# Brazilian orthodontists and the legal issues involving their professional activity: A legal and behavioral proposal

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**Objective:** The aim of this study was to review the use of orthodontic records (OTR's) by Brazilian orthodontists and propose a behavioral approach from a legal point of view, drawing on their interpersonal relationship with their patients.

**Methods:** A statistical cross-analysis was performed to compare five groups. A sixth group was created comprising the intersection of the responses provided by the five aforementioned groups.

**Results:** The results demonstrate that 42.2% of orthodontists require initial and final records and keep orthodontic records throughout their professional career; 13.9% duplicate the initial records and consider patients as the lawful owners of these documents; 19.5% make use of a medical history questionnaire, to be duly signed by all patients; 5.4% acknowledge that the decision to undergo treatment is ultimately the patient's, and, therefore, an alternative response "not perform the treatment" should be included in the questionnaire; 24% recognize the importance of the Consumer Protection Code (CPC), regard the provision of orthodontic services as an obligation of means; and explain to the patient the risks involved in orthodontic practice. Among the 1,469 orthodontists researched, 0% simultaneously took into account all aspects of this study.

**Conclusion:** It was concluded that Brazilian orthodontists adopt a mistaken legal, professional and behavioral attitude, neglecting to build patient's orthodontic record with due care and in accordance with the law, which makes them vulnerable to patient disputes, contentious or otherwise.

Keywords: Brazil. Agreements. Informed consent. Documents. Legal responsibility.

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# INTRODUCTION

Performing an orthodontic treatment with the aid of adequate diagnosis and planning can be time consuming. Moreover, as months go by, the interpersonal contact between patient and professional tends to develop and deepen. With the advent of the Brazilian Consumer Protection Code (CPC), interpersonal relations between clients and service providers have deepened. In their role as service providers, orthodontists have become the target of their patients, now referred to as clients.<sup>1,2</sup>

Most legal actions against doctors in US Courts were sparked by trivial misunderstandings stemming from an ineffective interaction of these professionals with their patients or their patients' parents. However, the number of patient's complaints relating to dissatisfaction with the outcome of treatments carried out by orthodontists who were eventually prosecuted is not significant (about 3%).<sup>3</sup>

Within this worrying context, properly maintaining OTR's is now regarded as crucially important by wary professionals.4 The issue surrounding "ideal OTR's" becomes even more obvious when a patient, for any reason, discontinues their orthodontic treatment and requests the records produced during their treatment. In this case, orthodontists are often clueless as to how they should respond. After all, to whom do these documents belong and to what extent are these records important to orthodontists? As a result, OTR's reflect a professional's relationship with his or her patient in the form of information documented in various media formats (paper, casts, tracing paper, electronic media etc.). Such documents should always meet legal, therapeutic and scientific criteria that are consistent with orthodontic practice, and may be more or less elaborate and thorough, depending on how careful and dedicated orthodontists choose to be. Be it as it may, these records must remain accessible at any given time and for as long as necessary, thereby protecting the confidentiality between professional and patient. The manner by which an orthodontist documents the information gleaned from their daily monitoring of the orthodontic treatment delivered to the patient clearly demonstrates the attitude of that professional toward their clients.<sup>5</sup>

To this end, the aim of this study was to analyze the use of OTR's by Brazilian orthodontists, examining their behavioral attitudes under a legal point of view, based on their interpersonal relationship with their patients. The results are ultimately made available to the dentist community in the form of a proposal.<sup>6</sup>

## MATERIAL AND METHODS

Pursuant to the Brazilian Health Care Council's resolution CNS 196/96, this research project was submitted to the Institutional Review Board of the SL-Mandic University under file No. 2010/0285 and met with the necessary approvals.

A survey involving 5,355 Brazilian orthodontists was conducted and a questionnaire consisting of 35 questions was prepared. The Microsoft Access 2000<sup>®</sup> software was used to analyze all data and to prepare reports based on a cross-analysis of the data of interest, according to the results described below.

