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Letter to the Editor

Integration of telemedicine into the public health response to COVID-19 must include dentists

Dear Editor,

Dentists are among the medical professionals, who are particularly exposed to Covid-19 (Meng *et al.* 2020, Yu *et al.* 2020). Indeed, in addition to the nasal passages, the mouth is a privileged place of contamination; urgent or emergent dental care is often invasive and requires aerosolization (Ather *et al.* 2020). Dental practitioners are then exposed to saliva which plays a role in the human-to-human transmission of diseases, in particular respiratory coronaviruses (Lu *et al.* 2010, Liu *et al.* 2011, Sabino-Silva *et al.* 2020). We believe that dental surgeons are at the forefront of practitioner–patient cross-transmission. It is imperative that dental surgeons stay abreast of this outbreak and appreciate essential precautionary practices that are potentially crucial to protect themselves, their relatives and their patients during this outbreak.

While reducing face-to-face consultation is necessary to reduce the risk of infection, dental surgeons need to ensure continuity of care and 'oral telemedicine' is a solution of choice. Indeed, the COVID-19 epidemic may represent an enduring transformation in medicine with the advancement of telemedicine (Rose 2020). The inherent visual nature of dentistry makes it ideal for the practice of telemedicine (Estai *et al.* 2016). Dental pathoses and oral lesions are often directly observable, and hence, photography may be a valuable diagnostic tool that should not be underestimated in times of epidemics or pandemics.

As other medical specialties such as dermatology (Kaliyadan & Ramsey 2020), during this pandemic period, teledentistry could provide an effective alternative to face-to-face visits for many dental and mucosal conditions, whereas in a normal context, this virtual system could be used as a complement to standard oral diseases management.

Recently, a focus has emerged, detailing the importance of telehealth in this context of crisis and the need for a significant change in the effort to manage and redesign existing models of care (Smith *et al.* 2020). Like telemedicine, teledentistry involves the use of telecommunication technologies to provide medical information and services (Smith *et al.* 2020). Smartphones can also be easily connected to Internet networks and represent a great facility for the patient to communicate with the dentist. As described by Smith et al. (2020) for patients with COVID-19, or those who suspect they may be infected, teledentistry can assist in remote assessment (triage) and continuity of care. For those not infected with COVID-19, particularly those at higher risk of being affected (e.g. the elderly with pre-existing medical conditions), teledentistry can provide rapid access to a safe course of action in congested hospital or dental office waiting rooms. As with any management protocol, its appropriate effectiveness and sustainability depend on its integration into health services as a routine protocol. Confidentiality of patient data must of course be established (Damanpour *et al.* 2016, Kaliyadan & Ramsey 2020). An extension of the practice of teledentistry is the use of dedicated and secure platforms to discuss cases between healthcare professionals. One obvious advantage of these platforms is that a greater number of practitioners can see and comment on clinical cases, in the context of both diagnosis and management (Böhm da Costa *et al.* 2019). Nevertheless, the effectiveness of this new system is still dependent on the quality of the video and images sent. Effective teledentistry requires a good infrastructure on both sides of the consultation. The use of teledentistry also has limitations: consultations require clinical examinations that may be difficult to perform remotely (e.g. periodontal probing) and complementary examinations (e.g. imaging) that cannot be performed remotely. It is important that the training of clinicians in teledentistry highlights its limitations (Kaliyadan & Ramsey 2020, Smith *et al.* 2020).

As with telemedicine (Smith *et al.* 2020), in order for teledentistry to respond quickly to emergency situations such as the COVID-19 epidemic, dental surgeons must be prepared and therefore trained. Obviously, this also requires the integration of this training into the teaching programmes. Its effectiveness further depends on the question of the value of this effort, as well as reimbursement models, and therefore requires a reorganization of the health system. Teledentistry's promise in serving as a tool to serve disadvantaged population has already

been established. However, we suggest that it must become an essential part of our health system to respond to global and national emergencies. Evidence related to transmissibility and mortality informs the clinical community of the importance of vigilance, preparation, active management and protection. We urge the medical community to actively engage dentists in the fight against the current and also future health challenges.

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