The profile of orthodontists in relation to the legal aspects of dental records

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Abstract

Objective: The purpose of this study was to acquire knowledge about the key legal aspects of orthodontic practice, which may be used as important defense tools in the event of ethical and/or legal actions. **Methods:** A cross-sectional study was conducted with dentists in Belo Horizonte, Minas Gerais State, Brazil, by means of a specific instrument (questionnaire) addressing the ethical and legal disputes that involve the orthodontic specialty. Participants were asked to fill out the following questionnaire fields: personal identification, academic background, orthodontic accessories, oral hygiene, treatment plan, service provision, orthodontic documentation, drug prescription and forms of communication with patients, among others. **Results:** A total of 237 orthodontists, all members of the Regional Council of Dentistry, Minas Gerais State (CRO-MG) and living in Belo Horizonte, were given the data collection instrument. Out of this total, 69 (29.11%) answered and returned the questionnaires. Of the 69 respondents, 57.97% were male and 42.03% female. It was found that 52.17% of these professionals graduated from Higher Education Institutions (ISEs). It was observed that 34.78% of these orthodontists completed specialization between 5 and 10 years after graduation. Most professionals (94.2%) enter into their medical records information about any damage caused to the orthodontic accessories used by their patients and 53.62% of the orthodontists keep their patients' orthodontic documentation on file throughout their active professional life. **Conclusions:** This study revealed that some analysis parameters were very satisfactory, such as: the availability of service provision contract models, communication with patients and/or their lawful guardians in case of abandonment of treatment, orthodontic documentation files and the entering into the dental records of information concerning the breakage of and damage to orthodontic accessories. However, some practices have yet to be adopted, such as: patient signature should be collected in the event of damage to orthodontic accessories and copies of drug prescriptions and certificates should be kept on file.

Keywords: Civil liability. Orthodontics. Forensic dentistry.

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INTRODUCTION

With the new Brazilian Constitution of 1988 and new laws that have arisen or have been reformulated after this constitution, such as the Consumer Protection Code in 1990 and the Brazilian Civil Code in 2002, society has come to exercise effective citizenship grounded in the spirit of democratization contained in these laws with a greater awareness of individual and collective rights.[4] Thus, civil relations, contractual or otherwise, have been modified as a result of this new context.[4] The relationship between dentist and patient is no exception to this rule[11].

A key indicator of change in doctor-patient relationship is the growing number of ethical and civil lawsuits filed against dentists in recent years, which contrasts with the small and/or negligible number of these cases in the early 1980s.[8] Dental professionals, even if apparently timid, have been increasingly concerned with the growing likelihood of being sued and the inevitable havoc that these actions can inflict in their professional and financial status. The current context has contributed to the creation of a new concept and a new approach to the dentist-patient relationship. "Defensive Dentistry", a term that bears resemblance to other existing classifications, such as "defensive driving", is defined as any activity designed to produce early evidence of good dental practices.[8] The use of "Defensive Dentistry" has been growing steadily while undergoing improvements carried out by the various dental specialties, which seek to conform to their new reality. Orthodontics is a case in point, probably because it is one of the most often targeted dental specialties when it comes to ethical and civil litigations.[8]

Vanrell[17] maintains that one manner in which to produce early evidence of good professional practices is by gathering legal dental documents, i.e., statements, oral or written, signed by the dentist during the course of his profession activity, and grouping such evidence in the form of medical records. In addition to serving the traditional clinical purposes it may be used as evidence in case of legal actions. Dental records are the major documents and the dental professional's key defense weapon.

Proffit[10] believes that diagnosis in orthodontics, as in other areas of dentistry and medicine, requires a proper collection of basic patient data. Based on these data one can analyze and record clearly and objectively the problems and changes that take place during patient evaluation. Treatment planning is the synthesis of possible solutions to the problems identified by the dentist. However, it is necessary to pursue a specific strategy for the treatment by taking into account the best possible therapy for the particular case of the patient under evaluation. The adoption of these procedures, provided they are in line with changes in the law, leads to the application of "defensive orthodontics" instruments, which are of paramount importance for compliance with and fulfillment of civil liability obligations. Among these routine instruments, orthodontists should mandatorily produce anticipated evidence such as accurate and updated clinical records. The present study aims to determine whether the specialists in orthodontics in Belo Horizonte, Minas Gerais State, Brazil, are knowledgeable of the legal dental issues pertaining to dental records, which can prove relevant for "defensive orthodontics".

