Professional liability in dentistry: structure and causes of judicial litigation

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KEYWORDS

Professional liability, Dental malpractice, Informed consent, Forensic dentistry

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ABSTRACT

The great advances in diagnostic and therapeutic skills of most sectors of medicine and dentistry have led to an increasingly greater demand from patients for accuracy, attention and diligence by healthcare workers. Dentistry is one of the branches most frequently involved in claims for damages from malpractice, especially in those sectors that are particularly costly and of significant aesthetic value. Aim of the study was to compare data of malpractice claims with those of other Authors to identify similarities and/or differences in the results and to increase epidemiological knowledge in the area of dental malpractice. This work is a descriptive study performed analyzing medical malpractice claims in which one of the Authors was nominated as court professional expert advisor from 2018 to 2022 in two of the biggest courts in Campania: Naples and Santa Maria Capua Vetere. Findings of great interest were the greater involvement of the pros-thetic and implant-prosthetic sector, the significant recurrence of clinical records deficiency and the high prevalence of claims made by female subjects. Also, there was a greater incidence of emergent damage confronted to the non-pecuniary personal injury (biological damage).

INTRODUCTION

The great advances in diagnostic and therapeutic skills of most sectors of medicine and dentistry have led to an increasingly greater demand from patients for accuracy, attention and diligence by healthcare workers.

In the last twenty years there has been a profound transformation in the relationship be-tween doctor and patient, with greater importance being placed on the decision-making role of the patient,[1] who must be provided with adequate and comprehensive information.[2]

Therefore, the accusations of presumed professional liability may arise not only for mistakes in the diagnostic (missed or wrong diagnosis) or therapeutic phase (absence or in-adequate therapy or direct production of damage), but also for not providing the patient with enough information.[3]

Dentistry is one of the branches most frequently involved in claims for damages from malpractice, especially in those sectors that are particularly costly and of significant aesthetic value,[4] such as prosthetics and implantology, followed by conservative/endodontic,[5] oral surgery, orthodontics and periodontology.[6]

Therefore, the insurance market has evolved, adding different liability contracts for dentists, with coverage for damages deriving from inadequate diagnostic or therapeutic acts.[7]
In Italy, every year courts face more than 30.000 new medical malpractice claims (as shown by data from Osservatorio Sanità Ania in 2018[8]) and between 2017 and 2021 dental malpractice claims were at 4th place of the total medical malpractice claims (6,7%), with verdicts in favor of the patient in 74% of the cases (data from "Indagine Eurispes" 2023[9]).
Likewise, Manca et al. [10] showed that litigations regarding dental malpractice from the Civil Forum of Rome (the biggest in numbers of dental malpractice litigations in Europe) represented about 10.4% of all health-related litigations and in 74% of cases the dentist was found guilty, with recognition of a permanent psycho-physical impairment in 62% of the cases.
These National data are aligned with several international studies on dental malpractice: for example, Calla and Muñoz[11] reported that dentists were found guilty in 84.8% of cases and Hashemipour et al.[12] in 56.7%. However, Thavarajah et al.[13] reported a lower number of dentists pronounced guilty, with 39.63% of litigations decided in favor of patients.
In this context, the issue of identifying and delineating the boundaries of responsibility for the work of the single professionals involved arises, because of the possibility of carrying out dental work in an individual or associated form.
In fact, the expansion of scientific knowledge in the dental field has facilitated the frag-mentation of the skills of the oral health professional, encouraging collaboration between specialists or professionals with specific knowledge (orthodontist, endodontist, periodontologist, oral surgeon, implantologist, prosthetist, pedodontist), sometimes in an equal position (horizontal team) and other times in a hierarchical organization (vertical team) in which non-medical health professionals also take part.
Moreover, the different health professionals can intervene in a synchronic or diachronic cooperation, with the former being a provision of different treatments practiced in contemporaneity and the latter being a provision of different treatments practiced at different times and stages.
In this scenario, the dentist can intervene in the treatment process with a counselling re-port, without there being any relationship of dependence between the owner of the dental practice and the consultant, or as an operator consulted (most often by the patient) to remedy a result deemed unsatisfactory.
Because of these peculiarities that characterize the practice of the dental profession, aim of this study was to compare data of malpractice claims with those of other Authors to identify similarities and/or differences in their results and to increase epidemiological knowledge in the area of dental malpractice.

