

DENTISTS AND HUMAN IDENTIFICATION: THE IMPORTANCE OF DENTAL RECORDS

O CIRURGIÃO-DENTISTA CLÍNICO E A IDENTIFICAÇÃO HUMANA: A IMPORTÂNCIA DO PRONTUÁRIO ODONTOLÓGICO

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**Resumo**

O processo de identificação humana envolve uma comparação de dados de um corpo que pode variar desde integridade corporal a graus avançados de destruição, como esqueletização, carbonização ou fragmentação. A partir dos dados disponíveis nos remanescentes encontrados, inicia-se uma busca por informações *ante mortem* de pessoas desaparecidas. O presente trabalho busca demonstrar a importância do prontuário odontológico no processo de identificação humana, pela riqueza de informações, e unicidade da arcada dentária. O arquivamento do prontuário para toda a vida do profissional tem seu fundamento legal no Código de Defesa do Consumidor. Um prontuário bem elaborado, organizado e arquivado, pode fazer a diferença entre identificar ou não um indivíduo. Este arquivamento, bem como o trabalho bem desenvolvido do odontologista no processo de identificação do indivíduo falecido, constitui um serviço para o bem da população viva, isto é, para a família deste indivíduo, que não fará parte da estatística dos desaparecidos. Os documentos que compõem o prontuário odontológico são cruciais para a eficácia na identificação humana e possuem valor ético e jurídico.

**Palavras-chave:** Antropologia Forense. Prontuários. Odontologia Legal.

**Abstract**

Human identification involves comparing data from a body, ranging from structural integrity to advanced degrees of destruction, such as skeletonization, carbonization, or fragmentation. Data available in remains found trigger a search for *ante-mortem* information on missing persons. This work aims to demonstrate the importance of dental records in the human identification process, considering the richness of information within them and the uniqueness of human dental arches. The lifetime archiving of dental records has its legal basis in Brazil's Consumer Protection Code. However, we seek to demonstrate how a well-designed, organized, and filed medical record may play a key role in identifying or not an individual. The well-performed filing and forensic activity work in the identification process is a service for the living population; that is, for the family of the deceased individual who, if not identified, will be part of the missing persons statistics. Documents comprising dental records are fundamental for effective human identification, besides having ethical and legal value.

**Keywords:** Forensic Anthropology. Records. Forensic Dentistry.

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## INTRODUCTION

According to Article 17, Chapter VII of the Code of Dental Ethics, dentists are obliged to compile and update medical records in a legible manner, storing it in their own archive, be it physically or digitally. Its sole paragraph states that “dentists must store within the medical records the clinical data required to properly conduct the case, being chronologically completed in each evaluation with date, time, name, signature, and the dentist registration number at the Regional Council of Dentistry” (1).

Such imposition provides the oral surgeon with a document of paramount importance, justifying the need for ethical and legal norms regulating this work field. These norms are related to the completion of clinical forms, attests, radiographs, as well as clinical, administrative, and legal aspects (2).

By reviewing the legislation, the set of current regulations, and the literature with an interdisciplinary approach between Dentistry and Psychology, our study aims to stimulate a discussion about the role of the oral surgeon in human identification, considering dental records filing and the effects of non-identification on victims family.

## LITERATURE REVIEW

Dental records are a set of diagnostic information on a given patient recorded throughout the treatment, since their first visit (3). Professional attitude towards patient dignity and the way of communicating with them arises since the academic stage, when this knowledge is well fixed. Benedicto et al. (3) found that mistakes in filing clinical forms occurred mainly between the 5th and 7th semester of the dentistry course.

Although dentistry professionals are promptly aware of their importance and should make dental records part of their routine, many of them face difficulties in completing the forms (2). Unfortunately, dentists have much to lose in not valuing a correct and proper medical record. This documentation cannot be simply stored; it must compile enough quality to function as a procedural safeguard or be presented in cases of identification requirements. For that,

information contained within records must be clear, complete and interpretable by any peers. Untitled encodings and abbreviations in odontograms, incorrectly processed radiographs, and indecipherable handwriting render part of the information unusable (3).

Patient's identification and anamnesis are important data in the clinical files for providing other indispensable information. Dental records established within the clinic include clinical files with medical and dental history, treatment plan, consent form, intra and extraoral radiographs, copies of sick notes and prescription books, study models, and photographs (4). All records must be duly signed by patients, safeguarding the professional from justifying false information reported by them (2). Medical records are thus pre-constructed documentary evidences and may be necessary in procedural processes between patient and professional.

According to the Code of Dental Ethics (Chapter VII: on Dentistry Documentation), medical records must contain all documents issued within the clinic and complementary exams important for diagnosis, treatment plan, and monitoring of any unexpected outcome. Although there is a controversial topic due to the Code's lack of clarity in this issue, authors agree that oral surgeons must keep dental records permanently (1).

