

Needed: Technology for the Masses

I attend a substantial number of national and international meetings each year, as do many readers of this column. Such meetings offer not only the opportunity to learn from a broad group of lecturers but also to meet colleagues socially to discuss current topics, attitudes, technologies, and events in various countries. I recently attended three conferences, sponsored by rather varied groups, in three different countries. At each meeting, however, the audience was treated to presentations showing exquisitely crafted ceramic restorations. These restorations were fabricated using numerous different techniques and represented virtually every possible application of ceramics to restorative dentistry. The majority of these creations were developed using esoteric approaches that, more often than not, required complex and expensive equipment for their completion. Generally, the excellence of the restoration resulted from the skill of the craftsman, not from the superiority of any one technique or system.

With the realization that dentistry, along with all other professions and businesses, is troubled by a lagging economy in most areas of the world, I began to question the dichotomy with which dentistry is approaching the provision of services to those in need.

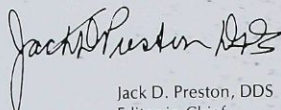
While I continue to be intrigued by new ceramic technologies and equipment, as do many of my colleagues, it is important to remember that the vast majority of dentists in the world do not have access to dental technicians who can make optimum use of even simple techniques. Furthermore, it is apparent that a substantial number of practicing dentists lack the ability to critically evaluate a completed restoration, both physiologically and esthetically, and either make needed modifications or reject the unit outright. The minimal remuneration offered for ceramic restorations by many third-party payers admittedly offers little incentive to many dentists to seek optimal laboratory services, and there is little incentive for technicians to spend time developing skills for which they cannot be adequately paid. Nonetheless, this is no excuse for accepting and placing substandard restorations.

It is obvious that both prosthodontic practice and dental technology are developing on two diverging paths. There is a large contingent that is using "quick and dirty" techniques to produce restorations of minimal quality that are made for minimally adequate tooth preparations and are recorded by less than desirable impressions. At the same time, a very small group of exceptionally talented technicians are honing skills that serve only a minute percentage of the world's patients.

The development of new technologies that require complex and expensive equipment are of questionable value in meeting the greater need for treatment. Inasmuch as the majority of laboratories employ less than five people, there is little financial surplus with which to purchase expensive new equipment. If such equipment can be procured, there must be some assurance that the technique for which it is needed will remain viable for a long enough time to justify the investment. Every reader can recall recent examples of techniques that required a considerable investment in equipment that is now gathering dust, while the technique for which it was purchased has been superseded by some new concept.

We should not be lulled into complacency as we watch presentations showing fine ceramic restorations fabricated by a limited number of skilled and dedicated technicians. These are the exception — not the rule. Similarly, the emphasis should not be on the development of technology that has a limited application and requires significant initial investment which makes it available to only a few persons. The fact is, dental laboratory technicians need techniques that are easy to use by individuals with average skills and from which they can derive at least moderate compensation. Our profession must place greater value on technical services that will benefit the majority of patients. Prosthodontists must lead the battle to raise the prestige level of dental technicians and technical services. Adequate education and training for technicians will only be possible when there is sufficient motivation to achieve it.

I wonder when someone will have the fortitude to assemble a presentation showing the "average" quality of ceramic restorations that emerge from the "average" laboratory and the oral result of such "average" service. It wouldn't be a very pretty picture — nor would dentistry be very proud of the outcome. Perhaps, however, it might spur more needed action than the often self-aggrandizing display of restorations that benefit only a fortunate few and use techniques that are impractical for the majority of laboratories.



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