Reflections on Oral Health in America

acd.org
A publication advancing excellence, ethics, professionalism, and leadership in dentistry.

The Journal of the American College of Dentists (ISSN 0002-7979) is published by the American College of Dentists, Inc. 103 North Adams Street Rockville, Maryland 20850. Copyright 2023 by the American College of Dentists.

Send address changes to: Publication Manager Journal of the American College of Dentists 103 North Adams Street Rockville, Maryland 20850

While every effort is made by the publishers and the Editorial Board to see that no inaccurate or misleading opinions or statements appear in the Journal, they wish to make it clear that the opinions expressed in the articles, correspondence, etc., herein are the responsibility of the contributor. Accordingly, the publishers and the Editorial Board and their respective employees and officers accept no liability whatsoever for the consequences of any such inaccurate or misleading opinions or statements.

For bibliographic references, the Journal is abbreviated J Am Col Dent and should be followed by the year, volume, number, and page. The reference for this issue is: J Am Col Dent 2023; 90 (1): 1-64.

Communication Policy

It is the communication policy of the American College of Dentists to identify and place before the Fellows, the profession, and other parties of interest those issues that affect dentistry and oral health. The goal is to stimulate this community to remain informed, inquire actively, and participate in the formation of public policy and personal leadership to advance the purpose and objectives of the College. The college is not a political organization and does not intentionally promote specific views at the expense of others. The positions and opinions expressed in college publications do not necessarily represent those of the American College of Dentists or its Fellows.

Objectives of the American College of Dentists

THE AMERICAN COLLEGE OF DENTISTS, in order to promote the highest ideals in health care, advance the standards and efficiency of dentistry, develop good human relations and understanding, and extend the benefits of dental health to the greatest number, declares and adopts the following principles and ideals as ways and means for the attainment of these goals.

A. To urge the extension and improvement of measures for the control and prevention of oral disorders;
B. To encourage qualified persons to consider a career in dentistry so that dental health services will be available to all, and to urge broad preparation for such a career at all educational levels;
C. To encourage graduate studies and continuing educational efforts by dentists and auxiliaries;
D. To encourage, stimulate, and promote research;
E. To improve the public understanding and appreciation of oral health service and its importance to the optimum health of the patient;
F. To encourage the free exchange of ideas and experiences in the interest of better service to the patient;
G. To cooperate with other groups for the advancement of interprofessional relationships in the interest of the public;
H. To make visible to professional persons the extent of their responsibilities to the community as well as to the field of health service and to urge the acceptance of them;
I. To encourage individuals to further these objectives, and to recognize meritorious achievements and the potential for contributions to dental science, art, education, literature, human relations, or other areas which contribute to human welfare—by conferring Fellowship in the College on those persons properly selected for such honor.
From the Editor: Oral Health in America
Nanette Elster, JD, MPH, FACP

Who Influences Dental and Oral Health Care in the United States?
Derek Gravholt, MS; Lydia Fleming, DDS; Victor M. Montori, MD; Sreenivas Koka, DDS, MS, PhD, FACP

The Oral Health in America Report: Pulling the Ethics Thread in Practice and Education
Carlos S. Smith, DDS, MDiv, FACP

A Public Health Perspective on Oral Health in America: Advances and Challenges
Scott L. Tomar, DMD, MPH, DrPH, FACP

Francisco Ramos-Gomez, DDS, MSc, MPH, FACP

Talking About Racism Will and Should Make You Uncomfortable, and that’s OK
Keisha Ray, PhD

Fellows Forum 2022: A Conversation
Moderated by Keisha Ray, PhD

From the Archives, Celebrating the Year of Oral Health: Changing Public Expectation and Challenges for the Profession
Robert J. Collins, DMD, MPH, FACP
Oral Health in America

In 2000, David Satcher, then US Surgeon General, issued the first-ever report on oral health in America. The intent of the Report was to “alert Americans to the full meaning of oral health and its importance to general health and well-being.” The Report detailed clinical, scientific, and psycho-social factors impacting the nation’s oral health and provided a framework to action to address deficits in these areas. Over 20 years later, the National Institutes of Health (NIH) took up the mantle and considered the progress made since the initial Report as well as shined a light on those challenges that persist in meeting America’s oral health needs.

While both reports present robust discussions about and calls to action for scientific advances to address socioeconomic differences in care, and the need to for the consideration of clinical best practices neither specifically addresses the ethical challenges and opportunities related to the nation’s oral health. They do, however, allude to issues that are reflective of the foundational pillars of the American College of Dentists (excellence, ethics, professionalism and leadership) and reflect the guiding principles found in the American Dental Association Principles of Ethics and Code of Professional Conduct (autonomy, nonmaleficence, beneficence, justice and veracity). For example, the 2000 Report, recommended diversifying the dental workforce noting:

- a lack of racial and ethnic diversity in the oral health workforce. Efforts to recruit members of minority groups to positions in health education, research, and practice in numbers that at least match their representation in the general population not only would enrich the talent pool, but also might result in a more equitable geographic distribution of care providers. The effect of that change could well enhance access and utilization of oral health care by racial and ethnic minorities.

Similarly, the 2021 Monograph addressed similar themes in its Call to Action:

**NIH MONOGRAPH CALL TO ACTION**

- To significantly improve the nation’s oral health, policy changes are needed to reduce or eliminate social, economic, and other systemic inequities that affect oral health behaviors and access to care.
- To improve oral health for more people, dental and other health care professionals must work together to provide integrated oral, medical, and behavioral health care in schools, community health centers, nursing homes, and medical care settings, as well as dental clinics.
- To strengthen the oral health workforce, we need to diversify the composition of the nation’s oral health professionals, address the costs of education and training the next generation, and ensure a strong research enterprise dedicated to improving oral health.

Both reports speak to the issue of justice and beneficence. Additionally, they acknowledge the significance of social determinants of health, the need to improve ac-
cess to care, the need to diversify and expand the dental workforce and the overarching importance of oral health to overall health and well being.

While both Reports were and are monumental, the ethical imperative they present is clear. To apply an ethics lens to the factors impacting the oral health of Americans, the American College of Dentists brought together a panel of experts at the 2022 Fellows Forum. The speakers gave voice to a theme that ran throughout both Reports focusing on social justice and the impact of health disparities and the social determinants of health on the past and current state of oral health in America from questions of access to care to the diversity of the dental workforce to the need for interprofessional education and practice, the need for trauma informed care, and medical/dental integration.

This issue of the eJACD provides an edited transcript of the Fellows Forum as well as observations, opinions and opportunities for action from Drs. Smith, Ramos-Gomez, Tomar and Ray. The moderator and panelists came from varied backgrounds, different practice settings, and each with a unique perspective on the ethics of operationalizing the call to action set forth in the NIH Report. The moderator, Keisha Ray is an associate professor of bioethics at McGovern Medical School in Houston, Texas. She recently published a book with Oxford University Press entitled, Black Health: The Social, Political, and Cultural Determinants of Black People’s Health. Other panelists included Lisa Simon, a physician and dentist who is committed to improving access to care and developing medical-dental integration; Carlos Smith, the Associate Dean for Inclusive Excellence, Ethics and Community Engagement at Virginia Commonwealth University; Scott Tomar, Associate Dean for Prevention and Public Health Sciences at University of Illinois at Chicago, College of Dentistry with expertise in Public Health Dentistry and Francisco Ramos-Gomez, Chair of the Division of Preventative and Restorative Sciences at UCLA with expertise in Pediatric Dentistry. Drs. Simon, Tomar, and Ramos-Gomez were actively involved in the development of the 2021 NIH Report.

The issue also includes an historical piece from a 1994 issue of the Journal of the American College of Dentists by Dr. Robert J. Collins entitled: “Celebrating the Year of Oral Health: Changing Public Expectation and Challenges for the Profession.” Additionally, in acknowledging how the profession is changing and how the public perception of the profession is influenced, an empirical study of dental influencers by Gravholt, Fleming, Montori, and Koka, entitled “Who Influences Dental and Oral Health Care in the United States?” is also included.

Together these pieces are intended to not only continue the important, and at times, difficult dialogue about access to care, social determinants of health, adaptation to new technology, but also to inspire and promote action including moving toward medical/dental integration, increasing interprofessional education and promoting interprofessional practice. “Oral health should be included in policy considerations, continued research, monitoring, surveillance, and other aspects of health. Advocacy is crucial to make permanent the temporary regulatory changes being implemented to address... ensure access to oral health care, address disparities and inequities, and improve population health.”

REFERENCES

Who Influences Dental and Oral Health Care in the United States?

Derek Gravholt\textsuperscript{a}, MS; Lydia Fleming\textsuperscript{b}, DDS; Victor M. Montori\textsuperscript{a}, MD; Sreenivas Koka, DDS, MS, PhD, MBA, FACD (corresponding author)

Abstract

Objectives
To identify and discuss the primary role, sector of work and gender of individuals, based on published rankings, who are considered to be major influencers in dentistry.

Methods
The relative rankings of “The 32 Most Influential People in Dentistry” in the United States published by the lifestyle magazine, Incisal Edge during the years 2017 (ranking list first published) to 2022 were reviewed. Each influencer was categorized according to criteria presented by Logeman et al (2019), specifically as having a primary role as an executive/administrator in industry (for-profit sector), an academic/advocate (almost all non-profit sector) or a government official (non-profit sector). Differences in the lists between years regarding included persons’ primary role, sector and gender were tabulated. Chi-square analysis was used to determine if the percentage of influencers had statistically significantly (p<0.05) changed by gender and by sector over time.

Results
There were 113 different persons named to one or more of the lists from 2017-2022. The primary work environment of influencers ranged from 53.1%-77.5% (mean = 67.0%) in for-profit industry, from 16.7-31.3% (mean = 21.3%) in Academia/Advocacy, and from 5.0-16.7% (mean = 11.7%) in Government. The percentage of women listed as influencers ranged from 12.2-27.5% (mean = 18.3%). No statistically significant change in the percentage of influencers over the six years of the study period were observed for both gender and sector.

Conclusions
Dentistry in the United States, per this source, is influenced mostly by male industry executives in for-profit organizations. Despite its health care mission, we identified a negligible number of influencers whose primary role was patient or clinician. This has implications as to the values and goals that influence dentistry.

Keywords
Industrialization, for-profit, dentistry, influencers, patient care, advocacy

Note: An earlier version of this article was published at 87(3) Journal of the American College of Dentists 29 (2020). The authors remain the same with the previous iteration also being authored by: Derek Gravholt, Lydia Fleming, and Victor Montori in addition to Sreenivas Koka. Their names were inadvertently left off the previous iteration of this manuscript. This update is based on an increase in the data collected.

Affiliations:
\textsuperscript{a} Knowledge and Evaluation Research Unit, 200 First Street SW, Mayo Clinic, Rochester, Minnesota 55905, USA
\textsuperscript{b} Loma Linda University School of Dentistry, 11095 Anderson Street, Loma Linda, California 92350, USA
\textsuperscript{c} University of Mississippi Medical Center School of Dentistry, 2500 N State Street, Jackson, Mississippi, MS 39216, USA
Clinical Significance

The dental profession’s mission is to care for the oral health and well-being of patients. Nevertheless, the rankings of those perceived to most influence dentistry include neither patients nor clinicians. The prominence of executives as influencers suggests that the logic of business may be guiding the practice of dentistry to a greater extent than the logic of care or the interests of patients which forebodes further industrialization of dentistry and further erosion of patient-centeredness.

Introduction

Ideally, health care systems serve patients in a manner that provides a caring and kind experience yielding desired patient-centered outcomes using care models that are affordable to patients and to society at large. As much as organizations heavily influence how health care is offered to and received or not received by patients, the leaders of organizations exert significant influence. In dentistry, as in medicine, there is a tension between those whose primary mission is for profit and those whose primary mission is non-profit. Furthermore, the interplay of stakeholders of society, patient, patient’s family, clinician, employer, policymaker, academic, dental organization, equipment manufacturer, supplier, state government, and insurance company provides another level of complexity to the challenge of determining exactly what “influence” is and, consequently, who has said influence.

In 2017, *Incisal Edge* published in the US the first in a series of annual rankings of the “32 Most Influential People in Dentistry”. [1-6] The magazine is published by Benco Dental (Pittston, PA) and claims “*Incisal Edge* reaches more than 130,000 Benco customers and their staff. This number continues to grow due to media partnerships and a subscription option.” [7] Therefore, the list is widely distributed across the United States. However, who is responsible for generating the list is unclear as is the precise manner by which people are considered, vetted, excluded and, if included, how it is determined where each person ranks.

The words “influence” and “influential” bring nuance. Merriam-Webster defines “influence” as the power or capacity of causing an effect in indirect or intangible ways; the act or power of producing and effect without apparent exertion of force of direct exercise of command; corrupt interference with authority for personal gain; and, an emanation of spiritual or moral force. Influential is defined as exerting power or influence. Influence implies power; specifically, the power to exert an effect, and the effect may be positive or negative. What constitutes positive and negative lies in the eye of the beholder. In the case of the *Incisal Edge* ranking, the following factors were considered when determining who had sufficient influence on dentistry to be included on the list: “Trying to determine what exactly constitutes influence, we ultimately nailed down a few key metrics. We counted dollars — company size, or size of budget controlled — as most important. Next, we looked at the weight an organization can throw around: If a group is influential, by definition its leader is too, even if he or she operates behind the scenes. Finally, we tried to calculate “size of voice”: how much influence an individual has through his or her speaking, writing or research activities.”[1]

The purpose of this study was to review, compare and contrast the yearly lists of the 32 Most Influential People in Dentistry in order to determine the relative ranking of executives, administrators, academics, clinicians, government officials and patients over the time period of 2017-2022. Additional purposes of the study were to determine the percentage of men and women deemed to influence dentistry, the degree to which the rankings were made up of individuals whose inclusion was due to for-profit or non-profit activities, and to compare to published rankings of influencers in healthcare.[8]

Methods

To extract relevant data from the articles, we noted each individual’s primary role and gender, along with the organization they were associated with and its designation as for-profit or non-profit. Then, using this information, individuals were categorized into one of three sectors based on the following definitions:
Who Influences Dental and Oral Health Care in the United States?

Derek Gravholt, MS; Lydia Fleming, DDS; Victor M. Montori, MD; Sreenivas Koka, DDS, MS, PhD, MBA, FACD (corresponding author)

**Government**: Listed in article as: a) an elected public official (e.g. senator, governor) and/or b) holding a position in government or at a government organization (non-profit).

**Industry**: Listed in article as: a) holding an executive, founding, or administrative position at a for-profit organization or LLC.

**Academia/Advocacy**: Listed in article as: a) holding a position at a non-government, non-profit organization and/or b) a writer or content-creator regardless of organization.