The second phase of the survey consisted of a computerized statistical cross-analysis of a database comprising responses from 1,469 orthodontists. Specific results were utilized among the alternative responses to questions Nos. 08, 10, 11, 12, 13, 14, 16, 19, 23, 25, 29, 30, 31 and 33, of the aforementioned questionnaire. Five response groups were created. Each group was represented by a filter composed of three results stemming from previous survey questions (Survey I). Each group was analyzed according to the intersection of these responses. A sixth group was created comprising the intersection of the responses provided by the previous five groups. Group data were compared, analyzed and separated according to the orthodontists' opinions on various topics, namely:

- a) Filter I Orthodontists who have initial/final records taken and the OTR's stored throughout their professional career.
- b) Filter II Orthodontists who duplicate the original records of all patients or those of patients who started but interrupted treatment, and believe that the OTR's belong to the patient.
- c) Filter III Orthodontists who administer to all patients a questionnaire, which is signed by each patient.
- d) Filter IV Orthodontists who consider that any decision regarding therapeutic options is up to the patient; they include the alternative "not to undergo treatment" and claim that signing an agreement is of paramount importance prior to starting treatment.

- e) Filter V Orthodontists who acknowledge the importance of the Consumer Protection Code (CPC) in their profession, regard the orthodontic services rendered to the patients as a duty of means and explain to them the risks involved in orthodontic practice.
- f) Filter VI Intersection of results of the five previous groups.

## RESULTS

A total of 5,355 questionnaires were mailed to orthodontists and 1,469 (27.43%) were returned for analysis. All unanswered questions and invalid responses were voided and excluded from these questionnaires. Thus, all valid responses were identified.

#### Filters I to V and cross-analysis (Filter VI)

- q) Filter I: 42.2% of the orthodontists require initial/final records and store the OTR's throughout their professional career.
- b) Filter II: 13.9% of the orthodontists duplicate the original records of all patients and believe that OTR's belong to the patient.
- c) Filter III: 19.5% of the orthodontists administer to all patients a questionnaire, which is signed by each patient.
- d) Filter IV: 5.4% of the orthodontists consider that any decision regarding treatment options is up to the patient; they include the alternative "not to undergo treatment" and argue that signing an agreement is of paramount importance prior to starting treatment.
- e) Filter V: 24.0% of the orthodontists acknowledge the importance of the Consumer Protection Code (CPC) in their profession, regard the orthodontic services rendered to the patients as a duty of means and explain to them the risks involved in orthodontic practice.
- f) Filter VI: 0% of the orthodontists Cross-analysis of all filters.

Table 1 shows the number of positive responses and percentages for each one of the filters (considering the total valid responses in each filter). Figure 1 depicts the percentage results and an error bar reflecting the confidence intervals with 95% confidence for each percentage.

## DISCUSSION

Data intersection in this survey showed, quantitatively, the understanding and behavior of Brazilian orthodontists toward various issues involved in an interpersonal relationship with their patients.

Most disagreement between parties has a subjective origin and is often structured outside the legal field. Such disputes are driven by unconscious circumstances, influencing human relations through hidden interests which underpin all litigation. These disputes resurface in the process in the guise of straightforward complaints and irreconcilable demands.<sup>7</sup>

# Taking initial/final records and safely storing the OTR's throughout the entire professional career

The absolute majority of Brazilian orthodontists require that candidates for orthodontic treatment have initial records taken. Brazilian professionals regard such basic documents as essential to initiate orthodontic treatment.

Table 1 - Distribution of responses according to each filter.

