



## Shared Decision-Making in Prosthodontics

While a more patient-centered approach during treatment planning and execution has become important in many fields of dentistry, it has gained specific relevance in fixed and removable prosthodontics in recent years. This is reflected by the routine reporting on patient-centered outcomes and patient satisfaction in recent prosthodontic research. We have discussed the significance of oral health-related quality of life (OHRQoL) and the standardized ways of monitoring it before<sup>1</sup>; yet, it remains to be considered how decisions on different treatment options are made. Who decides, and who bears the responsibility for the outcome in the end? What factors are influencing the associated patient satisfaction, and is the decision-making process crucial for final patient satisfaction?

It may be due to these open questions that a new (scientific) area is rising in interest and importance: shared decision-making (SDM). The idea of clinicians and patients sharing the responsibility for making decisions with respect to a certain therapy is not new. In 1956, a new model of the doctor-patient relationship—mutual participation—was proposed by Szasz and Hollender.<sup>2</sup> The term “sharing of decision-making” was first introduced by Veatch in 1972.<sup>3</sup>

It has taken 40 years for SDM to become an integral part of scientific studies and a new benchmark in research on clinical communication. SDM is defined as “the involvement of patient and clinician in the process of treatment decision-making.”<sup>4</sup> Several models for the decision-making process have been published in the medical literature in the meantime, ranging from paternalistic models to interpretive and informed models to, finally, the SDM model.<sup>5</sup>

All have the same goal: to assist patients in having an active role in the process of decision-making. For this, however, it is crucial that the patients understand their treatment options, the advantages and shortcomings of the different options, and the associated risks. The communication of all this can be difficult, as it is influenced by the ability of the clinician to communicate the goals and the patient’s ability to ask questions to obtain all relevant information, as well as to intellectually understand the replies in order to apply them for decision-making.<sup>7</sup>

To improve the communication process, decision-making aids/tools have been recommended.<sup>8,9</sup> Different tools were evaluated in the medical literature, displaying the improvement of the decision-making process and highlighting the need for further research and development with this respect.<sup>8,9</sup>

More research in this domain is even more important, as medicine and dentistry are in the midst of a digital transition, and this digital health transition is significantly transforming the doctor-patient relationship. A recent questionnaire study evaluating physicians’ knowledge and attitudes toward recent digital health technologies and their influence on the transformation of the doctor-patient relationship has shown that digital technologies are appreciated to increase the efficiency of patient-professional collaboration.<sup>10</sup> Another phenomenon linked to this is that, through the new online sources, patients can become well-informed prior to consulting a professional (doctor, dentist). Telemedicine may have numerous advantages, such as improved access to care and reduction of treatment time and costs via prior online steps. Furthermore, patient information/teaching, and thereby empowerment, are facilitated.<sup>10</sup> All of this increases the need for good

(digital) tools for the communication of treatment plans to enhance the SDM process and allow for predictable outcomes.

Pretreatment diagnostic tools such as (virtual) wax-ups or set-ups, and clinical try-in of such, can improve SDM in prosthodontics. Conventionally made, milled, or even printed mock-ups can be considered as patient decision-making aids since they help the restorative team so that the clinician, technician, and patient can decide on the different treatment options together during the clinical evaluation. Digital tools for the virtual prediction of treatment outcomes (eg, by means of augmented reality) are communication tools as well. And this is just the beginning of the digital transformation of prosthodontics—many more communication and planning tools will be available in the near future.

It is interesting to see that, until today, very little or no research has focused on how patients, clinicians, and technicians are involved in the SDM process in prosthodontics, to what extent patient satisfaction with the final outcome can be influenced by SDM, and what the role of digital dental technologies is thereby. Future research should definitely focus on this upcoming area, and prosthodontic researchers are strongly encouraged to dive into SDM.

On behalf of the entire Editorial Board team,

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