After categorizing individuals, distributions for gender and for individuals working in each sector were calculated in order to plot trends across the sampled time period. Percentages were chosen for analysis rather than frequency in this study because of the potential for ties on each list from *Incisal Edge*. Although each article purported to list the “32 most influential people in dentistry”, in 2018, 2019, 2020, 2021, and 2022 there were 33, 42, 42, 40, and 41 individuals listed, respectively, as a result of ties. Furthermore, in each of the six years, there was one instance of a group making the list in place of an individual. These cases were excluded from the gender analysis but were categorized into appropriate sectors based on their descriptions in each article.

We also conducted a Pearson’s chi-square test to investigate whether there was a significant relationship between year and gender, and between year and sector of the included individuals to better understand whether there was any significant change over time.

**Results**

From 2017-2022, *Incisal Edge* magazine named 80 unique individuals to its annual “The 32 Most Influential People in Dentistry” articles. The dominance of industry influencers in dentistry was apparent, with their prevalence ranging from 53.1% to 77.5% (mean = 67.0%) of individuals named in each year (Figure 1). Many of these individuals are associated with for-profit organizations and held senior administrative or executive-level positions, e.g. chief executive officer, director, President, founder, owner, etc. In comparison, academia/advocacy influencers comprised 16.7% to 31.3% (mean = 21.3%) of the lists and government influencers comprised 5.0% to 16.7% (mean = 11.7%) of the lists.

After conducting Pearson’s chi-square test, we found that there was no significant relationship between year and sector of the individuals $\chi^2 (10, N = 230) = 7.26, p = .701$.

For gender distribution, yearly percentages of women in the lists ranged from 12.2% to 27.5% (mean = 18.3%) indicating that women hold, on average, less than one in five positions perceived to influence dentistry.

After conducting Pearson’s chi-square test, we found that there was no significant relationship between year and gender of the individuals $\chi^2 (5, N = 223) = 4.73, p = .450$.

**Discussion**

Logeman et al, reviewed trends in all of healthcare across a 17-year window ending in 2018.[8] Results indicated an obvious upward trend in the influence of “industry” leaders, reaching an apex of 72% in the final year. Additionally, a minority of those listed were female, with yearly percentages ranging from 17% to 28%. The present study indicates the dental industry’s conformity to general healthcare trends described by Logeman et al. with industry executives from for-profit organizations dominating the lists.[8] Additionally, the present study showed a consistent disparity between genders over the six studied years, with the average yearly percentage of female influencers at only 18.3%. This percentage is far less than the percentage of the dentist workforce comprised by women (33.4%) [9] and demonstrates
an opportunity for improvement. Although there appears to be an increase in recent years for included women as shown in Figure 2, a chi-square test indicates that this change is not significant.

Revisiting the definition of “influence” used by *Incisal Edge*, the most important criterion listed are “dollars”, “company size”, “size of budget” and “weight and organization can throw around”. These criteria are in opposition to the fact that dentistry is a healing profession. The lists do indicate that individuals from non-profit organizations like the American Dental Association, American Dental Hygienists Association, American Dental Educators Association and the National Institute of Dental and Craniofacial Research have influence which is encouraging inasmuch as these individuals represent dentists. However, their influence is ranked lower than that of individuals from for-profit organizations implying there is a disconnect, and resultant tension, between the ethical human imperative of our profession of dentistry and those individuals for whom the industry of dentistry prioritizes profit. For context, among healthcare professionals, dentists are considered less honest than nurses, veterinarians, medical doctors and pharmacists while business executives, who apparently are dominant influencers in dentistry, rank lower than lawyers.[10]

Ultimately, any entity that influences dentistry modulates the influence of dentistry on the various stakeholders in dentistry. For example, patients, clinicians, industry representatives from supply companies and manufacturers and laboratories, researchers, employers of dentists such as dental service organizations (DSOs), educators, insurance companies, lobbying groups, legislatures and government entities, charities and advocates all seek a positive outcome through dentistry. The results of this study are disturbing to those who believe that the patient-clinician relationship is the key relationship in the provision of ethical patient-centered care as patients are conspicuously ignored while over two thirds of the most influential leaders in dentistry are associated with for-profit organizations. Dentists have partnered with “industry” for many years in purchasing materials and equipment and conducting research studies. Nevertheless, it appears that dentists are losing control of the patient-clinician relationship due to the influence of factors that compromise their ability to do so. Whether it be insurance plan policies, the continuing commoditization of dentists through dental service organizations (DSOs) or the use of “key opinion leaders” by large dental for-profit corporations to promote their products to name a few, there are more threats to putting the patients’ best interest first than ever before. The looming shadows of dental school debt and daily financial production sheet mandates by DSOs further tempt/forces dentists to take a path that realizes financial benefit instead of what is best for the patient.

One cannot, at the core, balance a patient-centered mission with a profit-centered mission. One is a social mission (to help fellow humans) and one is a market mission (to realize a material/financial gain for oneself); one is about serving the world and one is about savoring the world. When conducted with authenticity, putting the patient first is all-encompassing and requires a ruthlessness to eliminate everything else, especially profit, from consideration.

Dentistry is, unfortunately, following a comparable path taken by physicians, who delegated more and more non-clinical work to administrators and executives and then found themselves often unable to control their own patient-clinician relationship. As a result, physicians in hospitals/clinics became commodities and dentists, through DSOs, are heading in the same direction. In the final reckoning, dentistry is a noble profession. Dentists are the final guardian and protector of the patient and the patient trusts the dentist not only to do no harm to them but to always do what is best for them. One cannot, at the core, balance a patient-centered mission with a profit-centered mission. One is a social mission (to help fellow humans) and one is a market mission...
(to realize a material/financial gain for oneself); one is about serving the world and one is about savoring the world. When conducted with authenticity, putting the patient first is all-encompassing and requires a ruthlessness to eliminate everything else, especially profit, from consideration.

**Conclusion**

Although we were not able to study influence directly, the present study indicates that, like healthcare in general, the perception is that public opinion and policy in dentistry are chiefly influenced by male executives who are motivated by commercial and financial incentives. Without patients, advocates, and clinicians in this list of influencers, industrial (for-profit) goals, rather than care-centered goals, appear to control key aspects of oral health care in the United States. As a result, many patients find themselves priced out of care and in a system that does not prioritize their well-being. The profession must review its own role in shaping the practice of dentistry and make a concerted effort to advance diverse voices within it. Furthermore, it must explore ways to ensure the promotion of patients and their advocates as the ultimate stakeholders in dentistry.

**REFERENCES**


Figure 1. Percentage of individuals constituting list of Most Influential People in Dentistry (in the US) in the years 2017-2022 by designation of primary organizational affiliation (industry, government or academia/advocacy). X-axis: year; Y-axis: percentage.

Figure 2. Percentage of men and women constituting list of Most Influential People in Dentistry (in the US) in the years 2017-2022. X-axis: year; Y-axis: percentage.
The Oral Health in America Report: Pulling the Ethics Thread in Practice and Education

Carlos S. Smith, DDS, MDiv, FACD
Associate Dean, Inclusive Excellence, Ethics, and Community Engagement, and Associate Professor, Department of Dental Public Health and Policy, VCU School of Dentistry

Understanding ethics and the process of ethical decision making are daily undertakings for oral health professionals. Whether one finds themselves carrying out the daily tasks of a clinician, molding the next generation as an academician, or even simply being a friend of oral health care from various vocations, ethics and our ethical commitments ought to ground the essence of our every interaction. The 2022 Convocation Fellows Forum had, at its purpose, the unpacking of the relatively recently released Oral Health in America: Advances and Challenges, a report from the National Institutes of Health’s National Institute of Dental and Craniofacial Research, published in December 2021, which was the follow-up to the historic and groundbreaking Oral Health in America: A Report of the Surgeon General from the year 2000.
With the ACD’s mission of advancing excellence, ethics, professionalism, and leadership in dentistry, the Report’s timing, significance with our cultural climate and how and why it matters to dental education is essential. The Report laid out interdisciplinary approaches that direct, conduct, and apply research and implement policies to promote oral health. Detailed were preventive measures as well as obstacles to their implementation and distribution. Also presented was a call for systems change and policy reform, combined with scientific advancements across the research spectrum, greater population-level data and analysis, and community participatory involvement, all to prevent disease and promote population oral and general health. The Fellows Forum presented an unprecedented opportunity for the American College of Dentists, the conscience of dentistry, to engage with many of the Report’s themes and scopes.

The multiple determinants of health and how dentistry and dental education choose to engage or ignore the social and societal components leading to optimal health outcomes are of paramount importance. Social determinants of health (SDOH), as defined by the World Health Organization, are those conditions in which people are born, grow, work, live, and age, and the broader set of forces and systems shaping the conditions of daily life. The necessity to be able to characterize those influences on health outside of the realm of healthcare itself led to the development of the SDOH idea. Often, these SDOH play a significant role in who becomes sick, is riddled with disease, or lacks the opportunity to be the healthiest they can be. SDOH are estimated to account for more than 50-60% of health outcomes, with some studies indicating that social determinants account for up to 80% of health outcomes. Oral disease is among the most significant unmet health needs in the world, and populations most prone to these diseases are also the most vulnerable: the poor, the very young, the elderly, those with disabilities, and those with comorbidities.

Perhaps most intriguing is that the Report gives attention to SDOH, most notably in the section on pediatric dentistry. With the large percentage of patients, particularly those from populations experiencing access to care issues, it seems curious that issues around social and societal needs that go unmet are not linked throughout the report. Why do you think this is? Is this troubling, ethically? Is dentistry too focused on “personal responsibility” to refuse to see how larger systemic issues may result in circumstances beyond the public’s and/or patient’s specific control?
ican Public Health Association, the Centers for Disease Control and Prevention, and more, have named racism as a public health issue. Systems of oppression such as sexism, homophobia, xenophobia, transphobia, ableism, and even ageism most often frame the very realities of SDOH and are apparent root issues that must be addressed to cultivate real solutions and mitigate access to care requires it.

The oral healthcare workforce is an additional key aspect of the report. The oral health workforce also includes dental hygienists, dental assistants, dental laboratory technicians, and, more recently, dental therapists and community dental health coordinators. While some across the dental professional landscape embrace a holistic and collaborative team member approach, there is some caution and apprehension about expanding the workforce to include multiple provider types. What is the ethical framework of those reservations? It may be founded or be educational, status, or profit driven? Diversifying the oral health workforce is a huge issue, not merely concerning the representation of those patients served. While the racial and ethnic diversity of providers mirroring those of the communities served deserves much attention, one must also consider the diversity of the entire oral health workforce relative to team member roles, responsibilities, and ability to practice or work to the top of their license and knowledge.

In keeping with workforce issues, the Report also explores the much-needed conversation of dentistry’s understanding of healthcare’s quadruple aim - better outcomes, improved provider experience, improved patient experience, and lower costs. The quadruple aim adds provider well-being to the previously suggested triple aim. The Triple Aim, which was introduced by Donald Berwick and colleagues in 2008, is a paradigm for the delivery of high-value care in the USA that focuses on three broad objectives: enhancing patient experience, enhancing population health, and lowering healthcare per capita costs. Experts have now even extended the concept further to the quintuple aim, with a much-needed emphasis on health equity. The inclusion of equity as a fifth goal is driven by the fact that quality improvement without equity is a hollow success. It is easy to claim that two goals—better patient experiences with care and bet-
Experts have now even extended the concept further to the quintuple aim, with a much-needed emphasis on health equity. The inclusion of equity as a fifth goal is driven by the fact that quality improvement without equity is a hollow success. It is easy to claim that two goals—better patient experiences with care and better population health—already address health inequalities. But unless health justice is explicitly stated as a goal, neither is guaranteed. Efforts to increase quality without a focus on reducing gaps may have no impact on them and may even unintentionally make them worse. Additionally, making health equity an explicit goal of quality improvement may inspire new initiatives that might not have been undertaken otherwise, for example including new initiatives whose main goal is to increase health equity. One can hope that dentistry and dental education will both be willing and ready to systemically embrace such a model.

REFERENCES


Inequities Persist in Oral Health Status, Utilization, and Access to Care.

The population of the United States changed substantially between the publication of the Surgeon General’s Report on Oral Health in 2000¹ and the 2021 Report on Oral Health in America.² The nation is now more diverse than ever in terms of race, ethnicity, religion, and other characteristics that describe us socially and culturally. The United States is also an aging nation. By 2035, there will be more adults aged 65-years or older than there will be youth,³ and the health care needs of older adults are quite different from those of younger people.
Although there have been improvements in population oral health during recent decades, many people in the United States still suffer from chronic oral conditions and lack of access to needed oral health care. The incidence of oral diseases and conditions, like many other chronic conditions, is socially patterned, with the largest burden of disease occurring among people living in poverty, racial and ethnic minorities, frail elderly, immigrant populations, persons with physical and intellectual disabilities, and other socially marginalized groups. In fact, the magnitude of disparities in dental caries experienced has increased during the past 20 years among groups defined by household income and race or ethnicity. Not only do these groups suffer the highest burden of oral disease, they also face the greatest barriers to accessing routine preventive and other oral health care services.

Identifying the factors that contribute to poor oral health among vulnerable groups may provide guidance for developing and targeting oral health promotion strategies and reducing inequities. To that end, models of oral disease development have been created that bring attention to the multilevel factors now known to contribute to oral health status.

Identifying the factors that contribute to poor oral health among vulnerable groups may provide guidance for developing and targeting oral health promotion strategies and reducing inequities. To that end, models of oral disease development have been created that bring attention to the multilevel factors now known to contribute to oral health status.

The determinants of oral health arise from the level of the individual, the family, the community, and the nation. Factors known to influence oral health status are classified into three levels, labeled as the structural, intermediate, and proximal determinants of oral health. Proximal determinants are related to an individual’s biology and behavior. For example, individuals’ choices around diet, tobacco use, and oral hygiene all have clear links to their oral health. However, individuals’ behaviors are strongly influenced by the broader environmental context in which they live, which encompasses the structural and intermediate determinants of health. Structural determinants of health include the socioeconomic, political, and environmental context in which people live, such as policies regarding economics, social welfare, trade, housing, and advertising. Intermediate determinants of health encompass factors related to social position and circumstances such as gender, ethnicity, and neighborhood resources. Determinants at the structural and intermediate levels generally are not under an individual's direct control, but they play an important role in influencing health status. Collectively, these structural and intermediate determinants are referred to as the social determinants of health.

