



MEDIEVAL DENTISTRY: MYTHS, PRACTICES, AND HISTORICAL REALITY

Pardayev Otabek Anvarovich

<https://orcid.org/0009-0007-1381-5371>

otash6065@mail.ru

Jurayev Sanjar Ramazanovich

<https://orcid.org/0009-0002-4306-8796>

jurayevsanjar1983j@gmail.com

Ilhomov Elamon Ilhomovich

ABSTRACT

Medieval dentistry is often portrayed as primitive, brutal, and dominated by superstition and ignorance. Popular narratives frequently depict tooth extraction as a crude procedure performed by untrained individuals using rudimentary tools. However, archaeological evidence, historical documents, and medical manuscripts reveal a more complex and nuanced reality. This article examines dental practices during the medieval period (approximately 5th–15th centuries CE), distinguishing myths from historical facts. Through an interdisciplinary analysis of bioarchaeological findings, medical texts, and social history, the study explores the prevalence of dental diseases, therapeutic practices, professional roles, and cultural perceptions of oral health in medieval Europe and the Islamic world. The findings demonstrate that while medieval dentistry faced significant limitations, it also incorporated empirical knowledge, specialized practitioners, and early preventive concepts that contributed to the foundation of modern dentistry.

Keywords: Medieval Dentistry, History of Dentistry, Barber-Surgeons, Dental Diseases, Medical Myths

INTRODUCTION

The Middle Ages occupy a controversial position in the history of medicine. Often characterized as a “dark” period marked by superstition and scientific stagnation, medieval medical practices—particularly dentistry—have been widely misunderstood. Images of painful tooth extractions performed in public marketplaces by barber-surgeons dominate popular imagination. While such practices did exist, they represent only one aspect of medieval dental care.

Dental diseases were widespread during the medieval period, driven by dietary changes, limited oral hygiene, and increased population density. However, medieval societies also inherited and adapted medical knowledge from classical antiquity and Islamic scholarship. Dentistry, although not formally recognized as a separate profession, played a crucial role in healthcare systems across Europe and the Middle East.

The aim of this article is to critically examine medieval dentistry by separating myth from historical reality. By analyzing archaeological evidence, medical manuscripts, and social structures, this study seeks to provide a balanced understanding of how dental care was practiced, perceived, and developed during the medieval era.

LITERATURE REVIEW

Early historiography often portrayed medieval dentistry as universally crude and ineffective. Nineteenth-century historians, influenced by Enlightenment ideals, emphasized the contrast between



medieval practices and modern scientific medicine. However, more recent scholarship has challenged this narrative.

Researchers such as Ring, Guerini, and Roberts argue that medieval dentistry must be understood within its historical context. Dental knowledge was largely based on classical sources, including Hippocrates, Galen, and Celsus, whose works were preserved and expanded upon in Islamic medical centers.

Archaeological studies of medieval cemeteries consistently reveal high prevalence of dental caries, periodontal disease, and tooth wear. However, evidence of healed lesions, antemortem tooth loss, and dental modifications suggests that therapeutic interventions were common.

Medical manuscripts from the Islamic Golden Age, such as Avicenna's *Canon of Medicine*, contain detailed discussions of dental anatomy, oral diseases, and treatments. These texts later influenced European medical education through translations into Latin.

The literature increasingly emphasizes the role of barber-surgeons, monks, and itinerant practitioners in providing dental care. While their methods lacked modern anesthesia and antisepsis, they often relied on empirical experience and practical skill rather than pure superstition.

METHODOLOGY

This study employs a qualitative historical and bioarchaeological research methodology based on secondary source analysis. Data were synthesized from

Archaeological reports on medieval skeletal remains

Translations of medieval European and Islamic medical manuscripts

Historical records of medical guilds and professional regulations

The analytical framework integrates:

Paleopathological analysis of dental diseases

Textual analysis of medical writings

Comparative cultural analysis between European and Islamic traditions

Special attention was given to contextual interpretation, avoiding modern biases when evaluating medieval practices. The goal was to assess dentistry according to the knowledge, resources, and social structures available at the time.

