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# To wear the most conspicuous decoration on the teeth: The role of the dentists in tooth gem installation in Taiwan

## KEYWORDS

Tooth gems;  
Tooth gem installation;  
Dentistry;  
Dentists;  
Medical practice;  
Beauty industry

It is the human nature to love the beauty. Human beings have a long history of decorating their teeth. According to archaeological excavations, the earliest tooth decorations can be traced back to the Etruscans living in the Italian Peninsula in the 7th century BC. At that time, the upper-class women would deliberately remove some of their anterior teeth and wear a denture fixed in place with the gold bands, purely for the aesthetic purposes.<sup>1</sup> The focus shifts to the Maya civilization in the Central and South America around the 3rd to 9th centuries AD. Among the Classic Lowland Maya, the tooth inlays were common among the male elite, and every third of the individuals found in archeology was inlaid with the colorful gems, stones, and fillings.<sup>2</sup>

Regardless of time and space, all human beings have one thing in common. That is the desire to change their appearance to be more beautiful. However, the teeth are certainly included in the category of appearance. Moreover, the development of the modern dentistry, especially in the field of the conservative dentistry and the dental adhesive, has directly benefited the advancement of the tooth gems (also called the tooth jewelry or the dental grills). Thus, the fashion and dentistry go hand in hand.<sup>3</sup> Certainly, the ornamental dentistry also keeps pace with the times.

The tooth gems became popular in the 1990s. Basically, the rhinestones are attached to the tooth surface as a

decoration by using the dental adhesive. This kind of tooth gems is loved by the younger generation, which deeply affects the future hip-hop culture. To this day, the tooth gems are still popular among young people around the world.<sup>4</sup> In the United States, there are dental clinics that specialize in helping customers to install the tooth gems. In Hong Kong, there are several tooth gem shops (not medical institutions) that provide many different tooth gem styles for their customers. In Taiwan, a 2024 official document from the Ministry of Health and Welfare revealed the role of the dentists in the practice of the tooth gem installation. This article reported the connotation of this official document and its impact on the development of tooth gem installation in Taiwan.

This official document was issued by the Ministry of Health and Welfare to the Taiwan Dental Association (TWDA) on April 10, 2024. The document number is No. 1132060342 from the Oral Health Department. It is titled "Regarding non-medical personnel's performance of the tooth gem installation suspected of violating the provisions of the Physicians Act". It stated that anyone practicing as a physician without having obtained a physician license shall be sentenced to prison. Moreover, the medical practice refers to any examination, diagnosis, and treatment performed for the purpose of treating, correcting or preventing human disease, injury or disability. The business scope

<https://doi.org/10.1016/j.jds.2024.11.026>

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**Figure 1** As shown in the diagram, the tooth gems are those that are attached onto the tooth surface with the corrosive substances, resin, and other substances.

of beauty industry should be engaged in cosmetics and beautification of the human body surface, and should not involve the practice that affect or change the structure or physiological functions of the human body. However, the service for the tooth gem installation used the corrosive substances to apply onto the people's teeth, and then used the resin and other substances together with the light curing to fix the tooth gems onto the tooth surface (Fig. 1). If it causes the damage to the dental tissue or the change of the oral function or if it involves the examination, diagnosis and treatment, it belongs to the medical practice. In addition, the medical practice should be performed by the dentists themselves or by the relevant medical personnel under the instructions of the dentists. The beauticians do not have any medical qualifications and are not allowed to perform the services involving the medical practice.

In conclusion, the connotation of this official document confirmed that the Taiwan's highest health authority recognized the dentists as the professionals who can legally perform the tooth gem installation, based on their ability to fulfill their commitment to the quality assurance of the tooth gem installation and take care of the oral health of their customers. The dentists have professional training in the oral cavity, tooth structure, and related treatment techniques. In addition, they have the core ability to provide patients or clients with the services of oral hygiene education, prevention and treatment of oral diseases, and maintenance of the oral and dental function and aesthetics. Based on the above capabilities, the dentists have the relevant knowledge and skills to ensure to avoid or reduce the damage and possible side effects to their patients' or clients' oral and tooth structure when installing the tooth gems. They also have the ability to find the best

balance between the oral health care and the popular culture (such as the tooth gem installation). In addition to the dental health assessment before the tooth gem installation and the avoidance of the tooth damage during the installation process, as well as the performance of accurate disinfection procedure and infection control, the dentists can continue to provide oral hygiene education and oral health care services after the tooth gem installation to avoid the inappropriate tooth gems causing tooth sensitivity, plaque accumulation, dental caries, gingival tissue destruction, bite interference, and oral mucosal irritation or allergic reaction.<sup>5</sup> Therefore, we believe that the dentists are not only the gatekeepers of the oral health, but also the performers of artistic expression of the dental decorations.

### Declaration of competing interest

The authors have no conflicts of interest relevant to this article.

### Acknowledgments

None.

### References

1. Loevy HT, Kowitz AA. The dawn of dentistry: dentistry among the Etruscans. *Int Dent J* 1997;47:279–84.
2. Hernández-Bolio GI, Quintana P, Ramírez-Salomón M, et al. Organic compositional analysis of ancient maya tooth sealants and fillings. *J Archaeol Sci Reports* 2022;43:103435.

3. Bhatia S, Gupta N, Gupta D, Arora V. Tooth jewellery: fashion and dentistry go hand in hand. *Indian J Dent Adv* 2015;7:263–7.
4. Vazhiyodan A, Mohan S, Vizhi GK, Khan R. Sparkling smile. *JIDENT* 2013;1:1–3.
5. Peter T, Titus S, Francis G, Alani MM, George AJ. Ornamental dentistry- an overview. *J Evolution Med Dent Sci* 2013;2: 666–76.

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Received 24 November 2024  
Available online 6 December 2024