The World Health Organization defines social determinants of health as those with which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These circumstances are shaped by the distribution of money, power, and resources at global, national, and local levels, and a largely responsible for health inequities—the unfair and avoidable differences in health status seen within and between social groups. Social determinants of health also include and are influenced by commercial determinants of health, which are the “strategies and approaches used by the private sector to promote products and choices that are detrimental to health.” Examples of such products include foods, beverages, and substances such as tobacco products that cause or promote oral disease. Commercial determinants of health also include corporate strategies to influence public policy, oppose regulation, and increase consumption of products that are detrimental to overall health. Perhaps not surprisingly, social and commercial determinants that are most damaging to oral health also are deleterious to overall health. That “common risk factor” perspective strongly suggests that dentistry needs to be part of broader societal approaches to address social and commercial determinants of health.
We Need to Prioritize Prevention.

Despite overall improvements in many indicators of oral health status and the tremendous advancements in science and technology, the United States has made very modest progress in preventing oral diseases during the past 20 years. For example, there has been virtually no change in the prevalence of dental caries experience in the primary dentition of children aged 6–8 years or in the permanent teeth of adolescents aged 12–19 years. Although dental caries is widely considered a preventable disease, the majority of US children continue to experience the disease by 6 years of age. Compared with the major technological advancements in treating or repairing the sequelae of dental caries, there have been relatively few new developments for the primary prevention of caries. Most of the prevention armamentarium consists of various forms of topical fluoride and dental sealants. Although the formulations and materials may have changed, the underlying mechanisms for prevention have remained relatively unchanged for the past 50 years. There has been relatively little investment in new caries prevention technology.

The recognized dental specialty of Dental Public Health similarly needs to develop a deeper understanding of and emphasis on primary prevention of oral disease at individual and community levels. Curiously, the specialty currently does not have a single competency focused on disease prevention. Those prevention strategies may extend from increasing access to evidence-based clinical preventive services, to becoming more effective advocates for policy changes to reduce the public’s exposure to harmful substances and promote healthier behavioral choices.

As new financing and reimbursement models emerge in dentistry, perhaps there will become a greater financial incentive for oral health care to prevent disease rather than restore its resulting damage. Dental Public Health needs to be at the forefront of developing and evaluating these emerging models.

We Need to Build Dental Public Health Policy Expertise.

Increased access to treatment services remains a necessary but insufficient approach to improving Americans’ oral health status and eliminating oral health inequities. The inclusion of dental benefits in Medicare and in state adult Medicaid programs would greatly increase access to treatment for some of the nation’s most vulnerable adults. However, public health has long been guided by the principle that society cannot treat its way out of epidemics. All of the major diseases that dentistry deals with are heavily driven by social and commercial determinants of health. Determinants that act on population health at structural and intermediate levels may be most effectively addressed by macro-level interventions, including the formulation and implementation of appropriate health policies.

Unfortunately, the dental community has a relative paucity of experienced and effective leadership in health policy. Oral health often is not at the table when formulating policies around food, tobacco, vaccines, or many other products that have oral health implications.

Moving Forward.

We are unlikely to see major advances in oral health status or eliminate oral health inequities without addressing social and commercial determinants of oral health. Because those factors are largely the same as those driving the epidemic of other chronic diseases, the oral health community needs to more actively engage with other healthcare sectors to advocate for more effective policies and programs around food, employment, housing, and education.

We need to continue working to improve access to care, but do so with models that incentivize prevention and foster integration with the rest of the health care system. New dental schools are opening throughout the United States, frequently justified by concerns about access to care, but the ex-
isting programs to encourage dentists to practice in dentist shortage areas have had limited success. Market forces alone will not ameliorate geographic disparities in access to oral health care, and we need innovative workforce policies, programs, and delivery models.

With political will and cross-sector collaboration, we can make progress in tackling the root causes of oral disease and inequities. Without such action, we will likely have a similar assessment of the status of oral health in America in another 20 years.

REFERENCES


Early Childhood Caries (ECC) affects 600 million children worldwide and is entirely preventable, yet oral health inequalities persist and are prevalent and universal. In the United States, 23% of children from 2 to 5 years of age have ECC, and 80% percent of dental disease (including ECC) is concentrated in just 20-25% of the country’s children who are primarily from low socioeconomic and minority backgrounds. A review of studies from North America, Europe, Asia, Africa, and the Middle East showed the prevalence of ECC in socio-economically disadvantaged groups was as high as 70%. Therefore, positioning oral health as a matter of social justice, health equity and human rights to ensure all children receive basic care is critical to reducing oral health disparities among children worldwide.
Societal systemic and structural factors affecting oral health equity, social justice and human rights

Societal systemic factors affecting oral health equity, social justice, and human rights include government policies and social and structural influences that foster the continuation of privilege for some and discrimination for others based on such characteristics as race and ethnicity, economic status, gender, age, and physical disabilities or behavioral and emotional difficulties. More specifically, at the structural level, structural racism and discrimination (SRD) can impact oral health through macrolevel conditions, such as residential segregation and institutional policies that limit opportunities, resources, power and well-being of individuals and populations based on race/ethnicity or other characteristics. Studies in the United States have found that states with high levels of SRD have poorer oral health outcomes for Blacks compared to non-Hispanic whites. In Hispanic populations, studies on the direct association of SRD with oral health treatments and outcomes (e.g., restoration, sedation, extraction) are lacking, however, some community-level factors associated with poor oral health could be suggestive of the effects of structural racism. For example, studies have shown that living in a monolingual community and a school district with a high proportion of limited English proficiency (LEP), a form of residential segregation, heightens the impact on access to and utilization of care for Hispanic families. Addressing these societal systemic and SRD-related factors can have a positive impact on an individual’s oral health in addition to overall health.

How providers can help address oral health disparities among children and underserved populations

Viewing ECC through a lens of social justice, health equity, human rights and SRD awareness will help oral health providers, public health practitioners, and policy makers develop targeted actions consistent with the infrastructure capacity and current oral health situation of the populations they serve to ensure basic oral health prevention and care for all children. Below are 5 recommendations oral health professionals can use to promote ECC prevention to help eliminate oral health disparities among children and underserved populations worldwide.

23% of children from 2 to 5 years of age have ECC (3-4)

80% of dental disease (including ECC) is concentrated in just 20-25% of the country’s children primarily from low socioeconomic and minority backgrounds (3-4)

A review of studies from North America, Europe, Asia, Africa, and the Middle East showed the prevalence of ECC in socio-economically disadvantaged groups were as high as 70% (5)
1. **Encourage oral health and medical care providers to promote and advocate for mandatory age 1 health visits for all children, as this is a crucial first step in the prevention of ECC.** The American Academy of Pediatric Dentistry (AAPD) and World Health Organization (WHO) recommend a child see a dental provider by age 1 or within six months after the first tooth erupts. Additionally, oral health providers can promote and advocate for other population-based policies such as fluoridation of public water supplies (considered by the American Dental Association to be the single most effective public health measure to help prevent tooth decay), and a tax on sugary drinks to help reduce sugar consumption.

2. **Promote oral health education and increase oral health literacy.** Oral health literacy is defined as the capacity to acquire, process, comprehend and act upon basic oral health information. Most oral health literacy research comes out of the United States. These studies have shown an association between low levels of oral health literacy and decreased utilization of preventive dental services and poor oral health outcomes. There are substantial dental public health implications surrounding oral health literacy that must be taken into consideration. For example, populations unable to access dental care should be able to easily obtain educational materials regarding preventive dental care that are easy to understand and use. The information should focus on the risk factors and preventive strategies for oral disease and be culturally and linguistically competent. Dental and pediatric primary care providers and community health care workers should be encouraged by residency programs, hospitals and clinics, and non-governmental organizations (NGOs) to disseminate culturally and linguistically appropriate oral health information to schools as well as civil, religious and social service organizations outside of their dental practices.

3. **Establish a collaborative partnership between oral health care providers and community-based oral health workers (COHW) which could help improve oral health outcomes and reduce socioeconomic and culture-based disparities in a range of ways including, helping to coordinate care and educating about such things as brushing and flossing.** The community health worker model has been used worldwide to help increase access to health care services, especially among hard-to-reach populations. Community health workers are selected based on community membership and knowledge of the community’s culture and languages spoken. Their established membership in the community encourages trust and respect. Thus, community health workers are an important link between the community and use of health care services. Several countries (including the US, New Zealand, Canada, Great Britain, Netherlands, Switzerland, Malaysia, Thailand, Hong Kong, Singapore, Brunei, Cameroon, Cambodia and Azerbaijan) have established community and school-based dental service programs using COHWs and dental nurses/dental therapists to help expand the reach of oral health care,
reduce dental caries and treat dental disease in children.25-28

4. Support interprofessional education (IPE) and encourage collaborative practice between oral health, medical and other pediatric primary care providers to help increase access to and use of oral health care services for children in both developed and developing countries.29-30 Several dental schools in the US, Canada and Europe have incorporated IPE programs into their existing dental curricula.31-32 Research results from these programs report positive findings regarding the benefit of IPE on teamwork and have shown improvements in primary care providers’ oral health knowledge and increased confidence for providing oral health care services to children.30,32-36

5. The use of dental homes and teledentistry to promote patient-provider relationships that build trust, cultural competency and continuity of care across the patient’s lifetime are needed to increase access to oral health care, especially in underserved areas.37 Dental homes refer to a community-based oral health delivery system in which people receive preventive and simple therapeutic dental services (such as prophylaxis and education about brushing, flossing and nutrition) in community settings where they live or receive educational, social, or general health services. In countries lacking dental offices at a nearby location, dental home community providers can refer patients who require more complex treatment that only a dentist can provide to mobile dental clinics or other community-based/neighborhood dental centers (if available) where advanced restorative procedures are done.6

CONCLUSION

Developing practical and innovative strategies and health policy suggestions for systems-and SRD-level change approaches to improving oral health among children and underserved populations is of utmost importance, as access to basic oral health care is a matter of equity, social justice and continues to be an urgent human rights issue in both developed and developing countries.6,38 We need to advocate and have some specific policy recommendations for UNICEF and the United Nations to spell out, that “without good Oral Health there is no Total Health for the child.” All children have the right to health, in line with international human rights law, we need to add “oral health” to this UN mandate.

All experts agreed that the best Equity Policy includes the adoption of “Age One Dental Visit.” While more research is needed to better understand Oral Health Literacy and the direct association between SRD and oral health outcomes,8 it is hoped the recommendations in this paper will provide a platform for further discussion on how action can be taken to implement the strategies and policies needed to overcome oral health inequalities and bring social justice, health equity and human rights to children worldwide.

Viewing ECC through a lens of social justice, health equity, human rights and SRD awareness will help oral health providers, public health practitioners, and policy makers develop targeted actions consistent with the infrastructure capability and current oral health situation of the populations they serve to ensure basic oral health prevention and care for all children.
REFERENCES


Talking About Racism Will and Should Make You Uncomfortable, and that’s OK

Keisha Ray, PhD

As a professional philosopher, the philosophical absurdity of our Fellows Forum at the 2022 meeting of the American College of Dentists is not lost on me. Including myself, we were five racially, ethnically, and gender diverse scholars speaking in a hotel ballroom in Houston, Texas, one of the most diverse cities in the United States of America, talking about, among other topics, racial discrimination in dentistry. Yet, if the audience questions and looks on their faces were any indication, what we thought was a simple fact was met with suspicion and, at times, anger. When we said oral healthcare in America has roots in racism and contemporary dentistry can exacerbate racial disparities in oral health, we thought this would be a starting point to discuss how dental professionals can do better by their patients and colleagues. But it seems like the audience heard something entirely different— they heard us calling them racist. And perhaps that’s fair. After all they are in a profession that we said maintains racism and other forms of discrimination like classism. Because of this communication barrier we only got a chance to briefly discuss the specifics of what dentistry can do to offset its past and current contributions, whether systemic or individual, to racial disparities in oral health.

Talking about racism makes some people uncomfortable. And for many, once that discomfort sets in, all other information is filtered through the discomfort, contorting the message and ultimately ending potentially useful discourse. Additionally, this discomfort can affect how we educate and prevent learners from understanding their future patients in a more meaningful way that is conducive to socially informed care. But it does not have to be this way. Discomfort can be motivating, if only we could get comfortable with the uncomfortable.

The dentists and dental educators who attended our session on ethical and social issues in dentistry and dental education came face to face with dentistry’s past and current relation-
Talking about racism makes some people uncomfortable. And for many, once that discomfort sets in, all other information is filtered through the discomfort, contorting the message and ultimately ending potentially useful discourse. Additionally, this discomfort can affect how we educate and prevent learners from understanding their future patients in a more meaningful way that is conducive to socially informed care.

ship with marginalized people. Accepting that the profession has a racist history can be difficult for some people. But typically, not too difficult. People tend to abstract themselves from their profession’s past since after all, it’s not like they specifically committed any misdeed. They take comfort in believing that they are not racist, nor do they condone racism. They remind themselves that they are not their profession’s past. Acknowledging that you are continuing your profession’s racist past with your own patients, however, is much harder for some people to grasp. But our session asked the audience to do the opposite. We asked them to grapple with the racist history to understand dentistry’s role in keeping that history alive. We asked them to think about the ways that history repeats itself through repackaging; specifically how blatantly racist and inhumane acts like using teeth from enslaved African and African Americans to make dentures for White people can turn into contemporary acts like dentists being more likely to recommend tooth extraction rather than tooth restoration for Black Americans.

Similarly, we asked audience members to ponder why topics related to racism such as its impact on access to the social, political, and commercial determinants of oral health for racially marginalized people are not more prevalent in dental education. If Black, Latinx, and Indigenous people face known structural barriers to oral health, why isn’t this a central part of dental education? As learners, they are looking to their profession, institutions, and individual educators for guidance. If the guidance does not include understanding their future patients’ social lives, how those lives contribute to poor oral health, and what they can do as professionals to mitigate these effects on their oral health then their education is incomplete because it’s missing value formation.

But dental educators cannot be in a position to help learners in this way if they themselves cannot embrace the discomfort that may come with talking about racism and other forms of discrimination. Talking about these topics can be difficult and some people may even feel personally called out. But as the common saying in Black communities, goes, we are not calling you out, we are calling you in. As our session tried to do, we are calling dentists in and asking them to have the hard conversations and to examine their discomfort and more importantly, the eagerness to get rid of that discomfort. Change only happens on the other side of this eagerness to rid ourself of something we should embrace as normal.

I challenge readers to embrace the discomfort that can come when we acknowledge that we are a part of a historically racist institution. It can be uncomfortable to acknowledge that we can knowingly and unknowingly contribute to our institution’s contemporary racist behaviors, in all of its subtle and blatantly obvious forms. Instead of using it to shut down conversations, let us use it to create the conversations necessary to educate ourselves and future dental professionals. Let’s use the discomfort to change our values for the sake of the people who have to live with racial discrimination and its effects on their every day lives.
Feedback from Fellows Forum Attendees

“This panel discussion was the talk of the evening after one panel member labelled dentistry a white supremacist organization, and another then served as interpreter/translator for this remark. Though I am not sure this was her intent, it did bring forth extremely interesting and open race related discussion. It was my Wow from the entire meeting.”