MATERIALS AND METHODS

This work is a descriptive study performed analyzing medical malpractice claims in which one of the Authors (Di L. P.) was nominated as court professional expert advisor from 2018 to 2022 in two of the biggest courts in Campania: Naples and Santa Maria Capua Vetere.
Malpractice claims were divided by area (medical malpractice vs dental malpractice) and all information was divided based on multiple items: branch of dentistry involved, sex of the claiming party, type of defendant, defects in the clinical records available, the losing party, type of conduct defects claimed, temporary and permanent damage.
Data was then statistically described - and results compared.

RESULTS

A total of 161 medical litigations were retrieved in the indicated time frame.
Dental claim verdicts were firstly compared with the total number of medical litigation verdicts and the number of dental malpractices: out of 161 medical malpractice claims, 19 regarded dental malpractice, corresponding to 12% of the total medical liability claims (Figure 1).
All dental malpractice litigations were in reference to conducts that occurred before 2017.
Analyzing dental malpractice claims by year of ruling (Figure 2) the number of cases has slightly decreased in recent years, with 5 claims in 2018, 4 case in 2019, 5 cases in 2020, 3 cases in 2021 and 2 cases in 2022.
In 15/19 (78.9%) of all cases the sex of the claiming party was female (Figure 3).

Figure 1. Number of dental malpractice claims vs total of medical litigations

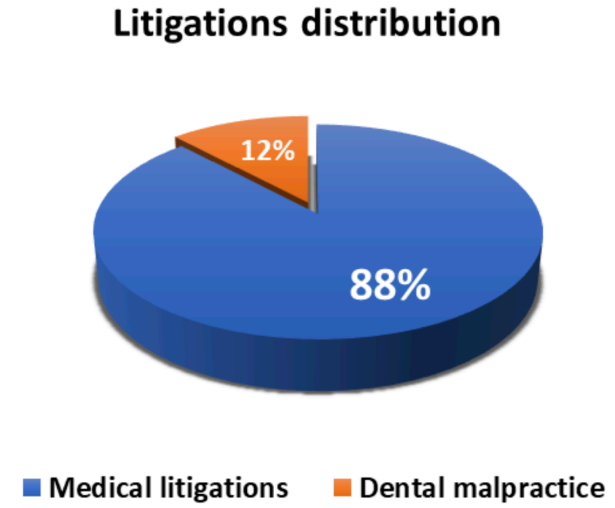


Figure 2. Dental malpractice claims distribution by year of ruling

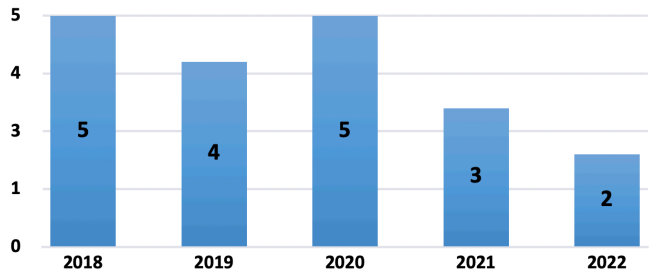
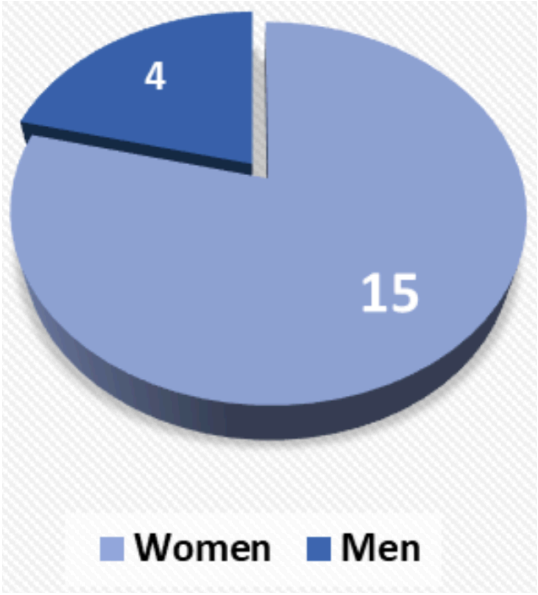
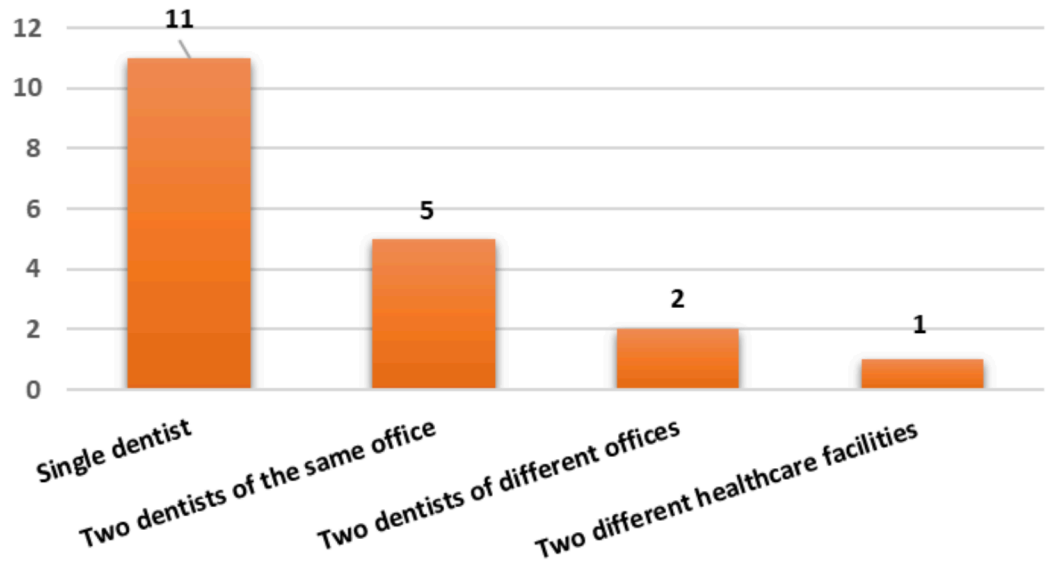


Figure 3. Sex of the claiming part



By analyzing the content of the verdicts, in 74% of cases (14/19) the dentist was found guilty.
As shown in Figure 4, in 11 cases the defendant was a single dentist, while the defendants were two dentists of the same office in 5 cases, of different offices in 2 cases and in 1 case two different healthcare facilities were involved.

