

The unfolding consequences of postponing routine dental care

Explorando las consecuencias de posponer las atenciones odontológicas de rutina

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The COVID-19 pandemic represents some of the most distressing challenges for health systems all over the world in the past decades, forcing clinicians to modify standards, prioritise treating conditions that require immediate care, and implement elements of remote attention in record time (Douglas *et al.*, 2020). These challenges have also had an impact in the population's oral health.

The physical features of the dental office make it a potential high-risk setting for the transmission of SARS-CoV-2, mainly because of the proximity between members of the dental team and their patients (Peng *et al.*, 2020). Also, clinicians often use aerosol-generating in dental care provision, which may play a role in further increasing the risk of airborne transmission in dental clinics (Epstein *et al.*, 2020). Although the exact magnitude of risk of infection within dental offices remains unknown and new evidence needs to be generated. From the early stages of the pandemic, the dental community around the world decided to move towards postponing routine nonemergent procedures, following previous recommendations implemented in the last SARS and MERS outbreaks (Peng *et al.*, 2020). This recommendation, formulated under a scenario of uncertainty regarding the potential benefits and harms, erred on the side of caution. It was based on placing a higher weight on patients' and clinicians' safety, from a value perspective. This restriction served two primary purposes. It gave the dental community precious time to gather available evidence, define new protocols, train dental personnel, and allow health systems to acquire new personal protective equipment (COVID-19 Dental Services Evidence Review Working Group, 2020). A second purpose was contributing to minimising the risk of transmission, particularly in areas of high

community transmission rates. These measures, however, also come with a cost. Abruptly pausing dental care provision would have likely worsened the prognosis of several chronic oral diseases that otherwise could have been managed, with a negative impact on the overall dental morbidity and disease burden, that still needs to be measured.

The COVID-19 pandemic, in a global context of epidemics of oral diseases (Peres *et al.*, 2019) will have significant short, medium, and long-term consequences, which will be an emerging challenge for health systems (figure 1). Although early on during the COVID-19 outbreak, the limitation of access to care could generate a volume of emergency consultations within a range to that observed before the pandemic, over time, an increase in the number of emergency consultations can be expected as a function of the lack of routine dental care (figure 1, red curve). During COVID-19 outbreaks, triage systems have been installed to balance the risk of viral exposure with the actual demand for care. In this stage, before dental attention, rapid antigen testing could be cost-effective, especially for the detection of asymptomatic cases in communities with moderate to a substantial viral transmission. As time passes, and during reopening periods, oral health providers may experiment a higher demand for care, in part, explained by a cumulative delay of non-urgent dental care (figure 1, green curve).

However, quantifying the long-term impact is problematic, as its effect is modulated by the role of the social and economic determinants of oral health (figure 1, blue curve). For example, untreated dental caries and periodontal disease would increase due to the

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pandemic, with irreversible consequences for populations, including tooth loss and other undesirable effects of dental infections. In parallel, under this scenario, it is expected that the world would experience an increase in oral health inequities, especially in low- and middle-income countries (Marmot, 2020; Urström & Tao, 2020).

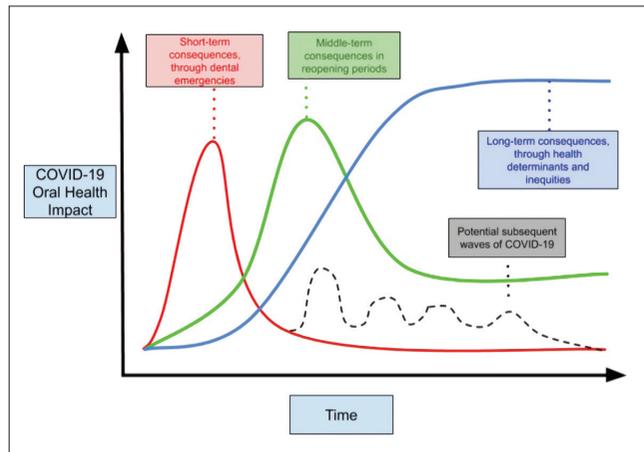


Figure 1: Short, Middle and Long-term consequences of COVID-19 in Oral health. It was adapted from UHC2030 International Health Partnership. Living with COVID-19: Time to get our act together on health emergencies and UHC.

The pandemic leaves a few lessons to the dental community worldwide. First, there is a need to refocus on health promotion and disease prevention, beyond the provision of dental fillings or other surgical interventions (Watt *et al.*, 2019). Second, there is an opportunity to take advantage of technological tools that may facilitate the continuation of care until the next pandemic occurs, with emphasis on self-care, maintenance of oral hygiene, reduction of sugar consumption, and control of habits such as smoking, and self-examination. Teledentistry, including counselling and education, could help to mitigate the consequences of delayed face-to-face clinical care.

Moments of crisis create an environment conducive to change at all levels. This reflection calls for a change in the philosophy of dental care, with a higher emphasis on maintaining oral health, increasing access to care using teledentistry, and preparing dental health systems for the next pandemic.

Conflicts of interest: none to declare.

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