“I believe the topic was very divisive and not about meeting people where they were. The panelist seemed to be dismissive of other perspectives.”

“A great forum discussion. A brave decision to have this topic be discussed as it is not an easy one and the conversations can be difficult.”

“This was an excellent forum. The speakers were very knowledgeable. The facts presented gave food for thought. Best ever presented in my mind.”

“This was one the best panel discussions on oral healthcare and education ever.”

“I thoroughly enjoyed the forum, the diversity of the panel, and very much hope it will be done again.”

“To be honest, this course was a bit uncomfortable at times. The intent was there, but some of the content missed the mark. I’m ok with saying this due to multiple new-to-be-inducted fellows and previously inducted fellows discussing this over the next few days. Yes, it is a fact that there are more white dentists/dental students than minorities. There is no disputing that. However, comments (by panelists) were extreme, and not so much conducive to positive communication and change. Those are more likely to create silence, resentment, and further division.”
Oral health is health, which we know. In fact, it has been more than 20 years since the 2000 Surgeon General’s report on oral health in America, and more than 25 years since Surgeon General C. Everett Coop said, “You are not healthy without good oral health,” bringing the seemingly basic idea more public attention, independent of its associations with other bodily diseases, since that’s often how we like to talk about oral health. Oral health is important in its own right and can have great repercussions for wellbeing. So to this effect, in 2021 the ADA issued a statement saying that oral health is integral to overall health, dentistry is essential to healthcare. Yet in the United States, dentistry and dental health is separated from medical care and medical insurance. And this has contributed to poor oral health and social, economic, and physical suffering for many Americans.

But that suffering is not equal. Marginalized populations such as people from low income backgrounds, immigrants, racial and ethnic minorities, the elderly, children living in poverty all have a higher incidence of oral disease. This all means that ignoring inequities in oral health is unethical and something we can no longer minimize or try to sweep under the rug. Yet in 2021, the National Institutes of Health Report, Oral Health in America: Advances and Challenges received very little, almost no attention. Is this an indication of how much dental professionals care about these issues?
Myself and esteemed panelists here hope that this is not the case, and especially since dentists as a part of their social contract are called upon to follow high ethical standards, which have to the benefit of the patient as their primary goal according to the ADA Code.

I’m a bioethicist, so I appreciate you all allowing me in your space. My research focuses on why marginalized populations have adverse health outcomes. As a bioethicist, we are talking about strictly healthcare— the incidence of disease in terms of social, cultural, political determinants of health or those non-biological, but social explanations for why disease is socially patterned. And oral health, from my viewpoint is no different. Less access to dental care because of the geographic location of dentists, low incomes, but high cost of oral healthcare, no real existence of dental insurance in the same way that we have medical insurance, cultural practices as well as a lack of dental literacy and a lack of substantial political power continue to adversely impact people’s oral health. So in other words, our oral health is greatly influenced by factors outside of ourselves.

Those factors, like systemic inequities, we are born into and oftentimes have little to no power to remedy. So as a matter of ethics, when discussing a systemic problem, we have to address the root of the problem and its effects at both the individual and the population level, and that’s what we’ll be doing today.

How we educate dental professionals and how, and with whom we practice dentistry, can also contribute to inequities in oral health. DEI or Diversity, Equity and Inclusion is a hot button term right now, but how are we meaningfully addressing DEI issues in education and in our practice? These are ultimately questions of justice, and as the ADA Code says under the principle of justice, the dentist has a duty to treat people fairly. This principle of justice expresses the concept that professionals have a duty to be fair in their dealings with patients, colleagues, and society.

Under this principle, dentists’ primary obligations include dealing with people justly and delivering dental care without prejudice, and I think that without prejudice is key there. So how are we living up to this value of justice that the ADA Code calls on us to exemplify? And what are dentists and dental educators to do? We know that some populations are underserved, we know that the ADA Code calls on dental professionals to share in advocacy and in care of the underserved. We also know the ADA Code says, under the principle of beneficence, the dentist’s primary obligation is service to the patient and the public at large. But how do we do this when the problem of poor oral health and disadvantaged communities seems so large, so overwhelming, yet so worthwhile for our individual patients as well as for entire communities?

So our esteemed panelists here will address the ethical issues and issues of social, commercial and political determinants of health that contribute to poor oral health outcomes from marginalized populations, what professional obligations dental professionals have in addressing these issues, and then just what can educators do to prepare future dental professionals for a profession increasingly becoming more committed to DEI and social justice issues.

—Keisha Ray

Let’s talk about how we frame this oral report. So we know that we have social, cultural, political determinants of health. We know that they greatly influence people’s oral health. Why do you think that social and ethical issues were not more prominently featured in the report, and what are some implications of this absence?

—Lisa Simon

I’m first of all, just so honored to be a part of this. It’s incredible to be here and especially to be a part of this panel.

I’ll confess, Scott, I’m a little intimidated to answer this question first because I was a mere contributing author and you are an associate editor on the Report, so you’re going to give us the real details. But I think that in part the answer is that, a lot of things happened in the process of making this Report, and I imagine there may be some other contributors here in the audience as well. But when the Report was being written, it was intended to be a follow-up to the Surgeon General’s Report, but of course a pandemic and a change in administration led to some very big challenges in making that happen.

So, I think in part there were maybe competing priorities. The other thing I think is key to note about the report is that it’s very difficult, I would imagine, to create some-
thing that addresses every aspect in the field we’ve all dedicated our entire professions to. There were a lot of cooks in the kitchen, and I think sometimes, especially as dentists tend to be more detail-oriented folks, there tended to be a splintering or an over attention on very small topics or ensuring that we got enough of everything in there. So for example, I was asked to write a summary paragraph on the oral health of people experiencing incarceration, which I would argue could be its own report and then another one on rural populations. And those became just drops in the bucket of an enormous report trying to address so many issues. But what I think is then missing is that central mile high viewpoint that the issue of justice calls upon us to draw attention to these groups and think about oral health in America through a specific threat.

--Scott L. Tomar

Yes so, originally this Report was intended to be released as a Surgeon General’s Report. Earlier in my career, I was with the Centers for the Disease Control Prevention and was involved in putting together a number of Surgeon General’s Reports, primarily those related to tobacco and health, but also the first Surgeon General’s Report on oral health. Government reports are really good at laying out the problems, and this report, I think does a pretty good job of updating the 2000 report on laying out all the problems. Probably, it is less effective at really laying out some policy solutions. As was mentioned, what we’re primarily dealing with in the current problems in oral health is related to things that happen outside of the dental office. It’s really social, commercial, political determinants that influence oral health and oral healthcare in the US.

But it also happens to be some of the very issues that frankly, government reports are probably a little hesitant to weigh in on terms of policy changes that might help to alleviate some of the inequities that we see. But what I’m hoping, this afternoon that we can, maybe discuss some of the things that perhaps are not in the report or not adequately highlighted in the report on things that we as individual dentists and we as the American College of Dentists could help to do to deal with some of those determinants that again happen outside of the dental office.

--Francisco Ramos-Gomez

I’m so happy and honored also to be here, thank you. I just want to share, I was one of the contributors on the oral health disparities for children, and I wrote literally 10 pages. And when I went back to the Report, I think maybe they had three paragraphs of what I wrote. So, we all have to deal with this, and someone told me when I complained, as you know, me, I’m very vocal, so I complain. They said, “just be happy that we have this second oral health report,” it’s just a little step. But I feel after doing this for 35 years or plus, I feel that this is not a time for more reports, this is a time for action.

And we need some more policy changes and system change approaches, which is what Scott is saying. That was not really addressed in this Report. But having said that, it is great that we bring the magnifying glass to the issues of oral health disparities first and foremost, but we really lack an ethics lens on how we can improve our access to dental care for all in a more equitable and more diverse way. So, this is what I wish there was a specific report on, and I’m so thrilled because with this panel, as we’ve been discussing, we hope we can bring our own report from ACD that can really bring to light some very specific issues of policy change, addressing, if not all, at least some of the highlights that we think are important.

--Keisha Ray

So, I know this next question is a very big question, but I’m going to ask it anyway of our panelists and hopefully we can have some discussion. So I’m going to start with you, Carlos.

What is one of the more pressing ethical and social issues facing dentistry or dental education? Again, I understand the magnitude, but that’s why we’re starting with you. I’m a philosopher, so I have to ask the big questions.

--Carlos S. Smith

Yeah, so you chose the country preacher from South Carolina to start with a large question, right? In your introductory remarks, you talked a lot about justice. And so I think one of the challenges, I think in a dental profession is even how we define justice. And so I have some colleagues, Carlos Quinones in Canada and Eleanor Fleming at Maryland, who we just wrote a paper together really problematizing, social contract theory, and I’m kind of getting in the weeds of philosophy on some level.

We talk about the social contract that we have with our patients, with communities, that it’s not just our interest, that it’s the interest of the patient that is now centered, that is above our own, self interest, if you will. And so, if you look at the history of social contract theory, it was really developed at a time where someone like me certainly would not be offering any insights on any theory at all because it was
created in a time where black and brown folks or women were not really a part of these kinds of discussions.

So, to boil that down a little bit, this notion of justice and simply defining it as fairness, I think is an ethical challenge. Because if justice is simply fairness, then I'm looking at a lens as a provider to where I'm treating everyone fairly, but then that absolves me of any responsibility to actually intervene when I see challenges, particularly of an oppressive nature. So, I brought up Carlos and Eleanor because the piece we wrote really is asking the question of, should we redefine or reimagine a definition of justice as not simply fairness, but anti-oppression, and so that's a bit of a leap and probably a bit controversial, but I think we could even look to some of our Jesuit colleagues and we look at how justice is defined in some of these institutional ways, it really is looking at anti-poverty and really helping in combating oppression and is not simply about fairness. So, if you come to the table with a lens recognizing a responsibility to intervene when you see problems, that's totally different than just treating everyone fairly.

–Keisha Ray

Great. Lisa, same question, pressing, ethical or social issue?

–Lisa Simon

Carlos, you are a beautifully tough act to follow.

I actually am just grappling with what you just said, I love this proactive rather than reactive approach to justice, I think it's really beautiful and something I'm going to take with me into my work. I'm a big picture thinker, which is perhaps why I practice medicine now and not dentistry. But I think that the pressing issues are, at least for me, more infrastructural than they are individual. It's really great to be in a room with so many dentists who are really committed to ethics as the core lens to which we deliver care. But I feel that for many dentists, that's actually not the case. And that's been a huge frustration for me in my, admittedly so far brief career. But part of that is the rules of the game. We practice in a silo where the incentives are fundamentally misaligned from our patients.

And I think that leads to a fair amount of fear and conservatism on the part of many who practice dentistry and a lack of engagement with the white supremacist structures that uphold the way dentistry has always been and continues to be practiced and medicine to a lesser extent. But I think that that makes it very difficult to change things. I am very interested in changing the rules of the game, so that's no longer true. And I would argue that that comes down to things like health insurance policy and who gets coverage and how we get reimbursed and whether it's value-based and all these sorts of very concrete things.

But the big picture is that it is fundamentally important that we align our incentives as providers with those of our patients, and that simply doesn't exist in dentistry right now. As much as I would like all of our profession to be fundamentally focused on doing their best for the people we care for, I think there need to be structures in place to support and encourage that because all of us have challenges or moments of weakness.

–Keisha Ray

Great. I know how we think about dental insurance is important to you and how we think about the comprehensive nature of oral healthcare is healthcare and oral health is health. So great. Thanks for that. Francisco, same question.

–Francisco Ramos-Gomez

Yeah, I mean for me, we have to start from our crisis in dental education that we have at the moment. We have to do a total reform. It's not possible that we've still been teaching the same class, the same courses for the last 34 years. We need to revamp and change and rethink the way that we're really engaging new dental students in dental schools and how we engage them in this whole era of medical dental integration. Like I was telling Lisa, she's our role model for the future, she's our future, amazing, medical dental integrated individual. These are the kind of providers we need for the future to address these issues of these disparities. But having said that, if you think about it, most of the diseases we deal with are maybe 65, 70% are behavioral diseases?

Where do you hear that we're doing or we're training behavioral interventionists? Which is what we really need. We don't need more drillers or fillers and billers. We need to have behavioral interventions that really get engaged in risk assessments, assessing what are the social deter-
ominants of health of these patients, really getting to the very patient-centered individual approaches, and then act accordingly to nudge them on a behavioral change. So we need to really get to this, totally rethinking the way we’re going to be teaching the new dental providers of the future. Think about it, whoever we are here in dental education, we’re responsible for the next 30, 40 years of the dental education in this country, where are we? Why can’t we have really the audacity to revamp and change this stuff that we’re dealing with for years? So that makes me mad and that makes me want to take action. So we have created a whole curriculum reform, at least in my world, in pediatric dentistry of diversity, equity, inclusion. We really bring the issue of justice and ethics very much to the center and the core.

One of the things that we really learned, and I just came from the American Academy of Pediatrics, they had an amazing national meeting and I really learned so much from them because they’re 20 years ahead of us, why? The pediatricians, at the end of the day, regardless of what other considerations they may have, the focus is on the child. That’s what we have to do, that’s the piece that we’re missing here. We don’t see our patient as the center of the equation.

–Keisha Ray

Seems I have more issues with justice. I think Carlos started us off well. Your turn, Scott.

–Scott L. Tomar

Similar to Carlos’s comment about how we can reframe the ethical principle of justice. I think in the same way of beneficence. So traditionally, if we think of beneficence, we want to do good for our patient. As a public health dentist, I tend to think of that on more of a community level, doing good for the oral health of the community, which would involve, and again, looking at things through a different lens. This applies even to the regulatory framework in dentistry. For example, boards of dentistry, they typically spend a lot of their time and energy focusing on, aside from sanctioning people that run afoul of state practice acts, the health and wellbeing of those who are in the dentist’s chair.

There tends to be little or no attention to the health and wellbeing of people, who for a variety of reasons, can’t or don’t get into the dentist’s chair. And so again, to me, it is just looking at the population through the lens that we might apply now to a patient, but really looking at a broader perspective. And again, what I hope that American College of Dentists as the ethical guardians of dentistry, would challenge us to think more broadly in how we apply these ethical principles.

–Keisha Ray

One more question from the panelists before we open it up to discussion and questions. So we know that nations that spend more on social programs, their citizens have better oral health. This is largely because of population level determinants of health and how they act independently of individual behaviors and therefore require population level interventions. So let’s think a little bit more broadly about what ACD can do. This will go to you, Scott, first. How does the idea of addressing social and commercial determinants of health relate to the core principles of ACD? And just what is ACD’s role in reducing oral health inequities in this country?

