

The Troublesome and Delicate Relationship Between Scientific Evidence, Social Media and State-of-the-Art Clinical Practices

“The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn”. Alvin Toffler

Social networks have become a main supplier of information on different areas of the society, including health and science professions, resulting in an increased and uncontrollable dissemination of non-peer-reviewed content from a wide variety of sources. The amount of unfiltered information along with the vertiginous advances in dental materials and clinical sciences experienced in the last decade, have resulted in a void that affects the delicate balance between the information that is scientifically validated, and the one that is received by the clinician and dental students.

Even though many respected dental scientists and educators use these platforms as a mean to reach the population and other colleagues, trying to approach the scientific knowledge to the society, it is not uncommon that these platforms are also used to spread fake news or non-scientifically proven and validated protocols (1). Therefore, researchers and dental educators may remain skeptical about the real benefits of many advances because dentistry evolves faster than the rhythm at which scientific evidence is generated (2).

It is undeniable that technical, and technological developments have resulted in benefits for clinicians and patients, both by the introduction of more conservative, predictable and efficient techniques, and for the development of materials that exhibit higher biocompatibility, ease of use and overall better performance and longevity. However, the conjunction of massive diffusion of unfiltered information and lack of scientific knowledge may cause that some dental clinicians fall as victims of misinformation, exposing their patients to unnecessary, overly invasive, or overall harmful procedures that affect the quality of life of the people (1).

Therefore, it is a social responsibility for researchers and practitioners alike to try and educate both their patients and their colleagues. In that regard, extreme caution must be applied in universities, where the education of future dental professionals should be based on scientific knowledge, and not solely on the empirical knowledge and personal preferences of the teachers (2). On the other hand, those same teachers need to keep an open mind about the relevance and importance of studying, learning, and doing research that validates the information they receive regardless of the source. Also, education of the population in general should enforce the development of critical thinking before accepting as truth anything they see, read or hear, regardless of the source where the information comes from.

REFERENCES

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