The Consumer Protection Code (art. 72) imposes the penalty of detention to service providers who “prevent or hinder the consumer from accessing information on this regard kept within register, databases, files, and records,” being prohibited from denying patient access to this documentation. The same code also regulates that the patient's right to make a complaint for defect in services provided expires in 90 days (art. 26) and determines the right to repair damages caused by them in five years (art. 27). The term for latent defects, those not easily recognizable, starts only after recognizing the defect; considering dental procedures, it may take weeks, years, or even decades, reinforcing the need for a indefinite filing of medical records (5).

Thus, filing records for human identification adds no extra task to oral surgeons, as they only use supposedly pre-existing information (6). The constant and proper maintenance of

medical records, radiographs, study models, and photographs allows the dentist to contribute to justice in cases of human identification.

Dead bodies may be partially destructed by the action of mechanical, chemical, or physical agents, precluding fingerprints analysis and hindering the identification process, depending on the conditions in which it was found. Many times, the teeth are the only applicable elements for identifying the body. As teeth and dental materials are extremely resistant to high temperatures due to their composition, and for being in an environment protected by the skull, musculature, and tongue, they may be investigated in cases of carbonization, especially posterior teeth (7). Considering that, forensic dentistry plays a pivotal role in identifying victims (8).

Forensic Dentistry comparatively evaluates ante-mortem data and dental records in relation to post-mortem. These comparisons are conducted using the dental records provided by the dentistry professional, who filed all possible medical and legal data on the individual found. Such documentation enables professionals to evaluate the ante-mortem dental condition of the body and identify it by comparing data and radiographic images, as dental arch characteristics are unique (8). This comparison includes morphology analysis, dental elements positioning and proportion, pulp chambers, trabecular bone, association with other elements and anatomical accidents, possible anomalies, or even, less frequently, palatine rugae cross-checking, also unique.

Considering the aforementioned definition, a well-designed, organized, and filed medical record may play a key role in identifying or not an individual, which proves that such filing and the forensic team well-performed work in the identification process comprises a service for the living population welfare; that is, for the family of the deceased individual who, if not identified, will be part of the missing persons statistics (9).

This situation psychologically affects the family of the missing person, who vanishes from their relatives' field of view and is considered missing. The longer it takes to locate the person, the more physiognomic changes occur, hampering even more the identification process. Then, when the probable missing person is found, dead or alive, they can only be identified by ge-

netic commutations (10).

Identifying the body and burying it according to its cultural norms may relieve some of the family suffering. Death is a trauma that disturbs the lives of those who experience it. Without the body, the illness and frailty affecting the emotional competence are enhanced by the inability of assimilating grief (11).

For legal regulations, civil life ends with the death certificate. For family members and society, the remains and funeral ceremonies are indispensable for signaling the end of something. The ceremonies and the mourning indicate a new stage, whereby the absence of the loved one is gradually assimilated by their family and friends; and burial is a way of attesting the absence (11).

Death without burial – as would occur in cases of unattainable human identification – embeds the family with a continuous and endless waiting of someone who will never return. The lack of identification fosters an inability to perform mourning rituals, which regulates a situation of loss that invalidates the chance of renouncing what was lost and the arrival of a new stage. This scenario does not eliminate the hope of a possible reunion, and such interruption or suspension of family life has psychological effects potentially more harmful than death certainty and the mourning period (9, 11, 12).

## DISCUSSION

Human identification is one of forensic dentistry main functions. Bodies are often found carbonized, fragmented, destroyed, or severely decomposed, hindering victim identification. Dental methods are often employed in these cases, as teeth are extremely resistant and often the only source capable of determining the individual identity (3, 13).

Forensic dentistry is helpful in cases of unrecognizable bodies, but can only be performed in the presence of dental records. Although some professionals perform satisfactory documentation, they often record only the treatment to be performed, ignoring teeth condition before and after dental treatment, which hinders or precludes identification.

The importance of dental record in human identification is undeniable; each record is fun-

damental, including complementary exams and particularly imaging exams (4). When the professional fails in completing the medical records, properly storing the documents, or storing it for the appropriate period, the oral surgeon is unable to provide information that often is the only capable of determining an outcome to the situation. In some instances, oral surgeons employ radiography for an immediate vision, to diagnose or verify the quality of this procedure, unconcerned with correct processing, identification record and date, and images archiving, possibly neglecting precious images for identification.

Without an adequate record with well-processed and filed images, there is no identification; and without identification, the individual remains missing, with all (legal and psychological) consequences for the living. Responsible for the dental record proper registration and filing, the oral surgeon offers a sine qua non condition for the forensic dentist to identify a human body.

## CONCLUSION

Considering the aforementioned facts, documents comprising dental records are fundamental for an effective human identification, in addition to their ethical and legal value. These documents must be kept for an indefinite period, and may cooperate in human identification, in case of deceased individuals, reducing the anxiety and psychological impacts of the family members.

The authors declare no conflicts of interest

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