









## More than a smile, contributions of dentistry to forensic sciences: a narrative review

Joana Catarina da Silva Vitória <sup>1</sup>  0009-0005-2513-1933  
Augusta Pureza Alves Silveira <sup>1,2,3,4</sup>  0000-0002-9349-3443  
Cláudia Patrícia Campos Ribeiro <sup>1</sup>  0000-0003-0544-4973  
Pedro Moisés Soares Monteiro <sup>1</sup>  0009-0005-7279-7009  
Márcia Cláudia Dias de Carvalho <sup>1,2,5</sup>  0000-0001-9884-4751  
Maria Inês de S. B. Guimarães do Couto <sup>1,2,3,4,6</sup>  0000-0003-3687-7798

<sup>1</sup> Faculty of Health Sciences, Fernando Pessoa University, Porto, Portugal

<sup>2</sup> FP-I3ID, Institute for Research, Innovation, and Development; FP-BHS, Biomedical and Health Sciences, Porto, Portugal

<sup>3</sup> CEISUC- Center for Research in Technologies and Center for Health Studies and Research at the University of Coimbra, Portugal

<sup>4</sup> RISE-Health, Faculty of Health Sciences, Fernando Pessoa University, Porto, Portugal

<sup>5</sup> CINTESIS.UFP@rise, Center for Research on Health Technologies and Services, Fernando Pessoa University, Porto, Portugal

<sup>6</sup> National Institute of Legal Medicine and Forensic Sciences, Porto, Portugal

### ARTICLE INFO

Received 30 April 2026

Accepted 18 June 2026

#### Keywords:

forensic dentistry  
legal-medical expertise  
forensic pathology

#### Corresponding Author:

Joana Catarina da Silva Vitória; Fernando Pessoa University – Faculty of Health Sciences, Porto, Portugal; 2023104402@ufp.edu.pt

DOI: 10.62741/ahrj.v3iSuppl. 2.182

This article is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License.

### ABSTRACT

**Introduction:** Forensic dentistry has become an essential element of forensic sciences, contributing to human identification and medicine-legal proceedings. Beyond clinical practice, dentists play a crucial role in the analysis of orofacial injuries and identification procedures.

**Objectives:** This study aims to analyze the role of dentists in legal medicine, highlighting their intervention in this area, as well as their integration as experts, direct participants or potential victims in legal-medical proceedings.

**Methodology:** A literature review was conducted using the PubMed databases, employing the Mesh-terms “forensic dentistry”, “human identification” and “dentists”. The following inclusion criteria were applied: articles published between 2020 and 2025, in Portuguese and English, duplicate articles and/or those whose content did not correspond to the proposed topic, were excluded.

**Results:** Forensic dentistry plays a decisive role in human identification, especially in cases where the body is visually unrecognizable. Dental structures provide reliable data for age determination and identification. Dentists are in a unique position in identifying signs of abuse, particularly in children, through the correct recognition and documentation of oral injuries. Specifically, the dental diagnosis of injuries such as bite marks, dentoalveolar fractures, and soft tissue lacerations provides crucial physical evidence. When documented through clinical records, photographs, and radiographs, these findings serve as objective material proofs to substantiate and retrieve medical-legal proceedings. Additionally, these professionals may also act as expert witnesses in legal cases. Reviewed literature also highlights increasing concerns regarding professional liability and legal conflicts in dental practice.

**Conclusion:** In conclusion, forensic dentistry plays a multidisciplinary role bridging health and justice. Its forensic applications are essential for human identification, legal investigations and the production of technically substantiated expert evidence. Dentists contribute to technically grounded responses, essential for families and society, affirming themselves as active agents in upholding scientific truth, human dignity and justice.

---

**Contributions:** Conceptualization: JCSV and MIG; Data curation: Not applicable; Formal Analysis: JCSV and MIG; Funding acquisition: Not applicable; Investigation: JCSV and MIG; Methodology: JCSV and MIG; Project administration: Not applicable; Resources: Not applicable; Software: Not applicable; Supervision: AS and MIG; Validation: JCSV, AS and MIG; Visualization: JCSV, AS and MIG; Writing – original draft: JCSV, AS, CR, PM, MC and MIG; Writing – review & editing: JCSV, AS, CR, PM, MC and MIG.

**Please cite this article as:** Vitória JCS, Silveira APA, Ribeiro CPC, Monteiro PMS, Carvalho MCD, Couto MISBG. More than a smile, contributions of dentistry to forensic sciences: a narrative review. *Athena Health & Research Journal*. 2026; 3(Suppl. 2). doi: 10.62741/ahrj.v3iSuppl. 2.182