is not yet a dental student, the preamble of the ADA Code asserts that "… these high ethical standards should be adopted and practiced throughout the dental school educational process and subsequent professional career."[1]

The ADA Code does not only apply to ADA member dentists in their US practices. Ethical principles are universal and should apply everywhere: in private dental practices, in DSO practices, in public health clinics, in charity clinics, at Mission of Mercy clinics, and at mission-type service trips outside of the United States. ADA member dentists should strive to uphold the highest standards wherever in the world they work.

We found Dr. Davis' mention of a barber very interesting as it reminds us of the historical progression from barbering to the practice of dentistry today. This highlights the incredible strides in education, training, and ethics that have made dentistry the profession it is today, and this is precisely what separates us from a barber or a high school student practicing dentistry.

We stand by the ADA Code and the principles therein. Our column was designed to challenge the thoughts and practices of those who may not have fully considered the potential consequences of their actions. Furthermore, we applaud those dental professionals who volunteer their time both within the United States and abroad, sharing their skills with the world. ■

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VOLUNTEERING

The Ethical Moment column in June JADA (Shick E, Woodmansey K. Ethical Considerations When Participating in Global Mission Trips Before Dental School. *JADA*. 2020;151[6]:464-466) was great. I have participated in many mission trips over the year to low- and middle-income countries including the Dominican Republic, Mexico, and Guatemala. The authors' insightful and thorough evaluation of the ethical concerns surrounding such trips really makes me feel good about the trips I have been on. My groups have always focused on providing the same quality of care to patients in other countries as we would provide to patients in our own offices. From the materials and techniques that we employ to the skill level of the practitioners on the team, we strive to provide patients with the highest level of care. Honestly, sometimes that can be challenging in the field. Frequently, we are working under more difficult conditions, which make the provision of US-quality care that much harder for us.

We certainly rely on nondental trained people as part of the team to help the team function and often have spouses and children as part of the greater team. Just like a high school student is grossly underqualified to perform surgery on a patient, I am equally underqualified to service a generator. However, allowing me to try to work on a generator would not be unethical, while letting a completely untrained person, regardless of their age, perform irreversible surgical procedures on a patient, simply does not meet the American Dental Association Principles of Ethics and Code of Professional Conduct.

There are procedures that nondental professionals can be trained to perform in the field. In my experiences, we have trained team members to host toothbrushing "classes" where local residents are taught how to use a toothbrush and floss to perform oral hygiene procedures at home. We have trained many people in the procedures necessary to maintain instrument sterilization, from breaking down an operatory to washing dishes and even using the autoclave. High school students can be trained to give out and collect paperwork and even help triage patients who have visible swelling to the front of the line. These types of volunteers are excellent at keeping waiting children entertained by taking photos and making short videos with their phones, coloring, even kicking around a soccer ball. These are all valuable services that nondental mission team members can provide to make the dental experience better for everyone.

This column supports what I have been teaching and implementing on all of my mission trips. Patient autonomy, nonmaleficence, beneficence, justice, and veracity in care are things that we expect as a patient in medical and dental settings in the United States. The best way to help the patients we treat in other countries is to uphold these principles to the highest degree no matter where we are representing our profession. They expect the care provided to them to be of the highest quality because we are US dentists, we cannot let them down by being cavalier with our most basic principles.

I feel so proud to have been a member of so many teams who are doing this the right way. Thank you to the authors for eloquently reminding us that we must uphold the standard of care for our profession no matter the location of the treatment. ■

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DISRUPTIVE INNOVATIONS

In his August JADA commentary (Edelstein BL. Disruptive Innovations in Dentistry. *JADA*. 2020;151[8]:549-552), Dr. Edelstein presents his take on the disruptive innovations

"roiling" the dental profession. One example cited is "direct-to-consumer and do-it-yourself dentistry [DIY] like orthodontic aligners." This is a total mischaracterization of dentist-directed remote aligner therapy via teleorthodontics. Dentists who use the direct-to-consumer model, unlike the DIY model, are engaged in this type of care and are intimately involved with each step of the process from initial review of dental records including the review of dental radiographs when appropriate, all the way through to the stage of posttreatment retention. DIY is very different, and it is wrong to conflate the 2.