Filter	Responses		Percentage	CI (95%)*
	Positive	Valid	Percentage	CI (95%)
I.	568	1347	42.2	39.5 to 44.9
	183	1314	13.9	12.1 to 15.9
	244	1252	19.5	17.3 to 21.8
IV	71	1317	5.4	4.2 to 6.8
V	308	1282	24.0	21.7 ; 26.5
VI	0	890	0.0	0.0

\* Interpretation of the confidence interval reveals that the real percentage of the population will be 95% sure within the interval.

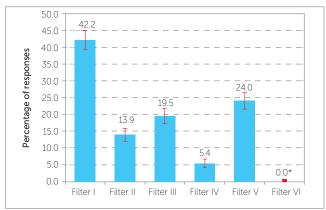


Figure 1 - Percent distribution of the responses and 95% confidence interval for the filters.

\* The intersection of all filters displayed zero percent, indicating that none of the 890 valid respondents met the five criteria simultaneously.

Of Brazilian orthodontists, 70.56% consider that the final records are essential while 26.13% asserted that they were necessary only in some cases. Nevertheless, some orthodontists pointed out the difficulty encountered in obtaining such records since patients claim they cannot afford it.<sup>5</sup>

However, although the final dental records play an extremely important role in the analysis of the treatment performed, these documents are not usually taken and are simply ignored in orthodontic practice, which makes it very difficult to prove that the proposed treatment was successfully performed. Thus, at the end of treatment, orthodontists should require the patient to obtain the final records and sign a copy of the request form as a receipt.<sup>8,9</sup>

Although professionals registered with the Brazilian Federal Council of Dentistry (CFO) are obligated to prepare the patients' clinical records and keep them on file, much confusion still surrounds this issue, for if, on the one hand, the Civil Code establishes that individual lawsuits are time-barred by the statute of limitations in twenty years, on the other hand, the Consumer Protection Code (CPC) provides that any suit for damages brought against service providers is time-barred in five years, counted from the moment that one is made aware of the losses and the party liable for such losses.<sup>10,11</sup>

However, OTR's must be kept on file for an indefinite period of time. Keeping the records of dental patients on file is usually regarded as a cautionary measure among U.S. orthodontists.<sup>12</sup>

A cross-analysis of the responses provided by Brazilian orthodontists (Filter 1) shows that 42.2% of these professionals comply with the survey recommendations that they should have the patient produce initial and final records and safely store the patient's OTR's for an indefinite period of time, at least throughout their professional career.

# Understanding that orthodontic records belong to the patient and duplication of records in cases of treatment interruption and/or all cases

Given that orthodontists are merely trustees of the OTR's, all records must be delivered to their rightful owner, i.e., the patient, upon request. It is up to the orthodontist to document this delivery by means of a voucher or receipt duly signed by the patient or their legal guardian.<sup>4,9</sup> However, a considerable number of patients claim that professionals show reluctance to surrender the OTR's. This statement is grounded in the fact that most professionals (79.01%) mistakenly believe that the OTR's belong to the orthodontist since he/she is responsible for the treatment outcome.<sup>5,13</sup>

Orthodontists are free to make copies of all orthodontic records and return them to the patient upon treatment completion. To this end, professionals should ask patients to sign a receipt with the description of the documents being delivered so that the patient is compelled to act as a trustee. Additionally, patients should be advised that those documents must be carefully stored and presented both in the review consultations and/or in court, if necessary.<sup>9</sup>

It was found that only 13.9% of Brazilian orthodontists studied in this survey (Filter II) agree with the authors in (a) considering that the OTR's belong to the patient and (b) duplicating the treatment records when treatment is interrupted and/or in all cases.

# Obtaining the medical history of all patients, duly signed by them

Patients eligible for orthodontic treatment should be invited to fill out a form with information on the patient's medical history. However, professionals must ascertain that all responses be provided.<sup>8</sup>

In Brazil, the Civil Procedure Code (2010) establishes that statements reported in private documents, be they written and signed or only signed, shall be deemed true by the signer. Moreover, although orthodontists are aware of the legal implications, 76.56% of professionals neglect to ask the patient to sign the clinical procedures card.

