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Integrating medical humanities into dental education through ancient dental modifications

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With great interest, we read the article by Seiler and his colleagues on the study of oral pathologies in ancient Egypt.[1] The study on social strata and oral pathologies in ancient Egypt contributes significantly by examining how lifestyle, diet, and social status influenced dental health. It illuminates the complex interplay of oral health conditions across different societal contexts, enhancing our understanding of past health conditions and human health evolution. Additionally, the study underscores the importance of precise methods for assessing periodontitis in ancient human remains, potentially advancing future research accuracy. Overall, this research enriches our knowledge of ancient Egyptian oral health practices and provides valuable insights into paleo-odontology.

We wanted to share our experience integrating ancient dental modifications into dental education. Dental mutilations, like intentional tooth removal observed in certain regions, are dental modifications.[2] Studies have identified various dental mutilation forms, including chipping, filing, drilling, and extraction, each resulting in distinct dental morphological alterations.

We integrated dental mutilations into an Oral Embryology and Histology class discussion. The discussion sheet's theme was "Dental Modifications," coupled with delivered dental pathology knowledge.[3]

The A4 discussion sheet first introduced ancient Taiwanese findings from the Shihsanhang Historical Site.[4] It then presented Reichart et al.'s photos of dental mutilations from 2008.[2] Three discussion questions followed. First, among Reichart et al.'s six dental mutilation classifications, which causes the most minor tooth damage? Second, figure S2453 shows two maxillary central incisors with abnormalities. What do you recognize about the teeth abnormalities? What pathological hard and soft tissue changes could they cause? Third, what are your thoughts on dental mutilation? What other dental modifications do you know of?

The first question prompts students to analyze the morphological impacts of different mutilation types classified by Reichart et al. It requires applying dental histology and pathology knowledge to assume which type likely causes the most minor tooth damage. This integrates technical dental science with clinical analysis of the effects of cultural practices.

The second question shows two incisors with abnormalities and asks students to diagnose the changes and resultant pathology. This requires visual recognition and dental tissue knowledge to identify the abnormalities and predict clinical outcomes. It connects dental morphology education with practical clinical examination skills.

The third question asks students to reflect on their perspectives of dental mutilation and share other modifications they know of. This incorporates social and cultural considerations into the technical discussion, supporting humanistic thinking. Students must view mutilation not just physically but also through a sociocultural lens.

Integrating medical humanities and multidisciplinary approaches has become crucial pedagogically within dental education.[5] This activity provided an opportunity to apply dental knowledge to analyze the impacts of an ancient cultural practice on oral health. Discussing this real-world application of course concepts enabled students to deepen their understanding of dental morphology,

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pathology, and the influences of cultural practices on oral health outcomes. Integrating medical humanities through activities like examining ancient dental modifications can enrich didactics with clinical relevance and sociocultural perspectives.

Declaration of competing interest

The author has no conflicts of interest relevant to this article.

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None.

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