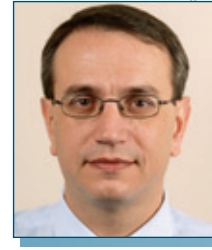




How dentistry will look 10 years from today



Eli Eliav



Sorin Teich

Although it is impossible to predict the next major breakthrough in dentistry, based on past and present trends, we can try to foresee some elements of the future. Indubitably, new materials and techniques will be introduced, some of which will become part of routine dental care. Just to name some of the recent new technologies, restorations, computer-guided implantology, and the use of microscopes in endodontics come to mind. Such developments require enhanced training and more technically savvy dentists. Future innovations will initially require developing specialists in the new techniques and will later evolve and become popular among general practitioners. Treatment quality will be improved, but costs will increase and further training will be required in either dental school or continuing education courses.

Along with these expected developments, life expectancy has increased and people maintain more teeth for most of their lives, leading to new professional challenges. Rather than dentures, many elderly people now keep their own teeth. While this enlarges the patient pool, the average patient age increased significantly. Older patients are more prone to systemic disease. Many also take medications that may affect the dental treatment plan: anticoagulants increase the risk for bleeding, drugs that induce hyposalivation increase the risk for caries and periodontal disease, and other medications may interact with medications provided by the dentist. To overcome this hindrance, dentists must have a more profound education in general medicine that will require curricular adjustments.

Another rapidly developing field is that of salivary diagnostics. This includes the diagnosis of diseases through saliva previously made through blood tests. Although this may be primarily utilized by physicians, dentists might (and should) also benefit from providing these diagnostic tests. However, this will, once again, require broadened knowledge in medical care and exposure to such technologies as early as possible during dental education.

All the additional required training presents a predicament. Ideally, it should be provided during the predoctoral training; however, the curriculum in dental schools is already extremely taxing. Adding vast pieces to the existing framework would be difficult.

One solution may be to increase the time students spend in dental school, but this could create a burden on the academic system and students. Another option may be to include different tracks of study, for example, technology- or medical-oriented tracks, which would be taught through basic or specialty training. Although some specialties already include technical or general medicine aspects, this concept may require a major revision in the dental curriculum.

Future dentists will face many new challenges: advances in technology, new materials, and a need for expanded knowledge in general medicine. Dental schools should be able to recognize and incorporate these changes in the curricula while carefully observing the developments in supporting evidence.

The ability of any dental school to adjust to the rapidly evolving changes in the profession and to constantly reinvent itself will be quickly recognized by prospective students as a cutting-edge advantage. Dental schools will not only face the challenge to recognize and implement new developments but should also be prepared to educate their faculty to function in a dynamic and rapidly changing environment.

New technologies and their impact on the cost of care, dental education, and the interface with general medicine are aspects that were and will continue to be relevant for the profession. The real challenge is combining all these aspects in one inclusive field to create the essential ingredient for the future success of dentistry.

Eli Eliav
Editor-in-Chief

Sorin Teich
Associate Editor