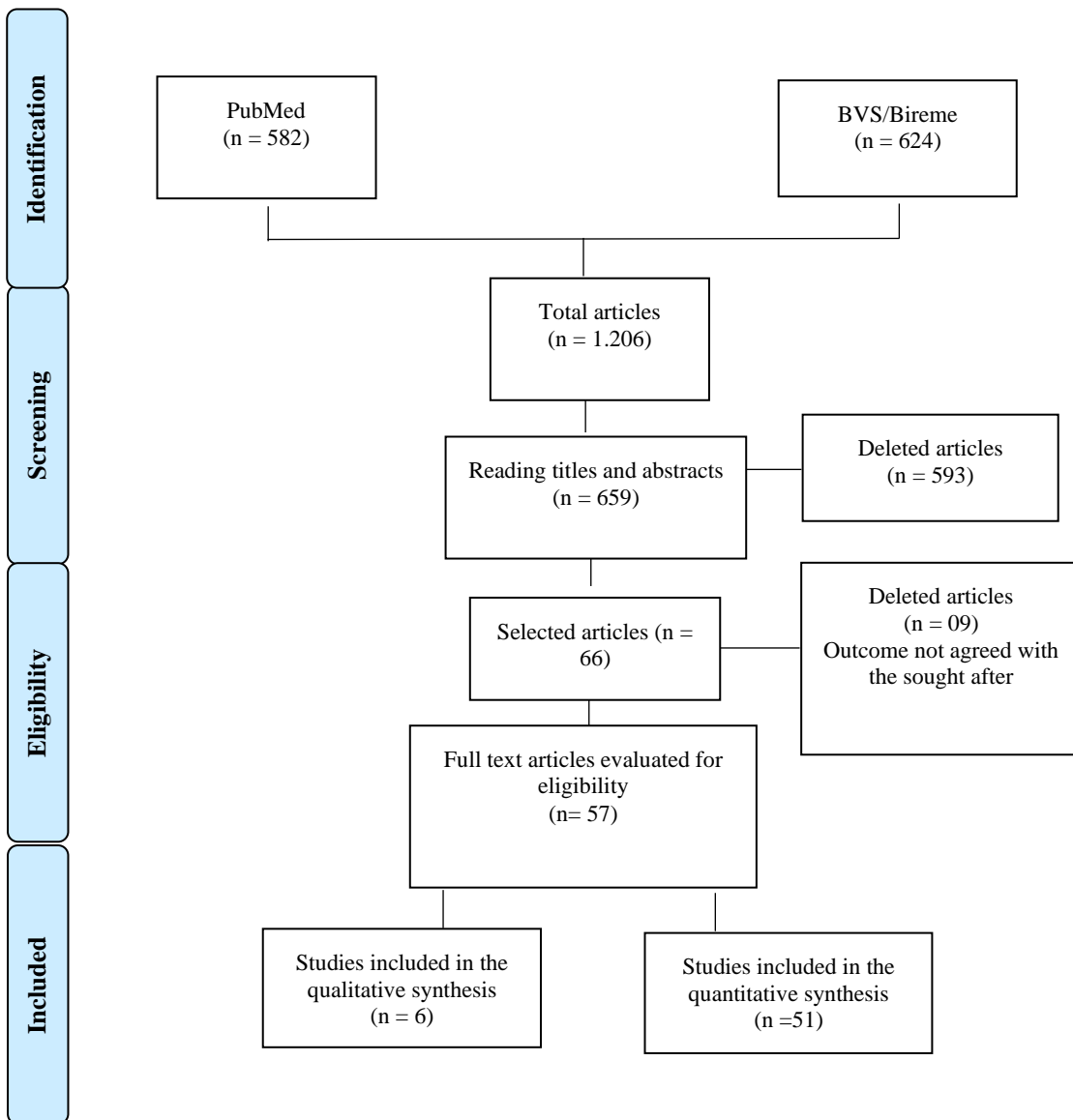


Figure 1. PRISMA flowchart used to capture articles included in the integrative review

