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What are the Prerequisites for a Paradigm Shift?

How many times have you heard a speaker describe a "new treatment paradigm"? The term is used so often that we probably think that new paradigms are developed almost every week. If that were the case, we would have so many treatment options available to us that we probably could not keep up with them all without an exceedingly agile mind or the use of a very robust computer program.

If we look at the term "paradigm," we will see a number of different descriptions or interpretations depending upon the specific usage of the term. As it applies to the science of dentistry, we generally think of a paradigm as a nearly ubiquitous acceptance of the underlying theories and techniques associated with a specific treatment modality. Achieving this general acceptance likely demands the achievement of a number of different milestones.

Paradigms must be associated with treatment that either provides an improved success rate when compared with traditional methods or establishes a similar success rate while utilizing a dramatically simplified intervention. Simple description of a different technical approach to achieve the same results would not establish new paradigms; in that situation, the description is nothing more than an alternate method of intervention.

New paradigms may be associated with new materials or technology. Issues such as improved biologic response, resistance to wear or fracture, durability, or maintenance of cosmetic results may be sufficiently dramatic to mandate a therapeutic change. In some instances, new paradigms could be established in response to economic factors that may allow treatment to be provided to a larger portion of the population by making the treatment affordable to them.

All the aforementioned factors contribute to new treatment paradigms, but there is one concept that rarely receives attention in dentistry. The "intention to treat" must be met before a new paradigm can be established. So, what is meant by an intention to treat? This is an important question that can dramatically affect the perception of successful treatment.

Think about it this way. Picture a patient with a specific diagnosis who could be treated with a specific technique. If that treatment qualifies as new, different, and somehow superior to previous interventions (as described earlier), it may well be considered as a new paradigm, but it will only do so if the vast majority of the patients for whom this treatment is intended are able to be treated using this technique. If the treatment is proposed for a group of patients, but on the day of intervention, a decision is made to treat the patient with another approach, each of those alternatively treated patients would be considered as failures in the category of intention to treat for the originally proposed treatment.

Said another way, if a patient is not treated in the intended way, that failure to treat according to the plan counts against the intended treatment. Although the intended treatment might be a perfectly legitimate technique, it is not so earth shattering as to be considered as a new treatment paradigm. To become a new paradigm, there must be a marriage of a new and innovative treatment that demonstrates favorable outcomes and is accomplished when the intended treatment is performed. Using this interpretation, we might be a little less willing to accept the descriptions of new paradigms.

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