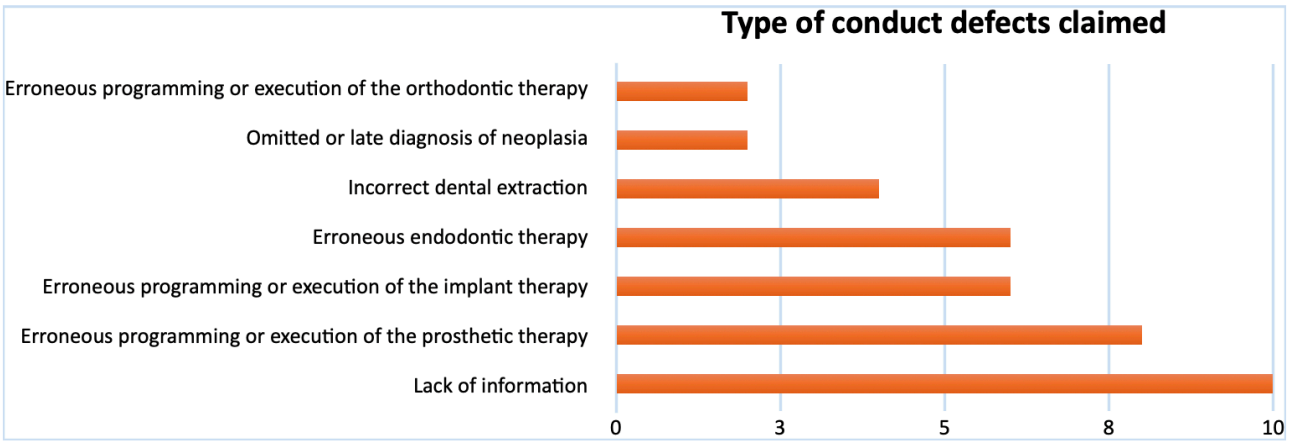
Figure 4. Type of defendants



As for type of conduct defects claimed (Figure 5), keeping in mind that dentists are often simultaneously charged with different conduct defects, in 2 cases were of erroneous programming or execution of the orthodontic therapy, in 2 cases were of omitted or late diagnosis of neoplasia, in 4 cases were of incorrect dental extraction, in 6 cases were of erroneous endodontic therapy, in 6 cases were of erroneous programming or execution of the

implant therapy, while in 8 cases were of erroneous programming or execution of the prosthetic therapy. Finally, in 10 cases a defect in the information was claimed.

Figure 5. Type of conduct defects claimed



As for available clinical records (Figure 6), in 7/19 cases (37%) a lack in the clinical records was found and in 9/19 cases (47%) there was absence of informed consent.

Figure 6. Results of clinical records' analysis

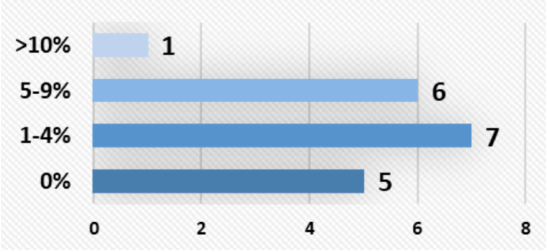
ANALYSIS OF CLINICAL RECORDS	
Lack in the clinical records	7/19 cases (37%)
Absence of informed consent	9/19 cases (47%)

This means that in 9 out of 10 cases of claims of lack of information this conduct defect was actually found.

Regarding the compensation voices valued by the Italian law, Biological Damage (BD), a quantification of psychological and physical permanent impairment percentage that goes from 0 (nothing) to 100 (the complete loss of physical validity), was recognized (figure 7) in 74% of cases, with DB of 1-4% in 7 cases, 5-9% in 6 cases and 1 case over 10%.

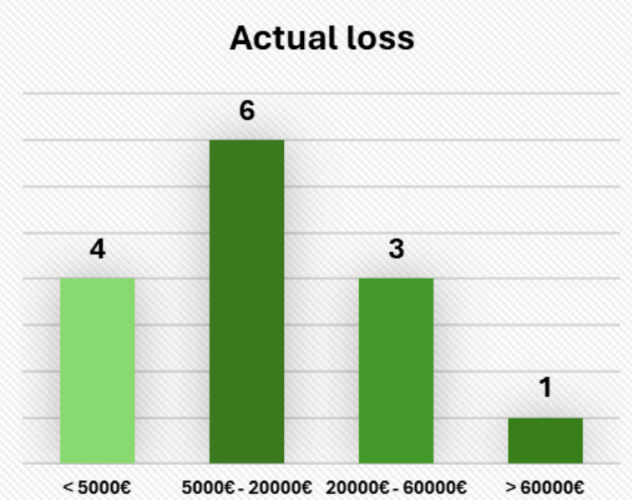
Moreover, a temporary damage was not always found. A partial inability was found in most of the cases, but with low incidence on validity of the patient.