system and its support regarding dental care. Carreiro et al.³⁰ described greater dissatisfaction and fewer dentist–inhabitant relationships in contexts of social inequality. For Souza et al.,¹¹ dissatisfaction was associated with contextual variables (city location, human development index, GINI index, presence of dental specialty centres, and oral health coverage in the public service). According to Eslamipour et al.,³¹ the main causes of dissatisfaction were the high cost of services (60%) and insufficient health

insurance coverage (40%). Anderson et al.⁶³ cited relative dissatisfaction with the accessibility of all services, especially assistance services. Martins et al.³⁹ associated dissatisfaction with socioeconomic conditions, oral health subjectivity, health professionals’ skills in the professional–patient relationship, and the facility’s infrastructure. Roberto et al.⁵¹ reported that approximately 11% of adults were dissatisfied with their dental service. Dissatisfaction was higher among adults who had

difficulty chewing', who had some discomfort in the mouth, head, and neck region, and among those who did not have access to information on how to avoid oral problems.

According to Armfield et al.,⁵⁹ satisfaction differed significantly by gender, spoken language, region of residence, and education level. This can be clearly seen in the research by Kohlenberger et al.,²⁵ in which the self-rated health of refugees was below that of the resident Austrian population, especially for women and Afghan women. Two out of 10 male and four out of 10 female refugees reported unmet health needs. Barriers most frequently cited included scheduling conflicts, long waiting lists, a lack of knowledge about doctors, and language. Although treatment costs are often not considered barriers, consultation with specialist medical services often associated with co-payment by patients, in particular dental care, is significantly less by refugees than by Austrians. In a study by Rocha et al.,⁵² women had a higher prevalence of dissatisfaction as well as older participants and those with lower parental education. Patients assessed the physical characteristics of the facilities and their interactions with the team as priority issues that required special attention.

4 DISCUSSION

This study investigated publications of scientific articles from 2005 to May 2020, with the objective of evaluating the satisfaction of patients with health professionals, dentists, and services provided as a whole. The hypotheses of this study were confirmed, as trust and a good patient–dentist relationship, facility infrastructure, and services provided positively influenced patient satisfaction. Skills and competence in solving the dental procedure were mentioned but not in isolation.

Al-Hussyeen⁵³ noted that satisfaction with dental care was significantly associated with high

quality of dental care, convenient consultation, and good staff. The quality of dental care, reasonable fees for dental services, and the proximity of dental clinics were all factors that encouraged the use of dental services.

According to one study, how patients are attracted to the service represents half of the actions of successful clinics and is responsible for determining the characteristics of the service to be offered⁶⁸. For different reasons, all health professionals should try to access the areas of administration and marketing and avoid thinking that they should only be used by those who sell products; the office should be regarded as a company⁶⁸. To obtain greater satisfaction among its users, health services need to understand the perceptions and expectations of patients and provide information in adequate quantity and quality^{32,51}.

The profile of patients has changed over time. Today, they are more demanding, more rigorous in terms of the execution and quality of services, and more involved in choices and decisions regarding their health. In this changing scenario, it is important to know the current characteristics of the profession to achieve success. The patient must be treated with respect and receive quality care to be satisfied with the procedure offered and to be certain they have received the ideal treatment¹⁷.

In most cases, a dental appointment causes a patient discomfort. Therefore, preparing a pleasant environment is essential to reduce the traumatic nature of the experience as much as possible. The patient should recognise that the professional is always concerned with their well-being. Talking to patients is a favourable approach, but sensitivity should be exercised when they prefer to remain silent⁶⁸.

In Brazil, patients with lower socioeconomic status are the most satisfied with such services^{21,37}. For Rigo et al.,⁴¹ the frequency

of visits to the dentist has an impact on the population's quality of life, as the patient needs to have contact with the professional to maintain a trusting relationship. Regular dental service patients were more satisfied with their oral conditions than non-regular patients. High satisfaction with the dentist can reduce patient stress, which, in turn, promotes even more satisfaction. Therefore, discussing fears and perceived pain with patients is very important¹⁷.

