

When 90% Is Not Good Enough

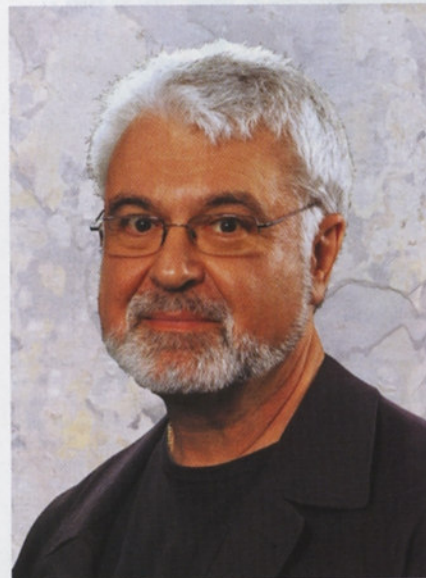
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Quality dentistry is not guaranteed by attending multiple continuing education seminars, especially when prosthodontic procedures are involved. It certainly helps, but in fact “quality” and “dentistry” may be mutually exclusive. Mutually exclusive due to dentistry’s multiple steps process. To achieve more than a 90% successful outcome for any given dental procedure, labour intensive attention to detail is required.

A successful outcome is only achieved if each and every step is performed at a level which will guarantee almost 100% success. If we examine the steps needed to create a single crown the likelihood of that happening is remote. The tooth in question may or may not be vital, may or may not suffer from periodontal disease, may be fractured or may contain a large restoration. All of these scenarios point to added difficulties and additional steps. If it is also an anterior tooth we have aesthetic concerns and we haven’t even started the preparation yet.

Next, we have to look at the patient’s medical and dental history. Perhaps we are dealing with a dental phobic or a severe gagger with multiple allergies and a history of TMD. All of these preoperative concerns impact on our ability to deliver a quality restoration; add to this, the involvement of a laboratory component in the production of the final product and then at the end, fitting, occlusal adjustment and cementation and the likelihood of success is doubtful.

It is important to add up the number of steps required for the successful completion of any dental procedure. If for instance there are 10 steps for completion and up until now a 90% success is considered an acceptable goal, This would mean (that we accept) that each of the above steps has a positive outcome 90% of the time. Using basic statistical analysis for all 10 events to be true with a 90% success rate, the probability of a successful outcome for the final product is $.9^{10}$ or 35%.



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Obviously, not very impressive.

In the duty bound world of dentistry, it is not easy to achieve quality results and to complete these procedures within pre-scheduled time slots. But this

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