Figure 7. Rates of biological damage found



Patrimonial damage intended as already sustained or future expenses (figure 8) was recognized in 14 cases, with 4 cases under 5.000 euros and a minimum of 500, 6 cases between 5.000 and 20.000, 3 cases between 20.000 and 60.000, and only 1 case over 60.000.

Figure 8. Actual loss compensation



DISCUSSION

Dentistry is an area characterized by high manual dexterity of the operator, collaboration among several specialist figures, use of sophisticated technical equipment and of constantly changing materials, aesthetic implications of dental treatments, high costs of most services which are frequently performed in election. These features, together with the predominantly commissive nature of dental damage and the fact that dental tissue easily shows signs of practiced therapy,

make dentistry a fertile field for malpractice claims.

The dentist has an obligation to the patient to use the most suitable materials to achieve the required aims, and is liable for the quality of materials chosen, for the aesthetic results of the treatment carried out and for optimistic unfulfilled promises.[14]

Failure to reach expectations results in a significant increase in judicial and extrajudicial litigation, in terms of professional liability. In fact, dental treatments are carried out as elective services, for which there are less justifications and excuses for errors.

Moreover, since dental treatment is carried out on hard tissues, which makes the damage produced more easily identifiable even after some time has passed, it is usually easier to demonstrate, a posteriori, the technical error at the litigation stage.

Possible productive misconduct involving the professional responsibility of the dentist can be identified in defects of information concerning privacy matters or diagnostic-therapeutic treatment, incorrect collection of anamnestic data, incorrect or incomplete clinical examination, inadequate evaluation and/or misinterpretation of instrumental and/or laboratory data and inadequate patient follow-up.

Therefore, the issue of dental malpractice is ubiquitous worldwide, contributing to the rise of the phenomenon of defensive medicine and dentistry. Moreover, numerous studies have shown how the dentist is frequently found guilty.

For example, Wu et al.[15] reported that in a study carried out specifically on endodontic malpractice litigations in the United States from 2000 to 2021 the dentist was found liable in 43.3% of cases. Additionally, they showed that 45.3% of cases consisted of pre-procedural allegations (meaning issues in the diagnosis or failure to obtain informed consent) and 77.9% had intra-procedural allegations and that plaintiff won 75% of the cases attributed to post-procedural infections. Similarly, Al-Fraidi et al.[16] have reported dentists to be found guilty in 47% of cases.

As for the identification of which branch of dentistry is more involved in dental malpractice claims, the results found in our study are similar to those presented by Kiani et al.[17], Yu et al.[18], Alsaeed et al.[19] and Manca et al.[10] who reported that the majority of clinical complaints involved prosthodontics.

This information also aligns with those published by Nassani[20] who indicated that the available evidence suggest that prosthodontics may come at the top of dental specialties in terms of inciting patient complaints and filing of dental claims, while our results are in contrast with those of de Castro et al.[21] and Fernandes and Junior[22] who found endodontics and oral and maxillofacial surgery to be, respectively, the branches of dentistry most involved in malpractice litigations.

Other crucial findings were those of a significant absence of informed consent given to patients prior to procedures and lack in the clinical records, which were found in almost every case in which they were claimed. This data aligned with the findings of Hesham F. Marei.[23], Al-Fraidi et al.[16], Kim[24], Corte-Real et. Al[25] and Hamasaki and Hagihara[26], who showed how a vast number of intra-procedural mistakes are associated with the lack of adequate informed consent.

Such defects are of great importance and show how much work is still needed to ensure adequate information to all patients undergoing dental procedures, while also highlighting the ever-important need to produce retrievable clinical records, which are important to both patients (who may need them for future procedures) and health professionals (who may need them to adequately support their case in malpractice claims).

