Our perfect storm: One orthodontist's opinion

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Dentistry and our specialty of orthodontics have prospered during the past 100 years because of (1) our education as professionals and (2) the public's esteem and trust we have been privileged to enjoy.

Times are changing rapidly. Our bedrock–education–has entered some tumultuous times, and we must prepare ourselves and our practices for some huge changes. Education and our professional lives are symbiotic; each depends on the other. Many issues impact education and our specialty that cannot be resolved quickly or easily.

First, all orthodontists are dentists. The issues that impact dentistry will directly impact orthodontics. Quite probably, dentists, orthodontists, and other dental specialists—as well as the patients we treat—must drastically alter expectations while society works through problems and solutions emerge. The major issues are oversupply, undersupply, and maldistribution of dentists and orthodontists.

Fifteen new dental schools are planned, are under serious consideration, or have recently opened in the United States.^{1,2} These new schools will create many new dentists. Will there be a glut of dentists? If so, these general dentists may have to resort to attempting any and all dental specialty procedures to make a living. For example, in my little town in Tennessee, we have a general dentist who has a billboard that says, "See Dr X and get your teeth straightened in six months with cosmetic braces." More and more general dentists will be forced to turn to orthodontics and other dental specialties.

Additionally, it is more than probable that some of these new dental schools will eventually want to have graduate orthodontic programs and other specialty programs. How will society absorb the graduates of these

Private practice, Cookeville, Tenn. Am J Orthod Dentofacial Orthop 2016;149:587-9 0889-5406/\$36.00 Copyright © 2016 by the American Association of Orthodontists. http://dx.doi.org/10.1016/j.ajodo.2016.03.009 additional specialty programs? Where will these programs find capable and qualified educators?

The Commission on Dental Accreditation has approved many new graduate orthodontic programs over the past 15 years. The specialty is experiencing a tremendous increase in the numbers of orthodontists. In many cities and towns, there is an orthodontist on almost every street corner. Conversely, some areas seem to have few orthodontists. Patients who live in these areas must travel a considerable distance to receive orthodontic care. The bottom line is that tomorrow's graduate might find it harder and harder to find a place to practice and make a living. The law of supply and demand will have to resolve the issues of oversupply, undersupply, and maldistribution.

The Commission on Dental Accreditation is the body that accredits dental education, dental specialty education, dental hygiene education, and so on. It does not legislate the number of dental schools or orthodontic graduate programs. Any dental school or dental graduate program can be accredited if it meets the accreditation standards. I have heard over and over that the commission needs to do something about this or that. The commission can do nothing about it. The law of supply and demand is the only answer.

Questions

Do we have too many dentists, too many orthodontists? Or too few dentists, too few orthodontists? A distribution problem? We need answers! The only way to get answers is to conduct a manpower study that surveys dentistry and dental specialties. Such a study is imperative for our specialty of orthodontics. A manpower study would give all the communities of interest-prospective students, graduate students, faculty members, practitioners, and the public-some needed answers. A manpower study would also give useful information to the politicians who control Graduate Medical Education money that is used to fund some dental specialty programs.

Orthodontics has some specific issues that make its position in this perfect storm even more unsettling. These issues seem to be somewhat unique to orthodontics and its interrelationship with the entire dental education system.

Graduate school tuition

Tuition at many graduate orthodontic programs is extremely expensive. This tuition expenditure impacts the practices of that program's graduates. For example, a graduate who leaves a program with a debt less than \$100,000 will have a much easier time during the early years of practice than a one who leaves a program with a debt of \$400,000 to \$600,000. Astronomic tuitions drastically impact the lives of that school's graduates. These graduates will "owe their soul to the company store"—ie, loan institutions—forever.^{3,4}

This debt problem will impact dentistry in general and orthodontics in particular, because the graduate who is overburdened with debt will be tempted to resort to unnecessary treatment procedures to attempt to pay the ordinary and necessary bills and to repay the huge debt that professional schooling incurred. The bottom line is that the person with the astronomic debt must make enough money to live and to service the debt. Will unnecessary procedures be done on an unsuspecting public?

Patient care

An exorbitant tuition is only 1 manifestation of how education administrators generate a positive balance sheet for the educational institution. Another approach is to require graduate orthodontic students to treat more patients while in the graduate orthodontic program so that more money is generated for the institution. A graduate program can become a "mill" where teeth are aligned for a fee. Graduate students become indentured servants. Gone are the days when a graduate student started 40 patients and carefully, thoughtfully rendered treatment. If the graduate is required to start 80 or 100 patients, not much learning can take place. The student must see patient after patient and use tooth alignment techniques to get a patient's teeth aligned so that another patient can be started. This type of education model cannot teach the basics and fundamentals of orthodontics. All it teaches is tooth alignment. This type of "treatment" might be good for the institution's bottom line, but it will create practitioners who do not understand the scientific literature. the biology of tooth movement, and the fundamentals of force systems. This scenario will ultimately cause harm to the patients who are treated by these "tooth alignment specialists," who do not know what they do not know.

"Widget" orthodontics

Companies that supply orthodontic products must become more and more aggressive to be profitable. Many have "courses" that tout their particular products along with a stable of gurus who present these courses. Some who attend are swayed by the personality of the presenter; they discount the fundamentals they learned in a graduate school and follow one guru after another. The patients these people treat are the ultimate victims. We orthodontists need our suppliers; they are a vital part of our practices. But the supplier of products should not be an integral part of our specialty educational process. The orthodontic specialist must be able to separate anecdote from fact while our suppliers' products are used-and appreciate the limitations of every new "widget" that is offered. A solid education in the fundamentals gives the graduate the knowledge to be more discerning.

