



Letter to Editor

COVID-19 vaccination and effect on dental health

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Dear Editor,

Coronavirus disease 2019 (COVID-19) remains a global public health concern. The COVID-19 vaccine is the most effective strategy to avoid the disease. More than 12.7 billion doses or 162 shots for every 100 individuals worldwide have been provided, according to COVID-19 vaccine tracker statistics from October 2022 (<https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/>). Localized and systemic adverse effects following vaccination were included in the general health effects of the COVID-19 vaccine that was reported in a global setting. The occurrence is minimal, nevertheless, and the majority of the negative effects are not life-threatening. The COVID-19 vaccination has more benefits than risks. The health consequences of COVID-19 immunization are an intriguing topic.

Regarding effects of COVID-19 on oral health, it is mentioned in the literature about the interrelationship.^[1] The virus and the many public health measures taken in reaction to it have had a significant influence on everyone's lives at work, at home, and in the community and are likely to affect many people's oral health.^[1] In addition, populations who are disproportionately affected by COVID-19 are more likely to develop oral diseases and experience inequities in oral health and oral healthcare.^[2] The effect of the COVID-19 vaccine on oral health is rarely discussed in dentistry science. Although it is helpful information, the COVID-19 vaccine's effects on dental and oral health are rarely discussed in the literature. The basis for the current commentary is this.

The authors would like to discuss this specific issue in this brief letter. Indeed, the negative effects of vaccination on the mouth are often ignored and there are no records for other vaccines. Due to the widespread use of the COVID-19 vaccine, there is an increased interest in the numerous side effects, including orodental side effects. Uehara *et al.* recently investigated changes in the oral microbiota of people with a healthy oral environment after COVID-19 vaccination.^[3] Uehara *et al.* discovered that SARS-CoV-2 mRNA immunization boosted oral bacterial diversity while decreasing the proportion of the species *Bacteroides*, implying that vaccination may be favorable to oral health.^[3] The COVID-19 vaccination has been proven to be effective and safe. The vaccine's orofacial side effects were uncommon and included abrupt peripheral facial paralysis (Bell's palsy), facial swelling, and swelling of the lips, face, or tongue linked with anaphylaxis.^[4,5] However, there is no specific report on the negative impact of oral health.^[3,4] The effect of the COVID-19 vaccine on oral health is an intriguing topic that deserves additional investigation.

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Conflicts of interest

There are no conflicts of interest.

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