MATERIAL AND METHODS

This is a cross-sectional and descriptive study. Data were collected from the self-explanatory questionnaire developed specifically for this survey. The questions comprised in the questionnaire were designed to enable the collection of data concerning legal-dental issues, i.e., the production of evidence early in the course of "defensive orthodontics". The population for this study consisted of dentists—specialists in orthodontics—residing in the city of Belo Horizonte, Minas Gerais, Brazil. The questionnaire

contained the following fields: personal identification, academic background, orthodontic accessories, oral hygiene, treatment plan, service provision, orthodontic documentation, drug prescription and means of communication with the patient, among others.

The orthodontists were identified from the records provided by the Regional Council of Dentistry, Minas Gerais (CRO-MG). The list of experts only comprised orthodontists who were registered in the State of Minas Gerais as of the month of April 2005, whose home and workplace addresses were located in the city of Belo Horizonte.

From the list of experts provided by CRO-MG, which contained the names and addresses of the orthodontists, the authors selected those (n = 237) who were to receive, between May and June 2005, the questionnaire and a term of free and informed consent that would enable them to contribute to this scientific investigation. It should be underscored that the criteria for exclusion from the study included deceased professionals and those who no longer worked in dentistry. After the questionnaires had been filled out and returned, data were collected for statistical analysis of the joint distribution of frequency and to determine the significance of effects by means of Fischer's test, when necessary. A confidence level of 95% was therefore established. It should be noted that this study was approved by the Ethics Committee of Universidade Federal de Minas Gerais, UFMG.

RESULTS

The population of this study consisted of 237 dentists, registered in the CRO-MG and domiciled in Belo Horizonte (MG). Of the 237 questionnaires that were sent out, 69 (29.11%) were returned. The demographic profile of the orthodontists is illustrated in Table 1. As can be observed, the time period required to complete the specialization course is consistent across the board, as is the nature of the institution where they completed their graduate course.

Tables 2 and 3 refer to the variables: (1) orthodontic accessories and (2) oral hygiene effectiveness. As can be observed, the vast majority of orthodontists recommend at least one oral hygiene method. Table 2 also shows that the minority of patients (23.19%) are required to sign a document when orthodontic accessories are damaged.

Table 4 shows the treatment plan and service provision contract. As can be noted, most professionals require patients or their lawful guardians to sign the proposed treatment plan and most also use their own service provision contract model.

Table 5 shows that most professionals (53.62%) keep their patients' orthodontic documentation on file throughout their active professional life. A similar behavior was observed regarding the archiving of prescriptions and certificates.

Table 6 shows heterogeneity with regard to the orthodontist's request for periapical radiographs for use in orthodontic treatment control. The most common request was for periapical radiographs once a year (37.31%), followed by twice a year and other intervals (23.88%) different from those included in the data collection instrument. According to Table 6, the most common form of documentation at the completion of the orthodontic treatment was a combination of photographs, radiographs and dental cast models (50.7%).

Table 7 shows that in the event of abandonment of orthodontic treatment, 92.75% of the professionals communicated with their patients. It was found that only 21.74% of professionals require their patients to sign documents at the end of the orthodontic therapy. As can also be seen in Table 7, 53 orthodontists requested an occlusal analysis to be performed after orthodontic treatment.

TABLE 1 - Demographic features of orthodontic specialists in Belo Horizonte, Minas Gerais, Brazil.

FEATURES	NUMBER (N)	PERCENTAGE (%)
Gender		
Male	40	57.97
Female	29	42.03
Total	69	100
Institution of Graduation		
Public	33	47.83
Private	36	52.17
Total	69	100
Completion of Specialist Course (in years)		
0 - 5	23	33.33
5 - 10	24	34.78
> 10	22	31.88
Total	69	100

TABLE 2 - Analysis of the explanatory variables selected with regard to orthodontic accessories.