The first interview should therefore begin with an analysis of the patient's medical history as well as any dental conditions caused by previous treatments. This initial stage should be well conducted and signed by the patient, a technical standard that should be adopted in any clinical situation. Negligence in carrying out an effective medical history interview constitutes professional malpractice, which may render the professional liable to ethical and legal action.<sup>8,15,16</sup>

Therefore, the written record of the initial interview should be based on an objective questionnaire, which should be dated and signed either manually or digitally by the patient or their legal guardian. A well formulated OTR, given the current relevance of Dentistry to the public eye, would result in a better relationship with the patient, a better image for the dentist as a health care provider, thereby reducing the likelihood of issues arising from the services provided to the patient, in the event of any legal action.<sup>9,17,18</sup>

It was found that only 19.5% of Brazilian orthodontists (Filter III) are in agreement with the authors of this study, as they conduct a medical history interview by means of an objective questionnaire administered to all patients and require them to provide their signature.

# Selling an agreement, understanding that the decision to undergo treatment is in the patient's hands and inclusion of an alternative "not to undergo treatment" as one of the treatment options

Selling a written agreement is crucial and the ideal moment to sign it is approximately one week before placement of the orthodontic appliance. Consent and surgical procedure should be discussed on separate occasions and the patient should take the questionnaire home, which would allow them time to ponder the proposed procedures.<sup>12,17</sup> As a result, patients will be respected for their own principles of autonomy and their own desire, as they are given a chance to either accept or reject the orthodontist's proposed treatment.<sup>19,20</sup>

Moreover, the Brazilian Penal Code stipulates a punishment of three months to one year imprisonment, or payment of a fine, for any person who embarrasses another, either through violence or serious threat, or compromises, by any other means, another person's ability to not do what the law allows, or do what it does not require. The same code provides that surgical or medical interventions can be performed without the consent of the patient or their legal representative when there is imminent threat to the patient's life.<sup>21</sup>

Therefore, the State Council of Dentistry (CEO) has established that it is an ethical violation to start any dental procedure or treatment without the prior consent of the patient or his legal guardian, except in cases of emergency or urgency, whereas it is likewise an ethical violation to fail to render the services provided for in the agreement.<sup>10</sup>

The orthodontist should submit to the patient and record in the OTR the treatment plan comprising the treatment options to be employed. The decision to undergo treatment is a privilege of the patient and their legal guardians, who are considered stakeholders in the process of rendering orthodontic services. It is also up to them to choose from among the treatment options presented by the professional in a clear, accessible language.<sup>10,20,22</sup>

Therefore, it was found that only 5.14% of the Brazilian orthodontists (Filter IV) are in agreement with the authors of this study, since such professionals (a) sign a service agreement, (b) understand that the choice of orthodontic treatment belongs to the patient and (c) include the alternative "not to undergo treatment" among the possible treatment options.

# The importance of the Consumer Protection Code (CPC) in Orthodontics, duty of means regarding the orthodontic services rendered to the patients and clarification on the risks involved in orthodontic practice

As of the inception of the Consumer Protection Code (CPC), consumers of dental services began to assert their rights in court, and since then there has been an increase in legal actions in the dentistry arena.<sup>1</sup> Similarly, dentists can be penalized if the information provided is insufficient to foster service provision and the attendant risks.<sup>23</sup>

As a result, the expressions clarified consent, voluntary consent, informed consent, post-informed consent and free and informed consent are the various designations of a document that reflects much more than the mere manifestation of the patient after having received all information about the risks, benefits and costs of the treatment they will receive or the research in which they will participate. These documents ensure that patients are respected in their own principles of autonomy and desire, and are, thus, free to accept or reject whatever is being proposed to them.<sup>19,20</sup>

On the other hand, in terms of the amount and type of information that patients really require, a complete term of informed consent submitted in writing generally provides more information than most patients care to receive.<sup>24</sup>