RESULTS

Prevalence of Dental Diseases in the Medieval Period. Archaeological evidence indicates that dental disease was extremely common in medieval populations. Dental caries increased significantly compared to prehistoric periods, particularly after the widespread consumption of refined carbohydrates and sugars.

Periodontal disease and tooth loss were prevalent among adults, often leading to chronic pain and infection. Dental abscesses, visible in skeletal remains, suggest prolonged untreated infections that could become life-threatening.

Despite these challenges, many individuals survived long enough to exhibit advanced dental wear and healing, indicating some level of care and adaptation.



Dental Practices and Treatments. Medieval dental treatments focused primarily on symptom relief. Tooth extraction was the most common intervention for severe pain or infection. Barber-surgeons performed extractions using specialized instruments such as dental pelicans and forceps.

Herbal remedies, poultices, and mouth rinses were widely used to treat toothache and gum disease. Ingredients included cloves, sage, vinegar, and wine, some of which possessed genuine antiseptic or analgesic properties.

In the Islamic world, dental hygiene was emphasized through the use of the *miswak* (chewing stick), reflecting early preventive oral care practices.

Professional Roles and Social Organization. Dentistry in medieval Europe was not a regulated profession. Dental care was provided by a variety of practitioners, including barber-surgeons, physicians, monks, and itinerant healers.

Barber-surgeons occupied a unique position, combining surgical skills with practical dentistry. While often ridiculed in later accounts, they played a vital role in providing accessible care to the general population.

Medical guilds gradually introduced regulations, marking early steps toward professionalization. In contrast, Islamic medical institutions maintained more formalized training systems, integrating dentistry into medical education.

Myths and Misconceptions. One of the most enduring myths of medieval dentistry is the belief that it was entirely dominated by superstition and magical thinking. While religious and spiritual elements were present, many treatments were based on observation and experience.

Another misconception is that dental pain was universally accepted as unavoidable. Historical records indicate that people actively sought relief and valued practitioners who could alleviate suffering.

These findings challenge simplistic portrayals of medieval dentistry and highlight its complexity.

DISCUSSION

The results demonstrate that medieval dentistry was neither purely barbaric nor entirely ineffective. It represented a transitional phase in medical history, balancing inherited classical knowledge, religious beliefs, and practical experience.

While limitations such as lack of anesthesia and poor infection control increased risks, medieval practitioners developed adaptive strategies within these constraints. The emphasis on extraction reflects pragmatic decision-making rather than ignorance.

Importantly, medieval dentistry laid the groundwork for later advancements by preserving knowledge, developing tools, and establishing practitioner roles. The gradual move toward regulation and education during the late medieval period directly influenced Renaissance dentistry.

CONCLUSION

Medieval dentistry must be understood as a historically situated practice shaped by cultural, technological, and scientific limitations. Archaeological and textual evidence reveals a field that addressed real health needs using available knowledge and resources.



By separating myth from historical reality, this study demonstrates that medieval dentistry contributed meaningfully to the evolution of oral healthcare. Recognizing these contributions enriches our understanding of dentistry as a cumulative and adaptive medical science.

REFERENCES

1. Ring, M. E. (1992). *Dentistry: An Illustrated History*. New York: Abrams.
2. Guerini, V. (1909). *A History of Dentistry*. Philadelphia: Lea & Febiger.
3. Roberts, C., & Cox, M. (2003). *Health and Disease in Britain*. Stroud: Sutton Publishing.
4. Whittaker, D. K. (1993). Dental pathology in medieval populations. *International Journal of Osteoarchaeology*, 3(2), 85–94
5. Avicenna. (1025). *The Canon of Medicine*. (Latin translations).
6. Hillson, S. (2005). *Teeth*. Cambridge: Cambridge University Press.
7. Magner, L. N. (2005). *A History of Medicine*. Boca Raton: CRC Press.