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Editorial

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On the discrepancy between professionally assessed and patient-reported outcome measures

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Clinical research in implant dentistry has always been driven by a meticulous search for millimetres, percentages, and dichotomous assessments of the presence or absence of any parameter supposed to be clinically critical. In recent years, there has been a paradigm shift from standard clinical parameters such as marginal bone level changes, changes in the level of the mucosal margin, and papilla height and presence towards patient-reported outcome measures (PROMs).

This shift relies heavily on current clinical studies in the field, which are increasingly struggling to meet today's demands for statistical power and are often not sufficiently powered to answer the research questions posed. In times when scientific journals and the respective reviewers increase the threshold for a study to be published, the choice of an appropriate primary outcome becomes crucial. This trend is to some extent manifested in the increasing questioning of the external validity of clinical studies, as most studies are conducted in university-based settings or at specialized centres.

For private practitioners, the translation of clinical data into daily practice is of the utmost importance, as clinical data support the decision-making for any intervention and therapy and help when discussing treatment options with patients during initial appointments. Based on clinical and personal experience, patients tend to ask primarily about the longevity of the therapy, treatment cost, and morbidity. This contrasts sharply with the outcome measures that are traditionally assessed in clinical studies. For example, we have never been asked by a patient whether in the long run, a gain of 0.5 mm in soft tissue thickness at implant sites is significant compared to a gain of 1.0 mm. While from a scientific aspect, millimetre-level differences in soft tissue gain might be important, these values are often not communicated to the patient because they appear to be irrelevant for them. In other words, what is meaningful to the patient can differ from what we as clinicians may deem meaningful.

The current principles of evidence-based medicine call for patients to be actively involved in decision-making. For example, when indicating soft tissue augmentation at dental implant sites, patients tend to focus on the side effects of the treatment (e.g., morbidity) rather than the efficacy itself. This may account for the current popularity of soft-tissue substitutes in implant dentistry, since they can reduce patients' morbidity. Intuitively, the best treatment is not necessarily the one that shows the highest efficacy, but the one that suits the patient's preferences. In this sense, clear information on the expected level of morbidity of current and alternative therapeutic interventions is essential for patients' understanding and acceptance.

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Unfortunately, the discrepancy between what clinicians and patients perceive as important has only been recently addressed in a few studies reporting professionally assessed and patient-reported outcome measures. Interestingly, there is hardly any agreement between pure clinical outcomes and PROMs, and the question of whether we are over-treating patients remains to be answered. To date, it is rather challenging for clinicians to discuss the clinical importance of different therapeutic alternatives with patients when clear and robust data on PROMs are not readily available. The choice of a therapeutic intervention always involves a certain trade-off between benefits and risks. However, information on these trade-offs from a patient's perspective—particularly in implant dentistry—is currently lacking. Taking the previous example of soft tissue augmentation at implant sites, it seems reasonable to ask, to what extent patients and clinicians are willing to give up clinical efficacy relative to benefits in terms of PROMs. Although the choice of therapy is primarily based on clinical judgment, the availability of robust data on PROMs will assist clinicians and patients in decision-making.

Therefore, this editorial underscores the need to assess PROMs not only as secondary outcomes, but also as primary outcomes in future clinical studies. Ideally, these PROMs should consider different subsets of the population as well as different stakeholders. By doing so, our patients will be grateful and will benefit from our research in what we hope will be a more meaningful way to conduct clinical research in implant dentistry.

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