VARIABLE	NUMBER (N)	PERCENTAGE (%)
I enter information about damage to orthodontic accessories into the dental records		
Yes	65	94.20
No	4	5.80
I have patient sign a document when orthodontic accessories are damaged		
Yes	16	23.19
No	53	76.81

TABLE 3 - Analysis of the explanatory variables selected with regard to oral hygiene.

VARIABLE	NUMBER (N)	PERCENTAGE (%)
I enter information about poor oral hygiene into the dental records*		
Yes	35	51.47
No	33	48.53
I recommend the following method(s) to improve patient oral hygiene*		
Verbal warning	22	32.35
Recommendation in writing (I do not keep a copy for my records)	20	29.41
Recommendation in writing (I keep a copy for my records)	15	22.05
A combination of methods	11	16.17
Other methods	0	0

*One professional did not respond.

TABLE 4 - Analysis of explanatory variables selected as regards treatment plan and service provision contract.

VARIABLE	NUMBER (N)	PERCENTAGE (%)
I require a signature authorizing implementation of treatment plan		
Yes	60	86.96
No	9	13.04
I have my own service provision contract model*		
Yes	60	88.24
No	8	11.76

*One professional did not respond.

TABLE 5 - Analysis of explanatory variables selected as regards orthodontic documentation file, drug prescription and certificate.

VARIABLE	NUMBER (N)	PERCENTAGE (%)
I keep my orthodontic documentation on file after treatment		
No, I do not keep orthodontic documentation on file	4	5.80
For up to 5 years	8	11.59
For 5 to 10 years	20	28.99
Throughout my active professional life	37	53.62
I keep a copy of drug prescriptions and certificates*		
Yes	42	61.76
No	26	38.24

*One professional did not respond.

TABLE 6 - Analysis of explanatory variables selected as regards the request for periapical radiographs, initial documentation and final documentation.

VARIABLE	NUMBER (N)	PERCENTAGE (%)
Frequency with which I request periapical radiographs for treatment control*		
Once a year	25	37.31
Twice a year	16	23.88
Only at the beginning of treatment	4	5.97
Only at the end of treatment	6	8.95
Other	16	23.88
Form(s) of documentation at the end of the orthodontic treatment		
Photographs	2	2.89
Dental cast models	2	2.89
Radiographs	4	5.79
Dental cast model photographs	3	4.34
Radiographs and photographs	14	20.28
Radiographs and Dental cast models	5	7.24
Photographs, Radiographs and Dental cast models	35	50.7
No documentation	4	5.79

*Two professionals did not respond.

TABLE 7 - Analysis of the explanatory variables selected as regards abandonment of treatment, patient discharge and end of orthodontic treatment.

VARIABLE	NUMBER (N)	PERCENTAGE (%)
In the event of abandonment of treatment I send a communication to my patient		
Yes	64	92.75
No	5	7.25
At the end of orthodontic treatment my patient is "discharged" in writing and I sign the document		
Yes	15	21.74
No	54	78.26
Occlusal analysis is performed after the end of orthodontic treatment		
Yes	53	76.81
No	10	14.49
Other method(s)	6	8.69

DISCUSSION

Liability is the obligation to account for one's own actions or those of others. It encompasses both moral and legal aspects. The former denotes good behavior, good conduct, conformity with the rules of society. The latter refers to the duty to account, both criminally and civilly, for violation of a specific right established by law. Therefore, liability is the result of action by which individuals express their behavior in light of such duty or obligation.[15] In Brazilian law, criminal liability and civil liability are independent from each other[1].

Civil liability depends on the existence of a causal link between two conditions: a) a person's conduct, which is regarded as inappropriate and b) damage resulting from such conduct. Civil liability is founded in these two circumstances of cause and effect. The conduct referred to above may be omissive or commissive.[7] In general, liability within the civil scope is manifested in the application of the value of compensation, in the act of prevention or indemnification for damages.[9] Thus, legal science has a direct bearing on dental activity, and orthodontists have both the duty and the right to learn about the basic provisions governing their professional activities so as to comply with them and thus avoid legal problems.[8] This study sought to highlight and clarify the legal and civil liabilities associated with orthodontic practice.