Dr. Edelstein rightly posits that there are tremendous technologic and societal forces that are upending the status quo in dentistry. Most importantly, he recognizes the gross class inequities in access to dental care that stem from its unaffordability. The most vulnerable segment of the US population is what Edelstein detachedly refers to as the "low end of the market." Although the factors of convenience, cost effectiveness, and value for the consumer are mentioned, the essay falls apart when the author exposes dentists' primary concern regarding disruptive innovation in care delivery, which is how and what will they be paid. Disruptive innovation is not a killer of dentistry's golden goose but an opportunity to serve the many people that we have left behind. Perhaps more important, as H.G. Wells so aptly put it, "adapt or perish, now as ever, is nature's inexorable imperative." ■

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AUTHOR'S RESPONSE

With appreciation, I accept Dr. Ackerman's critique regarding dentist-directed direct-to-consumer aligners as discrete from do-it-yourself dentistry while acknowledging that aligner services are precisely the point. Technology coupled with consumer demand is advancing changes in care delivery and financing that are new, innovative, and—yes—disruptive. They are driven by consumer demand for value.

I reject, however, the attribution of being "detached" from concerns for vulnerable populations by referencing "low end of the market." According to Christensen's model of disruptive innovation on which the article is based, "low end" is not a pejorative term. Rather, it refers to demand from consumers who are either outpriced or find the value of traditional services to be too low for their tolerance.

Of course, dentists are rightly concerned about how and what they will be paid. That is a reflection of anxiety stemming from disruption itself, not a call for retrenchment or a characterization of our colleagues as Luddites. Since Dr. Ackerman's response only reinforces the premise of the commentary, perhaps a pertinent quote is Nietzsche's: "The text has disappeared under the interpretation." We are, truly, in agreement. ■

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MORE ON DISRUPTIVE INNOVATIONS

Dr. Edelstein's August JADA commentary (Edelstein BL. Disruptive Innovations in Dentistry. *JADA*. 2020;151[8]:549-552) was interesting and thought provoking. Those who read business news are conversant with the concept of disruptive innovations. Large scale 4K "smart television" screens certainly have had an effect on moviegoing as has Tesla's forward-looking effect on the gasoline vehicles. It is certainly more affordable for a family to watch a movie at home than to watch it at a theater while purchasing overpriced popcorn at a movie theater. The growth of Uber services has had a nasty, disruptive effect on the income of taxi drivers in New York City.

A significant issue pointed out by Dr. Edelstein is the "unaffordability of care." But he omitted discussing the high cost of a dental education. When the new practitioner meets the patient with little income they have similar issues. They both cannot afford each other. From my perspective, an overriding question is, "do we have a dental-only issue or a social societal issue?"

Among the disruptive tiers outlined, the third is a discussion as to how dentistry operates. In the author's discussion of that required disruption, he omits an unmentioned disruption required in modifying the teaching of dentistry. The dental student is trained, which become ingrained in his or her persona, that he or she must produce a procedure to obtain a grade. The student is seldom ever rewarded for diagnostic knowledge. He or she can provide the patient with information that could save the patient hundreds or thousands of dollars during a lifetime for which no numerical recognition is received. The Current Dental Terminology manual is a handbook of remunerable procedures. In the manual, when a biopsy procedure is done, a diagnosis is never mentioned. Only the size of the biopsied tissue is calculated for reimbursement. Perhaps if the dentist could spend remunerable time with the patient, he or she could be counseled in looking after the area of concern so that a surgical intervention might be avoided. In that way, the dentist might believe that he or she could obtain remuneration with patient instruction rather than feel compelled to do yet another procedure.

A disruption in dental school instruction, therefore, has to be based on providing patients with good information and reimbursable diagnoses. That will never occur unless there is a disruption in the manner in which insurance companies reimburse patients for dental treatment, and that includes information, patient education, and diagnostic determinations.