–Scott L. Tomar

Thank you. So, as Francisco said, so much of the diseases that we deal with in dentistry have a strong behavioral component. One thing we’ve learned from other successful behavioral interventions, is that they tend to work best when you don’t focus at the individual level. So, I’ll give the example, tobacco control, and again, earlier in my career I was with the office of Smoking and Health at CDC, and I was fortunate enough to be in the days when we really were rolling out comprehensive tobacco control. So again, if we look at the situation today compared to where we were 30 years ago, we are at the lowest prevalence of cigarette smoking that we’ve ever had since we’ve been tracking it. About 5% of high school seniors that graduated this past year were smokers compared to 30 to 40% just 30 years ago.

Same thing with adult smoking, we’re down to about 12%, down from 30% not too many decades ago. And how did we get there? It’s not because suddenly people realized that smoking’s bad for you, we knew that when I was in high school. But what we did was, we changed the environment, we changed the social acceptability of tobacco use, cleaning the air laws, restrictions on advertising and promotion, effective counter advertising. So here we’re dealing, and I know Francisco can speak much better to early childhood carries than I can but, here we’re dealing with disease, there’s such a strong behavioral component. We know what a lot of the major risk factors are, but we’ve invested almost nothing.
Ineffective food policy, control of sugar substances, we expect it all to fall on the parents, and yet we’ve done nothing to help them to create an environment that reduces their exposure to advertisement for these products, the ready availability, that the high sugar content products are cheaper and easier to access than fresh fruits and vegetables. And so I think that we really have to invest much more in trying to take a population level approach to managing what we know are the major risk factors, effective food policy, things like taxes on sugar sweetened beverages, other things that other countries are frankly probably ahead of us on that. But we really have not invested much at all in that. And I think dentistry has a major role to play in helping to advocate for these kinds of things.

–Keisha Ray

Same question, Francisco. What’s ACD’s role in all of this?

–Francisco Ramos-Gomez

Yeah, for me, and we just wrote a very exciting paper on oral health literacy as a framework. Social determinants of health, bridging into structural racism and discrimination, we strongly believe that our communities of underrepresented minorities and of color really pay the price of being mistreated and given less treatment options than the regular community at large for many, many reasons that I don’t have time to spell out but, oral health should start early, from the consumer’s perspective, the family’s perspective, as well as from the provider’s perspective. I think both communities have to be very much engaged in learning more about each other to really work together. For us, prevention is really key, as Scott mentioned, early childhood care has been my passion, my crusade, my journey of my life.

It’s been what I dream, I breathe, I live and trying to come up with interventions. How many of you have really been advocates for or endorsed the age one visit? For example, how many of you treat infants and toddlers in your practice? How many of you engage with WICs and early Headstart and community health centers? How many of you really bring the issues of access to care for rural community where there’s no dentist. How many of you engage with pediatricians, with family physicians or nurses to have a more interprofessional practice and a form of giving access to care? Families want a one-stop shop. They don’t want to go like ping pongs to 20 places. Transportation, daycare are major barriers as well as language barriers for some. So how are we addressing this in our daily lives? I’m asking you as providers, as policymakers, as part of the ACD, we need to be much more standing upfront and be the voice of what needs to be done for change.

I am so sick and tired of issuing more reports. I like to be engaged in an act-up or an action item plan. Like we’re going to do A, B, and C and we’re all going to go for it and speak about it and be advocates. Like Carlos mentioned, this is not the time just to, oh, I’m not going to do what is bad, no to when I see it, I need to call it out and engage and try to change it. This is the piece that we’re missing out on -- on equity. And again, I mean this is a very important thing for me. Age one visit is essential, it’s an issue of equity. So we need each and every one of you to be advocates to go out there and go to your committee ask, are you brushing the kids teeth? Can I help you? We have resources, videos. That’s for me, an issue of equity, hands-on that we can do. Enforcing the age one visit, really working toward oral literacy and really try to bring this simple issue of tooth brushing back to the children at most need.

–Keisha Ray

So, action, is what I’m getting. So, let’s open this up to questions. We really want this to be a discussion. So before the panelists continue to talk, if you have a question, anything that we’ve talked about so far, please come up to the mic.

–Audience Member

This is for the woman doctor on the panel. Okay. I understood you to say that dental education comes from a white supremacist perspective. I would like to have an explanation for that.

–Lisa Simon

Okay. Thanks for your question and I hope some of the esteemed colleagues on the panel would also help with bringing about this framework. I think it’s important to point out that the first dental schools were founded in 1840s when the only people who were able to matriculate
were white identifying men. This, in many ways though, wasn’t an issue of malevolence, but rather a historical fact that requires, as Carlos has mentioned, proactive efforts to countermand.

We are now graduating, for the first time ever, dominantly female identifying dentists. But it took more than 150 years to get to that level of gender equity. And dentistry, even more so than medicine, which itself has serious issues with graduating physicians and a physician workforce which reflects the beautiful diversity of the rest of the nation. But dentistry lags even farther behind. This is only one small aspect of what it actually means to try and counterbalance a system that was founded when everyone on this panel would not be able to become a dentist or be a part of our profession. But it is a key ruling framework because I think in part it encourages this proactive response to justice that Carlos so beautifully laid out at the start of this talk. And it can be challenging...

to hear those words. I think that for many of us, perhaps especially if you are, like me, white identifying, it can perhaps feel threatening. But that’s important, because that’s the individual work that we can do to think about our colleagues and what we want our profession to be and how we can better serve everybody in our nation and our obligation to our patients and to our community.

–Keisha Ray

Anyone else want to comment?

–Francisco Ramos-Gomez

Yeah, I just want to add if we can, we have here leaders in our underrepresented minority associations. What is the percentage of African American dentists in the country at the moment? I can tell you for Hispanics it’s less than 4% nationwide. It is still pathetic, the lack of representation in the dental profession. What is that percentage of African American dentists in the country?

–Audience Member

About 4%, Francisco. So after all these years, since 1840, that we come to a 4%. It is for me sad, pathetic, and really disgusting.

–Keisha Ray

And we’re in the city of Houston and it is one of the most diverse cities yet our own dental schools, the number of dentists of color that we graduate is, I think it’s less than 10%. And that’s all, that is Indigenous, that is Black, that is Latino. And I think that when you talk about any sort of profession that has long roots in oppression, has long roots in white supremacy, you have to talk about it in a historical context. You can’t ignore the history of the profession. I think that does a great disservice to patients. It does a great disservice to people who eventually want to be a part of this profession and call you colleagues. So I think what our panelists are getting at is that we just can’t ignore the history of it and how that history continues to be present, how that history continues to repeat itself.

–Carlos S. Smith

If I can interject here, I think when we have conversations where race is evoked, we have to level set. And what I mean by that is we have to say, “Look, when we talk about these things, no one is disparaging anyone else, no one is attempting to evoke guilt, no one is attempting to rewrite some historic narrative. But what the data shows us is that this conversation is about improving patient outcomes.”

This conversation is about improving patient outcomes because the data shows us that Black and Brown dentists treat more underserved patients. The data shows us Black and Brown dentists treat more patients on public insurance, like Medicaid. This is data that has been around a good amount of time. And I think one of the challenges, is that we live in a country that doesn’t really like to talk about our racial history from a center of truth, if you will. We talk about it from different people’s experiences. And so your experience can be true for you, this person’s experience can be true for them, but there actually is a truth that took place that maybe is absent of your particular experience. Does that make sense to everybody?

...And so I think we have to level set. And in that, I read an article recently that was fascinating and I think it’s instinctive and organic, but it was interesting to see it written, and that is this, that when we talk about race and there’s a multitude of racial groups and ethnicities... but it was specifically talking about African Americans or Black and White folks in this instance... and I was saying that when, and this is a generalization in some regard, but when we talk about race and racism White people tend to think of how far we’ve come, right? How far we have come. And 20, 30 years ago it was this way, look at how far we’ve come now. Whereas with Black and Brown folks or people who are from minoritized or historically oppressed or systemically excluded backgrounds, they tend to think of current realities connected to historic narratives. So when we throw out race and racism, we’re already talking about...
two different things, because you have some people who are talking about, “It’s so much better. Oh, my gosh. We have 95 students in the dental class and five or six of them are Black. There were no blacks in my class in 1972.”

That’s true. It’s true of your experience and it is better. That “better” is relative. A colleague this morning brought up when we talk about a moral compass and how that is a relative term, because my moral compass and moral center can be different from Lisa’s, which is different from Francisco’s, which is different from Scott’s. And so when we talk about race and racism, I think one of the challenges and why it’s so difficult and why it’s so hard, we’re entering from so many different vantages and we almost can never get to a place where we’re actually talking about the same thing. That’s why the colleagues questioned, when Lisa threw out white supremacy, I cringed a little bit because I don’t tend to do that. But I’m in a different skin than she is. Right?

–Keisha Ray

Glad you did.

–Lisa Simon

I’m privileged to be able to make that claim.

–Carlos S. Smith

Yes. And so I know that’s an uncomfortable point or it’s a trigger where I lose 75% of the audience, so I can’t say it if I want to get something across.

But that’s because we’re entering from these different vantage points. And as the conscience of dentistry, I think it’s the ACD and it’s incumbent upon them, and I think they have been doing this, is to push these conversations. Because I think what can make a difference is the advocacy of everyone in this room who can leave and say, “I understand this from a totally different perspective than I have and I can go tell someone at the Texas Dental Association meeting, ‘Look, maybe you should think about this a little bit differently. I was at this meeting and they said, da da da.’” I think that power is one that really could make a difference in the ACD. Otherwise, we’ll stay in these silos, we’ll stay in these vacuums, we’ll keep shouting over each other, and the inequities will remain.

–Keisha Ray

And then also too, remember discrimination of any sort is a social determinant of health. And so that can also prevent people from getting the oral healthcare that they need. Let’s go to one more question. We’ll get one more.

–Audience Member 2

Hi, I’m a new Fellow, so I guess I probably shouldn’t be talking, but I will. For anybody who is doubting the role of White supremacy or race-based marginalization, at least, in medical and dental education, I would just refer you to the Flexner Report and the implications of that resulted in the closure of all but two historically Black medical colleges in the United States and the somewhat dubious claim of quality. Just something to think about. I encourage you to look at the Flexner Report and understanding what the implications of that were for medical education as we know it today, basically throughout the 20th century. I do have a positive comment, though. And would you comment on the use of technology to address some of the healthcare disparities? I don’t think that was talked about fully. It’s kind of a double-edged sword. And they can go a couple different ways. There are limitations and advantages. But I would just love to hear some of your thoughts on the use of technology leveraging, like telehealth, to reach some of these underserved areas.

–Keisha Ray

Scott? Or Francisco? You want to take this one?

–Francisco Ramos-Gomez

Well, I mean I really appreciate your comment, and if anything good COVID has left us or is leaving us with is this amazing opening to use technology for all socioeconomic status or races or formats. Everyone is familiar with Zoom. Telehealth was so unused before 2019, especially in dentistry, and now to have this opportunity. Everyday, I deal with children’s oral health disparities and the lack of understanding and awareness of the families to have oral health in their regular screen in health and not in disease. Because it might be priority number 385 if the child is okay, but if the child is in pain it becomes one, two and three. And that’s where the problem starts. That’s the conundrum of where to find a pediatric dentist or a dentist to take care of my child.
The idea is to bring pediatric dentistry to people’s households. And we have such amazing learning experiences. Families do not want to have to travel two, three hours to get to an appointment for 20 minutes, three buses they might have to take, you name it. Paying for parking at the university. Everything. The fact that we can bring pediatric dentistry to them, wherever they’re at, is just amazing. We do a lot of risk assessments now. We do screenings. Something that we learned that we really were so excited about is the use of cell phones in low-income families. It’s like using their television. So we’re able to connect, even the more rural or where there are frontier areas where there were no access to care.

We did a very exciting study that we just finished where we were assessing toothbrushing at home, because, as you know, it’s a huge challenge. Regardless of your socioeconomic status or race, parents’ biggest nightmare is to brush their child’s teeth at night. And we really wanted to see if we could learn from the cash incentive programs from vaccinations, where in some countries, like India, Africa, Mexico, we learned that by adding a $5 phone card to families, vaccination rates in some communities went from 38% to 90% in six months. It was just incredible. So we wanted to see if these incentives will work for families. We just finished that trial with Stuart Gansky and a group at UCSF and UCLA, where we found that really families are very engaged.

We’re giving feedback to the families. It was so powerful to have this kind of technology into the households, bringing them to their families, to a place that they feel safe, and really addressing the issue of oral health disparities. We are thrilled with the findings of not just to help but really interactive approaches where everyone can do it from our health center, our community, and you don’t need to use the dentist to do that. We have amazing community of healthcare workers who are the bridge between the providers and the families, which will be an amazing opportunity for each and every one of you, wherever you’re from, to really endorse and engage with community or healthcare workers. They really make the magic. They can do risk assessment, they can do the counseling, they can counsel, they can really handhold the parents to do this kind of work, which is very simple, but for them might be challenging.

–Keisha Ray

Thank you.

–Carlos S. Smith

I do want to say something about the advancing technologies, because I teach ethics I get to ask questions and not always provide the answer, so that’s fun to me, but one of the things I think is important is that the typical inequities that we see with anything, we see with advancing technologies as well. So I would say that when you’re dealing with these various advancing technologies, say that is a teledentistry type of thing, if it’s in a very rural, super rural area, is there WiFi that’s going to enable the folks in that community to be able to log on to your technological advancement?

I think in the same way, even with say augmented reality or artificial intelligence, I’ll use an example, most of us are very familiar with automatic sinks or automatic hand dryers. And so they’ve fixed most of that now, but when they very first came out years ago, they were not recognizing melanated skin because most of the testing had been done only on white skin. When someone that’s darker complected, like myself, would put their hand under the warmer, nothing happened. I think we have to think about as technologies advance and that connects to clinical trials ... larger question.

–Keisha Ray

It still happens.

–Francisco Ramos-Gomez

Right now we’re working with Migrant Head Start programs, which are in very rural communities where there’s no access. We linked through their WiFi. I was really surprised, because one of our first years of planning was how many of these low-income families had access just to a cell phone and we’re surprised almost 98% of them have them.

It was really incredible that we still have so much to discover and to do, especially to reach out.

–Keisha Ray

Right. Let’s do one more question.

