

LESS IS MORE

Leonardo da Vinci asserted that simplicity is the ultimate sophistication. As an undiscussed genius, he anticipated his time by centuries, emphasizing a concept that is still relevant today, applicable not only to all sciences but also to everyday life.

Jack Welch, past CEO of General Electric and one of the most prominent business leaders, warned against the false belief that complexity equates to progress. Albert Einstein echoed this sentiment by stating that if a phenomenon cannot be explained simply, it has not been understood well enough. This idea of simplicity aligns with the principle of “Less is More,” foundational to Modernism and Minimalism, a phrase popularized by architect Ludwig Mies van der Rohe in the early 1920s.

This notion of “simplicity,” as noted by essayist Edward De Bono, should not be mistaken for “simplism,” which involves jumping directly from observing a phenomenon to an immediate explanation while disregarding the underlying complexity of the situation. This oversimplification risks falling into the Dunning-Kruger effect, a psychological illusion of competence arising from superficial understanding.

In a world flooded by visual and material stimuli, “Less is More” is more a caution and an operative principle, rather than merely a motto. In recent years, this principle has gained prominence internationally both in medicine and dentistry, including oral surgery and implantology.

Tissue regeneration is among the most extensively researched topics in implantology literature. The demand for increasingly functional and aesthetically pleasing outcomes has challenged researchers to set new standards. However, more elaborate procedures do not necessarily guarantee superior results. For instance, in implant-prosthetic rehabilitation of posterior regions, even in cases of bone or keratinized tissue deficiency, reconstructive surgery may not always be required if clinicians effectively utilize existing bone volumes and potentially reposition keratinized tissue from lingual/palatal to buccal areas. Such an approach minimizes biological and financial costs for the patient, reduces morbidity and postoperative complications, and shortens healing and prosthesis completion times. Moreover, uncertainty persists regarding the long-term success of reconstructed bone.

The literature reports a growing number of studies on “biomaterial or biomedical device-associated infections” (BAIs). Dental implants surrounded by heterologous bone grafts seems to show lower success rates in cases of infection (peri-implantitis) due to exacerbation of the severity of infection.

The principles of this approach can be summarized as follows:

- Accurate diagnosis and preoperative planning;
- Avoidance of unnecessary surgical interventions;
- Utilization of minimally invasive technologies, such as piezosurgery or bone condensation;
- Minimization of the surgical trauma;
- Reduction in the use of medications or additional materials, as less invasive procedures often decrease the need for antibiotics;
- Cost-benefit analysis with the patient at the center of every clinical decision.

Overall, these concepts reflect a modern and advanced perspective, consistent with best clinical practices and Hippocrates' philosophy of "primum non nocere" (first, do not harm), which has inspired a similar principle in academic and scientific contexts: the "precautionary principle," advocating for cautious approaches in medicine.

The key points of this reflection in oral surgery practices are:

1. **Simplicity as sophistication:** The idea that simplicity represents a sophisticated goal is particularly relevant in science, where elegant, minimalist solutions often yield the best results.
2. **The myth of complexity:** Overcoming the erroneous belief that complexity always signifies progress. As Einstein noted, the ability to explain a phenomenon simply indicates genuine understanding.
3. **"Less is More" in medicine:** Applying the principle of minimization in oral surgery and implantology represents an ethical and clinically effective approach. Avoiding unnecessary interventions and favoring less invasive methods are essential for improving care quality, reducing patient risks, and optimizing resources.
4. **Focus on precise technology and diagnostics:** Leveraging advanced technology to enhance diagnostic accuracy and preoperative planning. This approach reduces errors and supports less invasive, targeted strategies.
5. **Consideration of biological and economic costs:** Balancing benefits, risks, and costs is critical. Thoughtful, patient-centered clinical approaches are the cornerstone of responsible and sustainable medicine.

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