The scientific literature points to the importance of documentation in the course of clinical practice.[3] Initially, one of the key concerns of this investigation focused on receiving the return letters with the completed questionnaires. Of the 237 dentists who were targeted, only 69 (29.11%) answered the questionnaire, providing the data presented in Tables 1 to 7. It should be noted that similar statistics was also observed in other scientific studies[2].

Regarding the demographics of the population under study, there was a predominance of males (57.97%), compared with females (42.03%). When analyzing the nature of the institution where the respondents completed their graduation course, certain percentage similarities between public and private can be identified. This is likewise true of their specialization course, which varied in intervals of fewer than 5 years, 5 to 10 years and above 10 years after graduation.

Machen[6] asserts that the most glaring weakness displayed by orthodontists is their inefficiency to keep records of the following facts: oral hygiene, damage to orthodontic accessories, tooth decay, damaged restorations and cancellation of or missed appointments. Constantly warning about problems by establishing an open and honest communication channel could go a long way towards influencing the decision of whether or not to file a lawsuit. It was found that most professionals enter into their dental records information about events involving damage to the orthodontic accessories (94.20%), but only a minority requires their patients to sign a document attesting to their awareness of this fact (23.19%) (Table 2). Regarding oral hygiene, there was a prevalence of verbal instruction and a combination of methods encompassing verbal warnings and instruction models. Twenty orthodontists replied that they provide professional orientation on oral hygiene in writing, or through texts, but do not keep a copy of the document. Fifteen orthodontists gave their assurance that they behave identically, but always file a copy of the document signed by the patient or lawful guardian (Table 3).

Riedel[13] asserts that the orthodontic treatment comprises three phases: before, during and after treatment. After treatment begins the maintenance phase, whereby the ideal functional and aesthetic position of the teeth is achieved. Professionals agree that orthodontists are not responsible only for treating the patient's malocclusion *per se* but also for preserving the results. Table 4 shows the importance ascribed

by professionals to the contract, both regarding treatment implementation and the existence of a service provision contract.

Orthodontists, like any other health care professionals, should always be well documented and ready for any legal disputes. Any sign of dissatisfaction by the patient should immediately be detected and discussed.[16] Some patients pursue legal actions against dentists long after completion of treatment, many of whom believe they are under the care of these professionals for ever and that these specialists are responsible for any problems that may arise in future.[5] According to the variable regarding the orthodontic documentation, shown in Table 5, most professionals keep their documentation on file for time periods of either 5 to 10 years (28.99%) or throughout their career (53.62%). The same concern, however, does not apply to certificates and drug prescriptions since only 61.76% of orthodontists archive these documents.

Preappointed evidence consists of all dental documentation developed throughout clinical practice. Therefore, documentation of all phases of professional activity is of utmost importance.[14] Professionals agree that there is a need to record all events that occur daily in the care of their patients.[12] When it comes to recording the end of treatment, most orthodontists (n = 35) use photographs, radiographs and dental casts for documentation (Table 6). Table 6 shows that the majority of orthodontists (n = 25) request periapical radiographs once a year for orthodontic treatment control. Also according to Table 7, 53 professionals replied that they request an occlusal analysis by the end of treatment.

Terra et al[16] recommended that professionals develop a high level of communication with the patient. This means not only speaking clearly and objectively but also listening, being attentive and showing interest and consideration. Concerning this issue, Table 7 shows, in particular, that most orthodontists (92.75%) try to contact patients and/or their lawful guardians in the event of abandonment of treatment. Nevertheless, a minority of professionals (21.74%) require their patients and/or lawful guardians to sign a document at the end of the orthodontic treatment (Table 7).

CONCLUSIONS

Dentistry has reached a new stage in terms of professional liability. This study revealed that some analysis parameters were very satisfactory, such as: the availability of service provision contract models, communication with patients and/or those responsible for them in case of abandonment of treatment, orthodontic documentation files and the entering into the dental records of information concerning the breakage of and damage to orthodontic accessories. However, it is still necessary to reflect and act on some other issues, such as: patient signature should be collected in the event of damage to orthodontic accessories and copies of drug prescriptions and certificates should be kept on file.

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Submitted: September 2007
Revised and accepted: August 2008

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