Teachers—the lack of qualified and enlightened teachers

We must have faculty in our orthodontic graduate programs who, as Lysle E. Johnston, Jr, has said, "know what good is." Unless the faculty member knows what is good, and knows how to achieve it, the student is will receive a poor education.

A significant issue for the junior faculty member is the need for a mentor—a senior faculty member who provides nurturing and guidance. Our specialty has too few senior charismatic faculty members to provide this mentoring. This lack of mentors in academia is a huge and looming issue.

The American Association of Orthodontists has worked long and hard on the faculty problem. The task force on Faculty Recruitment and Retention has studied the issue and made recommendations that are being implemented. The problem, however, cannot be solved by 1 organization and its task force. Putting it in agricultural terms, there is no seed corn in the elevator, so none is going into the granary. The granaries are being emptied because many charismatic faculty members who have taught for years and years are reaching retirement age. We need smart young people with charisma to replace these retirees. American Association of Orthodontists money is helping some young people get started in education. But we need many more.

Many bright young graduates who would make great educators have so much debt, and so many family demands, that they seek what are, at present, more lucrative avenues in the private sector. (This scenario will probably change. There is a "tipping point" out there somewhere. A career in education may look really good very soon!) Presently, the fact that we do not have enough faculty members for all of our graduate programs is a significant issue.

But wait a minute. School administrators want to do more with less—so it is hard to get a job as a teacher in a graduate program. There are no open "faculty lines" in many of our programs when 1 or 2 need to be made created. So, we need more good educators in our specialty; yet some who could be excellent educators cannot get a job! What a discombobulated mess!

To summarize, 5 issues are drastically impacting our specialty.

- 1. There is a supply/demand/distribution problem.
- 2. Some institutions require students to pay an exorbitant amount of tuition, causing their graduates to have astronomic debt.
- 3. Many graduate programs require the student to attempt to treat too many patients.
- 4. Suppliers must make a profit, so marketing of products is intense.
- 5. Many graduate programs need more and better faculty, but there are no open positions.

IS THIS NOT A PERFECT STORM?

When someone describes the perfect storm, it is incumbent on that person to offer some suggestions. Here are mine.

First and foremost, a manpower study must be done. Without the information such a study could give, there cannot be any solutions for the dental profession, the specialty of orthodontics, or the people who need care.

Second, a dental student or general dentist who wants to specialize in orthodontics should do the following.

Seek out the graduate programs that have a track record of preparing graduates to become certified by the American Board of Orthodontics. Its directors, working with orthodontic educators, have changed the certification process drastically to stimulate recent graduates to become board certified. The board has developed the initial certification examination, which can be completed with clinical material from patients treated during graduate school. Look for a graduate program that prepares its students to take and successfully complete the written examination and has the patient pool and the faculty expertise that will allow the students to treat the necessary types of malocclusion to become board certified. That program will also be able to teach you how to be a competent orthodontic specialist.

- If you do not match with a program that helps students achieve board certification, make the absolute best of the graduate program with which you are matched. It is harder at a program that does not have a track record, but it can be done. It takes more determination and more will power.
- After graduation from an orthodontic program, associate with the best clinicians in the specialty. If you want to be an educator, make it known while in the graduate program, meet educators at meetings, do meaningful research, and further your education to the PhD level. Educators, like clinicians, must prepare themselves. It is just as easy to become associated with the best in any arena as it is with those who are not so good.
- Become involved in our specialty organizations. By doing so, you will meet many people who are serious about orthodontics and who have given back to the specialty. These people are always honored to mentor and help young orthodontists. Work hard to become part of the "network" with these people, the givers, rather than with the people who make no contributions to the specialty, the takers.
- Do not buy every available piece of equipment when starting a practice. Just because a "toy" is available does not mean it should be purchased. To "make do with less" will alleviate even more debt accumulation.
- As a practitioner, do nothing for any patient that you would not do for your child or your sibling. Think about the benefit of what is proposed for a patient and weigh it with the burden of cost, long-term benefit, trips to the office, and so on. Practice the aphorism: "Treat patients well and they will treat you well."

If you follow these suggestions, you will have a "life preserver" during our dental and orthodontic perfect storm. Orthodontic education will always need great and charismatic educators. The public we serve must have competent, caring clinicians.

REFERENCES

- Looking ahead: the future of the dental profession. Proceedings of the 5th Annual National Roundtable for Dental Collaboration of the American Dental Education Association; 2014 Jan 11; Chicago, Ill.
- Anderson EL. Expansion in dental education: new schools. American Dental Education Association. Available at http://www. dentalboards.org/PDFS/2011MidYearPresentations.pdf. Accessed January 11, 2016.
- Nicholson S, Vujicic M, Wanchek T, Ziebert A, Menezes A. The effect of education debt on dentists' career decisions. J Am Dent Assoc 2015;146:800-7.
- **4.** Behrents RG. Me, the applicant, and the 500,000-pound gorilla: a challenge in orthodontic education. Am J Orthod Dentofacial Orthop 2016;149:1-3.