–Audience Member 3

Hi, I’m an affiliate professor in School of Dentistry in University of Washington. My comment or question is some panel members mentioned that there is obviously a lot of need in the underserved communities for medical and dental care. In the State of Washington, I know there is a lot of Native American areas but where there is very little
dental and medical care. I’m also familiar with individual practitioners who really do a lot of volunteer work. This particular dental faculty and practitioner, he used to take a whole plane full of supplies, go to South America and serve the people who had never seen a dentist in five years and so on. However, the need is far more than the people who are volunteering and doing this very good work. There’s a requirement for CDE and CME credits for every practitioner to maintain their license, so should we even talk about that there should be requirement for serving the underserved areas of those communities, just to maintain your professional standards and professional license?

–Lisa Simon
Sure. Thank you so much for your question. I have many, many thoughts about this.

–Francisco Ramos-Gomez
Me too.

–Lisa Simon
And I think it’s a very interesting possible solution. It provides some incentive for doing what I think we want our profession to do. But, again, I’m a systems person and my thinking is I don’t want people to need to get a bonus to provide care in a way that is necessary across our country. How would you amortize the CDE? Is CDE enough of a mechanism to push or pull people where they need to be? In the Indian Health Service, for example, salaries for very remote dental appointments actually are quite high in terms of income being a driver. If you want to make a lot of money, you can be an Indian Health Service dentist in Alaska. But those positions are still primarily unfilled, which I think speaks to the need to think about what drives dentists to become dentists, to practice where they choose to practice, and how easy or pleasurable or important or meaning making it is to be a dentist in that community and think about bigger-scale issues than even having a single mission or a volunteer approach or a temporary commitment to a community.

I am not an ethics teacher, but I will use Carlos’s approach and say that that is a question to which I do not have an answer and it is certainly one that the health system at large struggles to answer. But I would like to think that some of it starts with who becomes a dentist and how we build pathways so that everyone in the United States sees dentists who look like them, who serve their communities, who make them feel like this is a profession for them. I think it has to do with how we train dentists and what they believe themselves to be and what our identity is and what our job is going to be when we go into the world. And then I think it’s about how we fund dental care, how we are part of the health system, how we use technology and tools and community empowerment to make oral healthcare be delivered.

–Keisha Ray
I think this is a great segue into a question that I know that you’ve talked about before about how we separate medicine and dentistry. I know that you Lisa, represent one of those. I’m going to be a little bit selfish since I mostly work with medical students and in medical schools, and so I want to ask you, I know that you’ve said before that the separation of medicine and dentistry is an accident of history that has been compounded by education, policy and economics. So to the detriment of the patient, what are some of these consequences of separating dentistry from medicine? What are some of these historical origins? And then how can people as dental professionals think about advocacy for expanded coverage and how to think about dental insurance? Can you just shed us a little bit of insight on that?

–Lisa Simon
Sure. I’m a history nerd, so I have to go back. Many people already know much of this; probably better than I do, but in 1842 we have the founding of the first dental school in the United States, founded by physicians. In the 1860s, we have the founding of the first university-affiliated dental school, also founded by physicians. And these physicians are good guys. They’re thinking, “Wow, teeth are pretty important. Looks like we’re not graduating people with the skills to take care of them. Maybe we should have a training program where people can learn that.” That is a fundamentally good thing. It’s the initiation of our profession. But once you start a school and it’s not the medical school anymore, it’s a different thing. They built the base of the silo and it just continued from there. That’s an accident. I think that if you took Nathaniel Cooley Keep in 1860 and brought him in a time machine to today, I don’t
think he would be elated at what happened. But I think their intentions of this system are good.

And then going forward, this educational separation, which I would argue is sort of the earliest separation of medicine and dentistry, developing into dentistry being its own self-regulated profession, but then that has been compounded by the ways in which dental care and medical care are delivered. Part of that, I think, is dentistry has been small enough to evade a lot of national attention on the way care is delivered, which the overall healthcare system has not succeeded in. And I would argue that’s true of the way health insurance developed versus dental insurance, which as everyone in this room knows is not insurance. You are not insured against anything. It is a discount plan. But then also in the ways that federal policy has forced change onto the health system for the benefit of the nation and which dentistry has successfully evaded.

In 1965, the American Medical Association, the American Dental Association joined forces to oppose Medicare and Medicaid. It’s not like the American Medical Association is higher and mightier from an ethical perspective than we are. It’s that they lost and we won. But those outcomes continue to be compounded.

I’m sure all of us have cared for older adult patients who may even have had dental insurance in the past and lost their coverage at a time when they’re at risk of oral health need, and this heavy metal generation with lots and lots of restorations is being expected to pay out of pocket for substantial need. That doesn’t happen in medicine. And on the Medicaid scale, adults are uncovered who are eligible for Medicaid in almost 50% of states, which is astonishing. And then even in the states where they are provided coverage, dental acceptance of Medicaid is astonishingly low. These are structural historical things that have very tangible, concrete, measurable outcomes. And that’s not even getting into some of the more intangible but equally essential changes in oral health versus health that make it much harder for people to see any of us and to get the care we all provide. More broadly, I just think about it as the more doors you have to walk through to get something, the harder it is to get that thing, especially if you are vulnerable in any manner of ways that makes competing priorities very challenging for you. In dentistry, we’re a separate door. That’s harder. If we were just part of the one big door, that would be a lot better for probably the patients that, at least for me, that I remember the most, that keep me up at night, that I feel like I have failed, that I feel like deserve better.

–Francisco Ramos-Gomez

I avoid now these dental days, like Band-Aids. I’m very much against them. What we’re changing now, and I really hope that all the ACD members here endorse, this concept of adopting a community, adopting a partner. It is not one day, one hour, one week, it’s not a month, it’s a whole investment of your professional lifetime. I really encourage my students to work with the Early Head Start, with, whatever is close in their community, with their church, whatever is there, to bring the issue of oral health awareness.

I’m not sure if that answers a bit about having a day or a mission or what we’re doing. Also, we need to take care of our . . . cities in the US. I don’t send my students to Mexico, Guatemala when we have South Central LA or when we have in our front yard all these humongous disparities. That’s where we have to really make a difference. Think globally but act locally in your place and adopt your community where you’re going to be working for the year, three years, five years, not just one day.

–Scott L. Tomar

Yeah. Well, an idea that I’m careful about bringing up, because I worked for a public university and I think my dean is in the audience here.

And my former dean from my last institution is here. Also a public-supported school. Particularly in a public-supported dental school, roughly half the tuition is paid for by the taxpayers of that state and yet we as a profession have no expectation or obligation of our graduates to pay back in some way. Other countries do. And so I know it may not be a popular idea, but we keep creating more and more dentistry. We have five new dental schools that’ll be opening in the next year or so.

So we’re just going to keep creating more dentists but without changing the system.

We’re still going to have the same issues. It may not be politically popular, but that’s one potential strategy. I work a lot with a number of federally qualified health centers in the Chicago area, and I could tell you they struggle to find dentists in an area where we’ve got two dental schools. And actually the third one in the southern part of the state, their graduates also come up to Chicagoland. So we’ve got plenty of dentists, just very few that want to work in... FQHCs or the like.
Francisco Ramos-Gomez

So you’re proposing five years of dental school and an extra year of really community engagement?

Scott L. Tomar

I think people should obviously be paid for that, but I think that that’s part of the, we talked about, social contract, as part of the payment.

And I would extend it to pediatric dentistry. We’ve used HRSA funds for a number of years to support expanding pediatric dental residencies, again, with no expectation that they either accept Medicaid, that they work in an underserved community. And I think we, as a society, should make this part of the social contract.

Lisa Simon

I’ll be quick in problematizing this, because, first of all, I agree. But, I will also point out that one of the reasons that it feels so impossible is because of the burden of debt that most dentists are graduating with these days.

And again, I’ll kind of compare to medicine, which also graduates people with a crippling amount of educational debt. It’s still about $100,000 per person less for a graduating physician than a graduating dentist in the US. And those are just numbers that... will make your eyes pop up out.

Francisco Ramos-Gomez

No, it is. The average now is half a million dollars on student debt when they’re in their residency program.

Lisa Simon

And I get it.

Francisco Ramos-Gomez

So how are they going to do the right thing in life?

Lisa Simon

It’s hard to expect people to walk the walk when they’re staring down debt they won’t pay off until their 50s.

And so we have to have a solution and then get them into the FQHCs.

Carlos S. Smith

As one audience member commented, perhaps, a part of, we should require in some way for people to get their continuing education credits and things like that to participate in some of these...

... volunteer type things. And so I think in theory, I can understand the intention, and I think a robust benefit of these kinds of meetings is to have some exchange around these kinds of ideas and not just do what we’ve always done because that’s how we’ve always done it. But I would say, with that particular suggestion, I have challenge with it because of all the implicit bias that each of us bring to certain situations.

Specifically, if we’re going to require, until dental education is really going to fix and somehow perfect the idea of who our providers are, similar to what Lisa was saying about why they want to become dentists, I have pause about unleashing on particularly already traumatized and underserved communities folks that may not have the right emotional intelligence...

Francisco Ramos-Gomez

And sensitivity.

Carlos S. Smith

... and cultural sensitivity, cultural humility to engage with certain populations without re-traumatizing them. Does that make sense?

Keisha Ray

Not to mention that we don’t want to discredit the people who are already doing this volunteer work. The burden tends to be put on dentists from already marginalized populations. And then you use them as sort of the face to go and fix these issues in these communities or fix issues in the profession. So we can’t also ignore that there’s already people doing the work.

Carlos S. Smith

And I want to make sure everyone really heard Francisco’s point. Because I’m interdisciplinary by nature, so I have this whole other life of theology and everything, and when I went to seminary at Duke in Durham they
had this diversity inclusive program exchange thing with Sudan. And it was great. And they won awards and they won grants. But they didn’t do a thing...

And so that is something we would have to face where we’re not just doing this sort of tourism, missionary dentistry, let’s take photos with these and post them on Facebook, but we’re actually going to go in and do real work that you could do right in your community. And I understand levels of poverty are different all across the globe. I’m not in any way arguing that. But I think we have a lot of disparity right here that we tend to turn a blind eye to.

Because I think one of our overall challenges, dentistry is individualistic. You floss and you’ll be better, right? Floss, brush. You do these things. And so we kind of don’t think globally or holistically or about a system because we’re kind of just individually focused. So I think that sometimes is something that’s a hurdle in our way.

I do not think it’s appropriate if we unleash on communities that are already historically disenfranchised, systemically locked out. If you unleash on them providers who have no racial or cultural sensitivity or will potentially just blame them for the situation they stand in, I understand they want their tooth out, they want the abscess fixed, but there is this notion of generational trauma that happens.

And so what we don’t want to do is re-injure. And that leads me, I’ll just throw in here... want to do is re-injure. I’m a little bit obsessed with this. There’s some indigenous scholarship right now that talks about cultural geography, right? And what that means is that, for example, our hospital systems. For some folks, when they see a hospital that is a place of restoration, that is a place of healing, that is a place where I go to get my needs met. For the other people of different cultural backgrounds...

... That same site is horror.

And so I just think that’s a balance that we have to understand. And I understand there is need across the board, but I just think that has to be a part of the conversation.

--Keisha Ray

Let’s get another question in the back.

--Speaker 4

I was surprised to hear that your state subsidizes about 50% of the dental education. I practiced here in Houston and went to dental school here, graduated 49 years ago, and it was almost fully subsidized by the state at that point.

For the last year, I know about for the dental school here in Houston, the state share of my dental school’s budget was 16%. A certain amount of that gets made up by philanthropy, of course. A good bit of it gets made up by fee income that the school takes in. And in my opinion, inordinate burden of that is in tuition cost to our students. And so, I don’t know whether this reflects now the will of the citizens of the State of Texas, but I’m pretty sure it does reflect the will of our elected officials. And that seems to me to be a... And it may not be that way anywhere else in this country, but it’s a systemic problem here and it makes it difficult to bottom line work for Medicaid fees for example, and it just ripples on up from there.

--Carlos S. Smith

I think it varies from state to state. I’m in Virginia and so I would say, our state only contributes about 5% to 10% of our dental school budget. So it definitely varies, but I think that is where groups like this can put some pressure...

... In terms of advocacy on our legislatures to say, if we have this responsibility, particularly the state dental schools, we have this responsibility to care. But where is your fiduciary assistance in helping us meet those needs?

--Francisco Ramos-Gomez

Absolutely. Especially it will have a huge impact in the debt of these students in the future.

--Audience Member

I have two comments, one is that we currently have a crisis in auxiliaries in the dental profession really escalated by COVID that in my area up to 40% of offices have an open position. 30,000 hygienists have left the profession, and it profoundly affects the delivery of care. Additionally, in underserved areas, can you address the issue of mid-level providers, and what they will add to the delivery of care in a more equitable way?

--Keisha Ray

Scott, you want to take that one?

--Scott L. Tomar

Sure. So unfortunately, what you describe in terms of difficulty in hiring, particularly dental assistants and dental hygienists. Yeah, unfortunately this is everywhere. So in fact, even in our neck of the woods, we have one FQHC that developed its own in-house dental assisting program.
Because it’s the only way they could get dental assistants. Our college actually, I think it’s the first time, but we’re actually starting our own dental assistant program in a doctoral degree granting institution because we have this the same problem. So, I don’t know the short term answer to that. In terms of mid-level provider, I think it absolutely has a place in many parts of society. I had the opportunity a couple years ago to go to Minnesota to observe their dental therapist.

Working in a number of different settings, including in a private practice, and spoke with both the practice owner and the dental therapist in that practice. And I really wound up as a win-win. So the dentist said, “Well, because...” I think they had a lot of their pediatric dentistry, a lot of their pediatric restorative care was provided by their dental therapists.

And frankly she was really, really good at it. He felt that he was freed up to be able to do the things that he otherwise wouldn’t have had time to do. So actually, substantially increased the amount of crown and bridge, and implants and things. At the same time, they dramatically increased the number of Medicaid insured patients that they could see.

So in that practice actually, it wound up as a win-win-win because they increased access to care, they increased their bottom line, and the dental therapist actually was making a very nice living. And so, I think that it absolutely has a place, and particularly in parts of the country where we talked about the difficulty in getting dentists to practice in some areas. I think in some areas if we can hire people from those communities, that has a grounding in that community, it’s been shown over and over that it could be a very successful model of providing, at least within the scope of care that they could provide.

–Francisco Ramos-Gomez

I am really pro dental therapists, and I think that they have an incredible place in some areas in our nation and our country, but I’m going to say, do we need more drillers, fillers, and billers?

So I’m going to tell you because I studied a little bit about some of the dental therapist models, and this an exciting and amazing success story. But on the other hand, I also saw a model where some DSOs have hired these dental therapists for much lower income, like a fourth of what they will pay a dentist. They put them there to see 40, 50 patients in one day. Cash in, cash in, cash in, especially in FQHCs where they make a bundle and where they can really make a huge amount of dollars.

