Guideline topic: significance and evidence base

3 questions for Prof. Dr Joachim E. Zöller



Prof. Zöller, how would you define the importance of dental guidelines in day-to-day clinical practice—and where does over-interpretation begin?

Dental guidelines are intended to provide guidance for clinical decision-making. They are designed to ensure that the latest, evidence-based recommendations for diagnosis and treatment are followed.

Over-interpretation occurs when guidelines are viewed as immutable rules rather than evidence-based recommendations. This is because, in many cases, greater consideration needs to be given to individual patient factors than to rigid guidelines.

How do you assess the evidence base for many dental guidelines—particularly in implantology?

The level of evidence for many clinical practice guidelines is not very high, as, for example, prospective, randomised trials are very difficult to conduct. Consequently, whilst there are good RCTs and systematic reviews on specific topics in implantology (e. g. implant materials, surfaces), many guidelines are based on expert opinions, case series or studies with limited sample sizes.

What risks arise when guidelines are primarily consensus-based rather than evidence-based?

If guidelines are primarily consensus-based, there is a risk that they will have low scientific validity, as decisions are then often based solely on expert opinion rather than the best available data. This reduced reliability of the recommendations means that they may lead to overtreatment (e. g. unnecessary procedures), undertreatment or even incorrect treatment.

Final question for you: what reforms would be needed to make the guidelines more robust and relevant to practice?

Firstly, the evaluation procedures should be strictly standardised; all decision-making processes and data sources should be disclosed. This should allow for regular external reviews to take place. Participants would not only have to declare any conflicts of interest but would also be barred from taking part in the process.

Following the drafting of each guideline, consideration should be given to whether additional studies on clinical relevance and cost-effectiveness might be appropriate. Whilst these cannot, of course, form part of a scientific guideline, they may, under certain circumstances, provide important guidance for clinical practice.