Guest Editorial

Forty Years Woke and Still Disrupting

Can we use science without first paying attention to the vulnerability and dependence of children? No, not if we act to best protect the patients we serve.

In the history of pediatric dentistry, science has always been tempered by compassionate caring, and these two concepts will continue to coalesce in pursuit of optimal oral health for children. This has been the American Academy of Pediatric Dentistry's (AAPD) approach for at least four decades. Collectively, we four co-authors have more than 100 years of experience observing pediatric dentists doing what is best for children. We feel prompted to speak about the enduring marriage of science and benevolence in the Academy's history. We acknowledge our many members, past and present, who have served on committees and councils and worked hard to balance science with caring in developing positions for the Academy.

The current pandemic illustrates the challenge to temper science with compassion. The COVID-19 crisis' disruption of normalcy made us rethink how we choose and deliver care. The echoes of disruption will likely persist as effects on pediatric oral health continue to emerge. We have evaluated and sometimes used alternatives to our usual approaches to pediatric dental care that we may not have considered before the coronavirus disruption, but always in keeping with the goal of what is best for children and families. Teledentistry, nonsurgical caries management, in-office general anesthesia, space partitioning, and aerosol mitigation are some of the changes prompted by COVID-19 that are likely to remain within the scope of pediatric dental care well after dentistry and society regain a sense of normalcy. The Academy's COVID-19 re-emergence checklist was a product of careful consideration of both the rapidly emerging science and the welfare of children and families.

To the point of this editorial, the challenge during the pandemic's disruption that remains today is to balance our desire to discard science against our caution to do what is best for children. Academy policy and best practices are forged by thoughtful member volunteers who have worked and continue to work diligently to meld science with empathy and benevolence.

In the Letter to the Editor, "Silver Diamine Fluoride Usage in Children", published in the March-April 2021 issue of *Pediatric Dentistry*, Nainar addressed the limitations of emerging science relative to silver diamine fluoride (SDF) but also cautioned readers about extending results related to the application of SDF; he also introduced the concept of confirmation bias, which means agreeing with science that supports one's already established viewpoint. It is not hard to see the danger. Today, social media sites frequented by professionals often snowball incidental findings, singular reports, or just experiential perception into movements affecting the care of patients. During the pandemic, we saw this happen more than once—with plasma transfusions from recovered patients and antimalarials,

both ultimately ineffective, gaining credibility as rushed-tomarket science. In medicine, but less often in dentistry, these adaptations or applications get the benefit of randomized clinical trials to shape their use in clinical care and are proven beneficial or not. Our member scientist/clinician colleagues who craft Academy policy are often challenged to translate limited science into useful but safe therapy. Without the benefit of definitive studies, they do so with safety and benefit as their ultimate touchstone.

Pediatric dentistry's tempering of science with conscience, compassion, and caution gave rise to the AAPD's *The Reference Manual of Pediatric Dentistry*.² It is worthwhile to understand its history, continuous renewal, and the efforts that shape its policies and best practices. For over four decades, the reconciliation of emerging science with concern for children has been an essential function of the Academy. Over the years, evidence-based dentistry, child advocacy, recognition of social determinants of health, a better understanding of oral and systemic interactions, and, perhaps most significantly, the recognition, acceptance, and promotion of the inherent dignity of all children and families have honed the science of AAPD policies and best practices. These are sharpened every year after considering new scientific techniques and innovations and evaluating risks and benefits.

Today, we weigh science and its applicability to the oral care of children, but this was not always possible. Infant oral health and the care of persons with special needs illustrate challenges that brought the Academy to the fray with little more than good intentions and a smidgen of science. Infant oral health today seems a 'no-brainer', as accumulated studies have shown its benefits and both medical and dental professional organizations espouse its role in preventive health care.³ Few know that our medical colleagues were initially skeptical of early intervention, even to the point of suggesting that its only justification was our lack of busyness. Ironically, at the same time within dentistry, we have had to overcome a perception of the demise of dental caries in research and practice communities.⁴ It took two more decades to have these communities recognize the disease's profound impact on children.⁵ Fortunately, now nearly everyone is woke to the inequities surrounding early childhood dental

With special needs patients, even reams of studies on dental disease prevalence and suffering weren't enough to sway our dental educational system and organized profession to fully include persons with disabilities in their view of humanity. It was AAPD members who fought hard and with strong emotion for this recognition, with science taking a backseat. The disruption of a dental care system designed for only the able has taken four decades, and the struggle continues.

Today, our challenge is different, but so is the Academy. The policies and best practices in *The Reference Manual of Pediatric*

Dentistry are the products of evidence and thorough review by clinician-scientists rather than just expert opinion. Our challenge is the reverse of earlier tasks; now, evidence and science need careful vetting followed by consideration of how they will affect children. The pandemic has shown that the simple application of science without attention to the unique characteristics of populations can result in failure and inequity. We saw examples in the rush to vaccinate that left rural areas out of reach and which resulted in some minority groups waiting to qualify by age cohorts they rarely reach, sadly. The science was there but not the awareness. Our population is comprised of children, and our policies are where science and caring meet.

The COVID-19 pandemic and civil unrest have made it popular to be woke to the inequities of health care. It is also popular today to want to disrupt mainstream health care. But with 100 percent of us treating children and adults with special needs and three-quarters of us serving children on Medicaid, we pediatric dentists can say that we have "been there, done that" for at least 40 years, using the best interests of children as our compass.

Sincerely,

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