So they’re now the slaves of dental practice, right? So that’s also the other side of the equation that you have to be aware of. I go back to community or healthcare workers. Some states, like our state in California, has chosen not to go for a dental therapist model but have chosen to go for a community or healthcare worker. Which again, I want to make a plea for the ACD to really look and see how we can add these community health workers as part of our team.

They’re the ones that are from the community. They speak their language, they have the cultural sensitivity, the cultural competence to really engage with families on behavioral changes, which is what we need the most. And they can really focus in that social determinants of health, but also are you flossing, or are you brushing, or are you not brushing, or do you have food insecurities?

For example, we are asking families now to address some of the social determinants, language barriers, immigration issues. Are you fearful of accessing dental care because of your immigration status? We have nothing to do with that. So, we demystify some of these fears that families have, especially in our Latino community in Los Angeles.

So, we are really trying to address this just through these community health workers. We find them an incredibly amazing resources as part of the team because they really provide what the dentists who don’t have that time to really engage with families at their level, and meet them where they’re at.

–Lisa Simon

I think that there’s a role for both of those, and it comes down to what you described Francisco, which is that we need to be thinking about dental care delivery as a team-based profession.

This is something that has started to take shape in medicine. I’m a physician, but I have a team that includes the nurse case managers, it includes social workers, it includes community health workers, it includes NPs and PAs.
And it’s not about the different levels of capacity, but more about our specific roles on the team. We know that on teams that have dental therapists, patients have better outcomes. But that’s not to say that a dental therapist is doing better work than a dentist. It’s that together on a team, everyone can do their best work.

–Francisco Ramos-Gomez

And we can improve the oral health of the family as a whole.

–Lisa Simon

Yeah. It’s more pleasurable, too.

It gives you a sense of being in the weeds with someone and you get to more effectively meet family’s needs. This is absolutely true in medicine. It is a more satisfying game when you play on a team. Right.

–Carlos S. Smith

I think we have to also be honest about how hierarchal we are as a profession. And so, if 20 years ago we were lambasting and arguing against remote supervision of hygiene, now we’re arguing against... And no one up here, but it’s arguing against dental therapy. And I’m not saying there are pros and cons that are worthwhile to be explored, but I think the ethical question is what are we afraid of?

Are we afraid as dentists that we’re going to lose our position at the top of the so-called pyramid? I think sometimes that is part of these scenarios, whether that is about dental therapy, whether that is about Medicare coverage that will have a dental benefit. I think we have to ask some real ethical questions of ourselves as to why we either oppose an issue or we’re in favor of it.

–Keisha Ray

So I think this is a good place to talk about population specific issues.

–Keisha Ray

Oh, you have question? Sorry, go ahead.

–Audience Member

If we have the money and if we have all of the practitioners we need, how do we get people to want the dentistry that we have to provide even if it’s provided free? Because I’ve been in situations where people could get free dentistry, I had a list of people, okay? And less than half of them ever came to see me. People want the cell phone, did they want the electric toothbrush that was provided?

I see us wanting things, society wanting telephones more than we’re willing to spend $2 to buy a toothbrush. How do we get the population to change the mindset instead of just trying to make more of us available to take care of what people don’t want to get?

–Carlos S. Smith

Thank you so much for your comment there. So by nature, I am probably a both/and person versus an either/or, and so that’s my preface to my answer to this question or talking about a response to this question. I think that’s why social determinants of health are so important because this is a complex ordeal we’re talking about, right? Because that’s why there’s data that shows even when we eliminate costs similar to what our colleague has offered, even when we eliminate costs, barriers remain. And so, that’s what we have to really dig into and figure out is what are these barriers that remain? Why do they still remain even if we’ve accounted for the cost of the dentistry? We have a couple of advocacy groups in the Richmond, Virginia area that pre-COVID, they did an assessment, but they did some qualitative interviews with providers, staff, those folks on this side and then with patients. And they said, “What is in the way of you getting care?” And for the providers, “What is in the way of patients receiving care?”

Two diametrically opposed viewpoints came out, the providers and the staff said, oral health literacy. They don’t know enough about why this is important. Which I’d argue that could be applicable in certain circumstances. But what was profound is that the patients said, cost was number one. And so, if we eliminate that and then they said appointment times. It didn’t work for their working schedule in terms of taking time off or when the offices were open or childcare, all types of factors. So I think it’s a very good question. How do we get patients to show up if the cost is mitigated or eliminated or not a factor? And that’s where these social determinants of health and all these different barriers, some of which we discussed, a lot of them we haven’t even touched come into play I think in a very profound sense.

–Lisa Simon

I will take this moment to be very vulnerable and tell you that I’ve not been to a dentist in five years. Partly that’s because, I think many of our patients maybe, “I don’t have problems. Stop bothering me.” So that’s probably fine.
And because I’m in residency, I’m working 80 hours a week, and I just had a baby. These are all things... And I have so many privileges. Like, the finances of dentistry are not going to be a problem for me. Not only because I could afford to treat a problem if I had it, but also because I grew up in a fluoridated community where my parents were able to afford dentistry when I was a child where I didn’t have traumatic experiences with a dentist when I was younger. All of these things that make it very easy for me to access dental care better than probably 90... And I’m a dentist, probably 99.9% of people in the population. And even though I have barriers to getting to dental care that are both psychological and about my lived experience, and they’re partly structural. But I think it’s important to be holistic about those things, because everyone’s living with those set of feelings. Even people who have a lot of very good reasons to visit the dentist.

–Keisha Ray

And it’s a structural barrier. Do people have childcare? What’s the location of it? The place, their transportation, do they have paid time off? Does going to the dentist mean that their check is going to be less, and then they can’t afford things like food that they are putting rightly so as more important than seeing a dentist.

–Francisco Ramos-Gomez

... Recently, someone really became very upset because it took them three months get an appointment, and they were 20 minutes late and the dentist would not see them. So, going back to the revolving doors. So, I think empathy and awareness . . .

–Keisha Ray

I think it goes back to Carlos’s point about hierarchy, right? We put these time limits and things. Are we afraid of losing that procedure, that position of, “I’m at the top and this is how I run my office?” So, I think this is a good segue to talk a little bit with you Francisco, about population issues. So at the beginning, we talked a lot about specific populations who are affected by social determinants of oral health. We talked about immigrants, we talked about racial and ethnic minorities, we talked about elderly, and then we talked a little bit about children in poverty. I know that there are a lot of pediatric dentists here. And I know Francisco, that’s something knows a lot about as well. So let’s go ahead and talk about that. And so, one thing that we know, and that I’m learning from you is that children from low income homes are greatly impacted by oral health, but they’re also vulnerable to lots of social determinants of health. Children are the most affected by things like environmental issues, poverty, other social issues. So, how do we acknowledge the enormity of their risk for poor oral health, but also that there are significant commercial and political determinants that influence health? And then, how do we position pediatric oral health as an issue of social justice, as an issue of ethics? I know this is a big question, but how do we put it at the forefront of social justice issues and look at it from an ethical lens, just how much social determinants of health influenced pediatric oral health?

–Francisco Ramos-Gomez

Yes. I mean, this is the million-dollar question, right?

–Keisha Ray

I know it’s a big question, but you are the person answer it.

–Francisco Ramos-Gomez

Again, for me, it really begins with a multidisciplinary collaborative approach. Medical dental integration is essential. If you think about it, in the first year of life of these babies by 12 months of age, they have been seen by a pediatrician an average of six times or maybe seven, eight, I assume. Why don’t they give us one of those visits for a baby wellness dental visit where we can do risk assessment? This is the bonding experience where the parent is really eager to learn about baby’s health in general. How can we really bring the issue of just brushing their child’s teeth by the first tooth in the mouth, first birthday with fluoridated toothpaste? If you can help us with this notion of really, really being advocates for the use of fluoride toothpaste of all ages from the first tooth in the mouth to 110 years of age. There’s a consensus there, but many pediatricians and even dentists recommend non fluoride toothpaste.

So when these parents come in with the child full of holes in their teeth like, “Oh, but the pediatrician or my dentist told me to use this training toothpaste.” I say, “I’m sorry, but this is garbage and I throw to the garbage can.” This is the voice we need. And also for fluoride in the water. There’s a huge risk that we’re going to lose water fluori-
If we don’t get our act together and speak out and be all in unity to talk about this. Fluoride is in huge danger. We need to really address the issues of water fluoridation and the universal use of fluoridated toothpaste as an issue of equity, social justice, and human rights to start with. Providers need to provide oral literacy and tools for parents, engage in motivational interviewing and engagement to see, by doing very simple little things in their household they can make a huge difference. I might be with a pediatric patient, maybe two hours in a year as a pediatric dentist that you chose me. If you ever choose one of them, but you are with your child almost 10,000 hours in that year, you do the math, right? If I can nudge you, if I can engage you to say, “Oh, have you noticed your child still...” I mean, just those simple things can make such a world of difference for the child’s health outcomes in general. Not just for health, but health outcomes in general. Another issue we need to address is the increasing, number of children on the autism spectrum. We don’t have the training necessary. We are trying to now provide training for pediatric dentists to really deal with a very broad rainbow of children on the spectrum and with special needs.

–Keisha Ray

Carlos, anything to add? How do we bring pediatric health in terms of social terms of health and ethical lens?

–Carlos S. Smith

Yeah, so I’m not a pediatric dentist. I’m a general dentist, but I think we have to really think about what we used to call soft skills. They call them executive functioning skills now, at least in my little second graders school, that’s what they’re learning, which I think is fascinating. I’m like, “Oh, your second grade teacher needs to come give a talk at the dental school.” I think, a lot of what we can do is to be aware and say something. Like, when something feels off, don’t just keep going and say, “Let me get my production for the day.” So I think some of it is awareness and really seeing it, and then translating that individual type of thing to a systemic level, and so that policy and systems can work together with individual interventions.

–Keisha Ray

Let’s continue talking about these groups that are disproportionately affected by poor oral health as well as the NIH Report. Let’s go back to that a little bit.

So let’s talk about access to care which is in the Report. However, I think some people might argue that access to care from a systems view, I know that’s a term that we keep using for good reason, but I think that that is a lens that some people would argue is missing, like a grander scale lens. For instance, people might... I think could argue things like classism, racism, ableism, discrimination against LGBTQ people. And how those views can somehow make it less accessible for these particular groups to access oral healthcare.

So I wonder, why do you think a larger ethical lens, a larger systems view for particular groups is missing from the report? And how do we, or you all as practicing dentists, how do you stay conscious of those populations who have less access or those systems of oppression for people who are disabled or are from low income backgrounds, or are from LGBTQ communities? How do we keep these people at the forefront of the way that you all practice dentistry, and why it’s not as much in the Report as some of you may like. Let’s start with Lisa. What do you think?

–Lisa Simon

Again, and I’ll be grateful to Scott for pointing out that it’s not absent in the Report... that these words are used. But again, in an attempt to include as much as possible, to include everyone to represent everything, it’s very difficult to maintain that ethical lens and to use that as the primary viewpoint through which we maybe shine a light on specific communities or identity groups. And I really like what Francisco mentioned about this idea of sustained community partnership, because I think the most important thing for any group, but especially those...
who are at highest risk of poor oral health, is to listen to dissenter community voices. That can be an individual thing that you do with individual patients. I know that when I meet patients for the first time in medical education, I was lucky enough to get a fair amount of exposure to Trauma-Informed Care, which is... which is all about listening. It’s asking, is there anything important about your experience with healthcare or with dental care in the past that you want me to know? It can be as simple as that. It can take one minute of your time, and you will see the change in people. But then on a structural level, it’s thinking about the ways communities can tell us what they need, and listen and actually believe them. And that goes back to Carlos’s point about when we talk to providers and we talk to patients, there are very different perspectives on what makes it hard to get dental care. And so those are, I think, fundamental ways to listen to the communities we purport to serve, and then to be servants of those communities ourselves.

—Keisha Ray

Scott, you want to go next?

—Scott L. Tomar

Sure. So obviously increasing access to care is a complex problem. One of the issues then is that the more the providers look like and understand the communities they serve, I think the better traction we’ll get. So, a big part of our curriculum is actually having our dental students working in a variety of community populations, community settings. So, for one thing, they learn to experience different communities to develop as professionals. And again, not everybody feels comfortable in every setting, but over time we find that there are people who say, “Oh, I like working in this community.” And so ultimately, we create a cadre of providers who develop some degree of cultural competence in working in those communities.

One of the side effects of having our students work, for example, in schools and for many years, we ran a school-based program. Not only are they delivering preventive care, but they’re providing great role modeling for the kids that they’re serving. In many cases, this was the first dentist that these kids ever saw. We need to try to get our dental workforce to look a little bit more like the communities that we serve. And at least at our institution, we’ve had some success in that. But we’ve had a program through our urban health program working with kids as young as 4th and 5th grade, and we’ve dramatically increased the proportion of our classes that are now African American from about 5% to now, it’s about 20% in our current class. Not saying that we’ve arrived, we still have a way to go. But, these are long term things because the school has made a conscious effort to try to engage kids much earlier, get them interested in dentistry and provide some role modeling. We are also trying to provide the experiences for our students so that when they make a practice decision, they will have had some of these experiences.

—Keisha Ray

Yes.

—Terri Dolan

I’m Terri Dolan, vice president of the ACD... As I read the latest Oral Health in America Report I was very excited to see section six, which focused on promising technologies. There wasn’t a section like that in the original 2000 Report. But I do have mixed feelings about technology and sometimes, Carlos, you made your comments earlier about AI and potential bias and some negative impacts.

But then I was thinking about, I live in Florida and we had our hurricane experience two weeks ago, how the technology was so effective in getting public health information to me. When it was time to evacuate, when my water was safe to drink. And I’m thinking, “Why aren’t we using these technologies to impact behavior at the individual or community level, to really improve health and health outcomes?” And then Scott, I was also thinking about your work in oral cancer prevention where you worked with communications and marketing experts to really use innovative ways to get the message out about the importance of an oral self-exam, for example. So, your thoughts and feedback about: What are the opportunities to use technology to really advance the public’s health?

—Keisha Ray

And access to care. So, I think that goes great with our last question. Scott, you want to start?
Sure. I agree, Terri, that it’s a tremendously untapped resource in general in oral health. We saw a little bit of it actually takeoff during the pandemic -- the expansion and the use of things like telehealth, tele-dentistry. Some of what expanded, I think has maybe contracted a little bit, but I think it’s still a largely inadequately used technology. The one thing I do fear with technology, and again, not that I’m afraid of technology, but to some extent I have a fear that it will actually increase the gulf between the haves and the have nots Correct me if I’m wrong, but I have not yet to see a technology that’s reduced the cost to the individual for that healthcare service. It may create more efficiency for the system, I’m not sure that we’ve seen the cost of care go down.

