Letter to the Editor

Continuing endodontic education and COVID-19: before, during and after?

Dear Editor,

In all likelihood, the COVID-19 pandemic will continue to have a major impact on dentistry, not only in clinical practice but also in education. Certainly, both dental schools and continuing education providers will be impacted, and particularly with respect to teaching hand-skills, for example, for endodontic procedures.

The current pandemic has brought with it a need for social distancing. Indeed, much of university-based education has already moved to e-learning platforms. However, the practice of dentistry, and certainly endodontics, is also an art that requires the practice and repetition of technical procedures, as well as the opportunity to try-out specific endodontic instruments that are constantly evolving.

Continuing education opportunities are therefore necessary in endodontics so that professionals can master both the knowledge and technical skills required to continue and perfect their learning. The use of tele-technology appears to be an interesting way to offer continuing education at a distance.

Indeed, before this health crisis, distance education was sometimes recommended for continuing dental education (Kearney *et al.* 2016, Kolcu *et al.* 2020) and was considered to be a potential educational environment for endodontics (Nayak *et al.* 2015).

In order to be effective, continuing education strategies must be designed to incorporate the basic principles of learning (Perkins & Salomon 2012). Instructional design is based on constructivist learning approaches known as four-component instructional design (4C-ID) (Kolcu et al. 2020). The 4C-ID model has proven to be an effective instructional design in distance learning courses with learning (Pittenger et al. 2012, Susilo et al. 2013, Postma & White 2015, Kolcu et al. 2020).

The 4C-ID model is composed of 4 components allowing the development of complex skills such as structured learning tasks in a real-life context and partial task practices that allow for the development of routine skills (Vandewaetere *et al.* 2015, Kolcu *et al.* 2020).

Proposing continuing education courses in endodontics at a distance therefore seems important to set up and develop. As stated above, this has already been tested before the health crisis and the acceleration of distance learning caused by this crisis appears to be the right time to develop this type of continuing education (Kolcu *et al.* 2020).

It would therefore seem interesting to test online continuing education courses by sending to the practitioner's office the endodontic material necessary (e.g. files, material) to carry out remotely supervised hands-on-procedures. Moreover, the possibility of practical distance continuing education includes the potential to call on trainers from all over the world, and thus diversifying the requests and offers for training without any limit of location.

Tele-technology could be a powerful tool to reach many participants in different geographical areas.

It is important to have reliable means of communicating current theoretical and practical knowledge in endodontics and to establish sound methods that can help dentists to accurately assess their own performance in endodontics.

In the short term, this may be a useful solution, but as the currently prevailing restrictions are relaxed, it can be used to complement and diversify the continuing education offer, which should continue to be pursued as far as possible, in line with public health policy.

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