However, some of these deficiencies may find explanation in the fact that all of the claims were referred to procedures performed before 2017, the year Italian government passed the law that made informed consent mandatory for every medical treatment.[18]

In this perspective, adherence to these provisions of law will be of great interest in a potential future analysis, with a focus on claims related to procedures performed after 2017.

Another interesting finding in the dental litigations analyzed in this paper was that the sex of the claiming party was predominantly female. This discrepancy has been traced back by many Authors to the fact that women undergo, in general, more dental therapy than men[27] and are more concerned about oral health[28], while it also could be hypothesized that females give higher importance to the aesthetic aspects of treatment

because of the pressing beauty standards of modern Society.
Finally, biological damage was most often found between 1 and 9%, similarly to the mean of 4,31% found by Manca et al.[10]
With regard to malpractice claims and the role of different health care professionals, the peculiarities of both diachronic and synchronic cooperation make the dentist responsible not only for their own actions, but also for the errors of other team members if they could have been recognizable and avoidable.
In fact, based on traditional principles of warranty and fault, health professionals cannot avoid knowing and evaluating (to the extent that they can actually know and evaluate) the previous and contextual activity of another colleague by verifying its correctness and, if necessary, remedying the error of others.
Therefore, the dental practice owner may face two types of faults: in the first case, the dentist is culpable if they delegate a procedure to another person who is unable to properly perform it; in the second case, the owner is culpable if they do not adequately supervise, where necessary, the performance of certain interventions, or do not have organizational arrangements to prevent the occurrence of events harmful to the health of patients.
As a result, there are some obvious issues in the discrimination of who might actually be at fault in many dental malpractice claims. It is often difficult to demarcate the actions of the individual health care professionals involved and to distinguish between the responsibility of the individual, the responsibility of the team, and the responsibility of the dental practice owner.
In this context, we can highlight some precautions to be taken in the management of clinical risks in dentistry.
For example, as a lot of claims were related to erroneous programming or execution of prosthetic or implant therapy,[19] this shows the primary importance of a careful assessment of the patient's medical condition and their suitability for dental treatment, together with constant diligence in diagnosis and treatment.
Moreover, use of the necessary precautions to minimize the risk of failure of dental treatment along with identification of factors that may hinder the success of treatment and information to the patient of how they may affect the outcome need to be of constant interest in dental practice, as to not create unreasonable expectations and for the patient to understand that there is no guarantee of success. In this regard, written or implied warranties should be avoided.
In addition, it would be advisable to record pretreatment and treatment data and store them properly for a reasonable time, as well as to suggest a maintenance protocol designed to achieve long-term success and record patient cooperation data.
The roles of information and informed consent are to be considered of primary importance in dental treatment: the dentist must prospect, preferably in written form, the patient with prior comprehensive, detailed and comprehensible information about the health treatment and its foreseeable consequences, including the discomforts of the treatment (e.g., post-operative suffering) and the possibility of aggravation of health conditions as a result of the performance of the treatment itself, as well as about therapeutic alternatives. The need of a written consent is crucial to prove that they properly fulfilled the prior informational obligation.
Finally, the dentist must provide all documentary evidence as the person in charge of the formation of clinical records (such as, but not limited to, informed consent form, instrumental investigations, laboratory tests, medical certificates) and must show that they took all due precautions to avoid the occurrence of complications.
One limitation of this paper can be identified in the data collection methodology, which consisted of analyzing cases in which one of the authors personally worked as a court advisor, meaning that the sample size is relatively small and that the outcomes of the litigations were partly influenced by his personal medico-legal analysis of the cases.

CONCLUSION

The results of this study were aligned with those of other international authors.
Findings of great interest were the greater involvement of the prosthetic and im-plant-prosthetic sector, the significant recurrence of clinical records deficiency, the lack of consent recording and the high prevalence of claims made by female subjects. Also, there was a greater incidence of emergent damage confronted to the non-pecuniary personal injury (biological damage).

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