In reviewing the binding nature of the services provided by Brazilian orthodontists, it is necessary to distinguish between duty of means and duty of result. Duty of means requires only that the service providers implement and make use of certain means, irrespective of results. Duty of result, on the other hand, implies that if a professional fails to achieve the proposed goal or goals, they fail to fulfill their obligation altogether. When highlighting the risks involved in orthodontic therapy, professionals characterize their activity as duty of means.<sup>25,26</sup>

Orthodontics should therefore be considered a specialty of which nature is that of a duty of means, given that professionals have an obligation to use all means possible to meet the patient's expectations without, however, having an obligation to achieve the results envisioned. Nevertheless, orthodontists should be held accountable when incurring recklessness, negligence, incompetence misleading or deceptive advertising.<sup>2,27,28</sup>

Therefore, understanding the binding nature of a duty of means or duty of result will entail the burden of proof. In the case of a lawsuit involving a duty of result, the burden of proof lies with the professional, who must prove that they applied with utmost expertise the state-of-the-art technique available at the time. On the other hand, in a duty of means, it is up to the patient to prove that the professional did not perform properly nor used state-of-the-art techniques.<sup>29</sup>

It was found that only 24.0% of Brazilian orthodontists (Filter V) are in agreement with the authors of this study in (a) considering the importance of the Consumer Protection Code (CPC) in their orthodontic practice, (b) regarding their professional activity as a duty of means and (c) enlightening their patients on the risks involved in orthodontic practice.

## Cross-analysis of all filters

The intersection of all filters displayed a zero percentage, in which none of the 890 valid respondents (who responded to all data cross-analysis items) met the five criteria simultaneously, as required by the authors:

- a) Filter I: Orthodontists who request the initial/final records and keep the OTR's on file throughout their professional career.<sup>8,9,11,12,30</sup>
- b) Filter II: Orthodontists who duplicate the original records of all patients, and believe that the OTR's belong to the patient.<sup>4,5,9,10,12,13</sup>
- c) Filter III: Orthodontists who require all patients to fill out and sign a medical history questionnaire.<sup>8,9,14-16,18,31</sup>
- d) Filter IV: Orthodontists who consider that any decision regarding treatment options is up to the patient; they include the alternative "not to

undergo treatment" and claim that signing an agreement is of paramount importance prior to starting treatment.<sup>8,10,12,19,20,23,25,32</sup>

e) Filter V: Orthodontists who acknowledge the importance of the Brazilian Consumer Protection Code (CPC) in their profession, regard the orthodontic services rendered to the patients as a duty of means and clarify patients on the risks involved in the practice of orthodontics.<sup>1,2,10,12,17,19,20,24,25,26,28,29,33</sup>

# CONCLUSIONS

Based on the field survey conducted in this study, it can be concluded that:

- a) Brazilian orthodontists:
- Maintain a mistaken behavioral attitude toward their patients from a legal and/or professional point of view.
- Neglect to cautiously produce the orthodontic records (OTR's) grounded in legal foundations and in light of the concepts that underpin the current stage of orthodontics as a dental specialty.
- Feel vulnerable when questioned by their patients, be it contentiously or otherwise, be it fairly or unfairly, on the legal aspects of their professional practice.
- b) The following recommendations are in order:
- Patients should have both initial and final records taken and the OTR's should be safely stored by the dentist throughout their entire professional career.
- Duplication of OTR's, in case these documents are requested by the patients, who are their law-ful owners.
- Use of a medical history questionnaire, duly signed by the patient.
- Drafting of a service agreement and understanding that the choice of treatment belongs to the patient, by including an option "to not undergo treatment."
- Orthodontists who acknowledge the importance of the Brazilian Consumer Protection Code (CPC) in their profession, regard the orthodontic services rendered to the patients as a duty of means and clarify patients on the risks involved in the practice of orthodontics.

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