This study chose an important methodological approach for the construction of a broad analysis of the literature, contributing to discussion and reflection on a particular theme and providing the possibility of carrying out future studies^{18,19}. The scope of this study was intended to deepen the understanding of a given phenomenon based on previous studies. It followed rigorous methodological standards throughout the development of the research and in the presentation of results to the reader, allowing for identification of the true characteristics of the studies included in this integrative review of the literature. However, reflections and explanations on this topic were not exhausted. Rather, they were used to generate a synthesis of knowledge from the included studies to clarify some points on satisfaction with dental care and encourage future research needs and further learning this subject.

As a limitation of this study, it was reported that all quantitative studies had a cross-sectional design, which does not allow for claims of causality. Longitudinal studies are the most suitable for investigating the psychosocial and emotional aspects of individuals and causalities, as they follow the phenomena over a period of time. In relation to studies with a qualitative approach, there were few articles found in the field of dentistry compared to those published in other areas, such as nursing and psychology.

However, the practical recommendations

of this study provide a guide for decision making regarding dental care that could result in more effective care emphasizing respect of the opinions of service users.

5 CONCLUSIONS

The motivations and expectations of patients concerning health professionals and their care seem to be different for different groups, depending on the sociodemographic characteristics of patients, such as gender, age, socioeconomic status, education, and status of general health; groups with greater socioeconomic vulnerabilities were the most dissatisfied with professionals. Furthermore, physical characteristics of facilities, accessibility, and treatment costs were shown to generate dissatisfaction with dental services.

The findings of this study revealed that patients' perceptions of their dentist's skills and quality of care were positively related to interpersonal interactions, reported variously as the level of care given during dental care and after-care, a readiness to listen to their problems, and opportunities for the user to evaluate the service provided. This means that aspects of affectivity, such as trust and a good relationship with the professional and their team, increase the degree of satisfaction.

RESUMO

Satisfação dos pacientes com o atendimento odontológico: uma revisão integrativa

O objetivo deste estudo foi compreender a percepção do paciente a respeito da qualidade do serviço odontológico prestado, bem como avaliar a sua satisfação quanto ao profissional, cirurgião-dentista, considerando o relacionamento profissional-paciente, a confiança estabelecida e a satisfação com o tratamento realizado. Uma revisão integrativa da literatura foi realizada considerando publicações do período de 2005 a 2020, nos idiomas inglês, português e espanhol, utilizando as bases de dados Medline/PubMed e

BVS/Bireme. Para a busca, utilizaram-se os descritores “satisfação”, “paciente”, “confiança”, “dentista”, cuidados em saúde”, “odontologia” no singular, sinônimos e antônimos, com os termos booleanos OR para distingui-los e AND para associá-los, de modo a abranger a totalidade das publicações. Foram incluídos 57 artigos envolvendo publicações de diversos países, conforme critérios de inclusão. Os achados revelaram que indivíduos com menor condição socioeconômica são os mais insatisfeitos com o profissional. Porém, a satisfação quanto às habilidades e à qualidade do atendimento está relacionada a boas interações interpessoais. Ainda, as características físicas das instalações e os custos do tratamento podem gerar insatisfação com o serviço odontológico. Conclui-se que aspectos da afetividade, como a confiança e boa relação com o profissional e a sua equipe, aumentam o grau de satisfação dos pacientes.

Descritores: Satisfação do Paciente. Confiança. Cirurgião-Dentista. Avaliação de Resultados em Cuidados de Saúde.

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Correspondence to:

Lilian Rigo

e-mail: lilian.rigo@imed.edu.br

Faculdade Meridional /IMED

Rua Senador Pinheiro, 304

99070-220 Passo Fundo/RS Brazil