And so, the extent to which new technologies might actually be more expensive for people to access, is that going to create a greater goal? I think that we have the whole area of communications. Frankly, we in oral health have done an abysmal job. I think Francisco, you mentioned about the fluoridation and you and I have gone through fluoridation battles. The complete lack of knowledge in the public of something that’s been around for now more than 75 years.

People don’t know what fluoride is, they don’t know what it does, they don’t know if it’s in the water.

If it is in the water, they don’t know why.

–Scott L. Tomar

I think it’s also how you use the technology. So, I’m at VCU, which is in Richmond, Virginia. We have a new dean, Lyndon Cooper, who if you’re a prosthodontist, you may know that name. And so, he has this idea, which I think is brilliant, we haven’t implemented it yet. But he wants, when every patient comes in, say just for a general screening or their first comprehensive exam, that there’s a full mouth scan done. Because we use a lot of digital and scanning technology in our institution. And what he wants to greatly reduce the number of appointments for a full denture. And so, his concept is, if we have this scan immediately, so, instead of it taking seven appointments, could it be three? And then does that connect to them taking less time off work, less money spent on public transportation, less emissions, sustainability wise for however they get there.

We could connect the dots and mitigate some issues around access and equity. But I think it depends on how you have a vision for the technology and how you want to use the technology and what you’re going to do with it in terms of implementation. So, that’s one. I think the other thing that you brought up that I think is really fascinating, you talked about how in the hurricane you were getting these messages around when it’s safe to drink your water again and all this kind of stuff. And so, in my mind what I heard about is, you trust the public health messaging, but think about in this kind of quasi end of/ no longer pandemic, and the CDC said this one week, and no... I’m not disparaging anyone who works at the CDC or used to, but just how confusing the messaging is. And in a lot of public health circles, we’ve got some work to do to restore public trust in what health professionals say. That’s a really big issue that I think we’re not really thinking about, which connects to what Scott said around misinformation. And so misinformation about everything across oral health care or across fluoride or across when you’re supposed to bring your child for a first dental visit.

–Carlos S. Smith

I'm going to stop you there, Carlos. We're actually almost at the end, so we need to wrap up.

Go ahead.

–Audience Member

I wanted to say that, with technology, you’re right, it just kind of depends on where you are, because we heard it for a long time about the quality of water in Flint, Michigan and how our population had to deal with that and how it took so long for that. And reimbursement from

–Keisha Ray

Thank you for that question. Go ahead Carlos.
Medicaid is another important issue, but it’s not very encouraging or inviting for our younger dentists to even participate. But we took a dental oath and I’ve been in practice also for decades. And it was important for us to provide quality healthcare for the underserved communities. And my focus in my practice has been to treat patients with severe mental and physical challenges. And most of them are wards of the state. So, reimbursement is through Medicaid. It’s been quite rewarding, but we get back to these social and political determinants of health. Our reimbursement rates are different just based on our zip codes. And so, it just really brings this thing back home. You did, during this conversation, make me aware that we have children’s hospitals who treat patients with disabilities, then they age out of the program and they don’t even inform patients where they can even go. We do have success stories, but we really have to focus on these problems that we have. I don’t know how you’re going to keep this going, but we need to keep this going.

–Keisha Ray

I think that is a great way to end this. And I want end this with giving you all just we 30, 60 seconds to address, just very quickly...

–Scott L. Tomar

Yes.

–Keisha Ray

What’s the parting message? How do we keep ethics at the forefront? When you’re going from patient to patient, you’re busy, you still have your families to care for. All right, you have so many obligations on your time, but you have such an important role in communities and such an important role in helping underserved communities have proper oral health. How do you keep these ethical obligations, these social justice obligations at the forefront of your career when there’s lots of demands on time? So again, quickly we’ll start with Carlos and just work our way down.

–Carlos S. Smith

Sure. So I would say self-awareness and emotional intelligence. Really asking yourself the hard questions and then taking those questions to larger venues and larger audiences and your society meetings and your component meetings. I do want to just quickly say, we touched very briefly on workforce. I do want to just bring up and ask an ethical question. I’m not saying this is the answer, but an ethical question around workforce. Take for example, we want a workforce that more mirrors the population, as Scott said, and what the original Satcher report said over 20 years ago. But we still have barriers, for example, like the Dental Admissions Test (DAT).

And so, if you look at any actual literature, there is no literature that connects DAT success to clinical success as a third or fourth year dental student or even success in preclinical lab, in terms of hand skills. There’s some correlation to basic science knowledge, but I think we have to ask the question, who benefits from the DAT continuing to be administered? It’s a financial game for some entity, it’s also another way to just weed out and say, “This is a differential.” So, I think asking hard questions like that of any topic is really how we move the needle, and that’s just one that I know is controversial, but I think is worth us thinking about.

–Keisha Ray

Okay, great. Same question to you Lisa.

–Lisa Simon

Okay, sure. Well, I’m going to try and take the spirit of the commenter who mentioned thinking about success stories. And I feel like having this conversation today and when I gaze at everyone here, to me that’s a success story. And so when I think about hearing an ethical frame through our profession, I think the answer is community. And that includes our community here, and having people who will challenge you with the hard questions. Who will help you to grow, who will tell you things you didn’t know before or allow or learn from you. Those exchanges, I think, are so important and so sustaining, especially when the work of dentistry can often be very isolating. And then beyond that, our dental community or our professional community, there’s also the communities in which we live and we care for patients and we are ourselves a part of.

And the joy that is present in being a part of those communities and reminding ourselves that we . . . take care of our community members, we serve in that community, we can be a leader in that community and we can listen
to that community. And I think that done right, there’s nothing better. And I think that’s something all of us are capable of, especially because for dentists and especially because we have this professional community to grow from as well.

—Francisco Ramos-Gomez

You guys are the core... you are the conscience of dentistry, and I really commend you for doing that. We want to be part of this with you, we want to follow the Oral Health America Report. There’s some very specific umbrella themes that are low-hanging fruit that are very actionable items. So, this is something that I really want to leave you with, and I hope there will be more of these forums. I have many speaking engagements, and I cannot recall having an amazing panel like my panelist peers here. Please really think about curriculum reform. I think that’s really something that we need to address ASAP, as soon as possible and should be part of these themes. Thanks again for this. And Keisha, you’ve been an amazing right there.

—Keisha Ray

Scott, same question.

—Scott L. Tomar

Again, first of all, thank you all for being here, for sticking it out. Again, I would urge the organization to try to think big picture. So again, I understand the realities of day-to-day practice of running a business, dealing with employees and insurance companies and all that, but I think this organization of all dental organizations really has that ethical obligation to think big picture. What can we do to improve the health of the entire community, not just our patients. An example, we didn’t talk about the other end of the age spectrum, but we’ve had a lot of discussion about Medicare coverage. Well, if we truly believe that that oral health is an essential part of overall health, well then we should be advocating for coverage of dental care.

—Carlos S. Smith

Absolutely.

—Scott L. Tomar

In Medicaid Part B, we shouldn’t have conditions on that.

—Francisco Ramos-Gomez

That’s right.

—Scott L. Tomar

I think we have to see what barriers we can remove that we as a profession have imposed on the ability of, for example, dental hygienists to work to their full scope of services. In many states, their hands are tied as to... And we’ve shown in many places preventive services that can be done safely and effectively, but yet in many states they still... Dental hygienists still face tremendous barriers in bringing preventive services to the most vulnerable communities. And so again, I think we have to take a step back and say, “What is an organization...” We want to do the best for our own patients, but we want to do the best for those who, for whatever reason, can or don’t get into our office.

—Keisha Ray

Great. While I hold this up, are there any questions for our panelists?

—Audience Member

This has really been a wonderful session. I’ve really appreciated it. I have a question for you educators. So Dr. Sheera Lee, she pointed out the problem with reimbursement for Medicaid, but there’s a problem with reimbursement in general. Fee for service is not based on patient outcomes. So, are students being taught to focus on patient outcomes? Sometimes it is at the expense of fees for service.

—Francisco Ramos-Gomez

I mean the whole area of value-based care is essential. So, we do actually give them some scenarios. I mean, we are really showing them different models... At least in our program, we’re trying to really engage with them about what this future, whatever models is going to be like, what it would look like. So, value-based is really in the forefront as you know, but the elephant in the room is the lack of diagnostic codes.. You tell me, when will we have diagnostic codes that will match billing codes. Nowhere. I mean, You tell this to physicians, they’re appalled. They cannot believe it. So, my question to you, when is organized dentistry going to allow us to use the diagnostic codes we have there so, we can move into health outcomes or have outcomes and really match the diagnostic code with your treatment code?

—Scott L. Tomar

Yeah, thank you for that question. So, I can tell you actually, in our school, we’re opening a new clinic specifi-
cally focused on teaching our students to work in a value-based patient outcome centered approach. So, like many schools, we teach them a bit about prevention, a bit about health promotion, but then they get in the clinic and it’s all about producing X number of widgets. So we’re really... and again, we’re in the early stages, we’re currently renovating the space even as we speak, but that’s exactly our gestalt in that, is to give the students experience in what it would look like. And we’re also doing that in an interprofessional model. So, we’re actually collaborating with folks from the department of nutrition, nursing and pharmacy who will also be part of this.

–Francisco Ramos-Gomez

And just to add. They’re learning a lot throughout this amazing new trend of externships. So, in the fourth year, most of the dental schools, as you know, are sending the dental students outside to community health center FQHCs, where they see at least what is the approach of the one-stop shop, multidisciplinary approach, and also really the patient payment per visit, not for fee for service, which is a huge eye opener. So, I think community externships are also essential. But again, going back, I wish we have those for year four and year fifth of dental schools where we can really send them where they’re needed the most and learn about these experiences.

–Keisha Ray

Doesn’t that deserve some applause?

–Carlos S. Smith

So, I don’t want to problematize that.

–Lisa Simon

I do, but-

–Francisco Ramos-Gomez

But you are.

–Carlos S. Smith

I promise. My personality, I am an optimist, but I think these are unique circumstances and situations at least of what I am familiar with across the dental education landscape.

I think we’re trying to move in that direction, but I think... And my dean’s not here, so maybe I won’t get in trouble, but I think in general, dental education is still in kind of 1968.

In terms of models of care delivery.

So, several decades ago or two decades ago, we moved from where you needed to do 10 crowns, you need this many gold foils or this many whatever, to this notion of competence. And you did enough and then you could test for competence or proficiency. Now certainly all of us who are clinicians in the room know you don’t get better at something unless you do more of it. So, you have to do more. But then I do think students get to third year or whatever year, they’re more robustly in the clinic, and a lot of this goes out the window, because they need butts in the seats to produce this revenue and to get these skills.

So, I think in many ways we teach one thing and say one thing, but the application... There’s a tension between what’s actually being applied and how it’s played out in the clinics. I think external rotations are great, I know at our school, our students spend almost 30 days in external rotations. They love it. But I still think that’s a little bit separate and maybe some different models like ECU or Cal North State that have these models where they’re almost totally immersed in satellite clinics, you might have a different result, but I think unfortunately they’re still so procedurally based.

And so until we can move away from that, I don’t know how we set students up to see it differently.

–Keisha Ray

Question, go ahead.

–Kayhan Parsi

Sure. I’m Kayhan Parsi. I’m the current president of the American Society for Bioethics Humanities. I just wanted to say this was a fantastic... I’ve gone to a lot of conferences in my career, this is really one of the best, fantastic panel.

–Francisco Ramos-Gomez

Thank you.
–Kayhan Parsi
I’ve been hearing a lot about silos and kind of this historical division between medicine and dentistry. And I was wondering if you all could speak just a little bit about the value of interprofessional education and interprofessional research. It seems like... I mean, this has been a movement that’s been going on for some years, at my school, Loyola University of Chicago, Stritch School of Medicine. We have an institute on interprofessionalism, but it’s one of these things where we’re always trying to reform medical education, but we don’t seem to really take it to the next level. And I’m just curious what your thoughts are about a really pushing interprofessional education and research to the next level.

–Keisha Ray
Thanks. Lisa, start us off please.

–Lisa Simon
Sure. Thank you so much for your work and for your question. I sort of grew... In my both dental and medical training and in my role as an educator, I feel like I live and breathe Interprofessional Education (IPE). But I feel like the thing that we’re missing is the interprofessional practice.

I participated in a lot of interprofessional initiatives, and as an educator I think about how can we run simulations that are more real life? How can we create these scenarios that will prepare trainees for working in a team, for working with others, for understanding the job that other healthcare providers have? And I’ve seen success in all of those things. In fact, it’s a CODA requirement, but also it’s a requirement for medical education, for nursing education, for social work education. So, in some ways it’s easier to accomplish an education, because then you get into practice and you live in your little tiny bubble where you don’t actually interact with other professionals. So, in some ways, I think it’s less about IPE and more about what you do with the next step. The former dean of the dental school, Bruce Donoff, used to say that we are preparing students for professions that do not yet exist, which I think is a really radical optimism that I love and that I embraced, because I went to medical school, which is my job, not one that exists yet.

–Francisco Ramos-Gomez
But I also think it’s challenging, because if you train students for the perfect world that we want them to live in, for a world where there’s value-based reimbursement system, and there’s true interprofessional practice, and there’s a Medicare dental benefit, and a universal Medicaid dental benefit for adults and all the things. I think we want... and dental therapists who practice alongside them, these are really aspirational things. If we then fail them as soon as they walk out our front door, I think in some ways that engenders more frustrations than if we never made these promises in the first place.

–Lisa Simon
But I also think it’s challenging, because if you train students for the perfect world that we want them to live in.

–Francisco Ramos-Gomez
Yes.

–Lisa Simon
And I will take a page of Carlos’s book and problematize this without posing the answer, but I think the challenge is, I don’t want to stop doing IPE, I want to do more. I think we need to continue to have those dialogues. And in fact, there’s even a movement for pre-IPE, which is basically to have students be talking about this before they’re differentiated at all, but when they’re still in college or in high school. But I think we also need to start building a system that puts these trainees in positions where they can use those skills so it doesn’t just feel like fluff. And I don’t know how we get to that step, but it’s the one I think we need to see.

–Keisha Ray
I just want to say a quick thank you to a panelists. They did such an awesome job, please give them a round of applause.

–Francisco Ramos-Gomez
Good job to you.
Celebrating the *Year of Oral Health*: Changing Public Expectation and Challenges for the Profession

Robert J. Collins, DMD, MPH
Assistant Surgeon General & Chief Dental Officer U.S. Public Health Service

Article reprinted from the Journal of the American College of Dentists Fall/Winter 1994, Volume 61, Number 2

The views expressed herein are those of the author and do not necessarily reflect those of the U.S. Public Health Service.
Abstract

The year 1994 was designated as the Year of Oral Health by the World Health Organization. The remarkable progress in oral health achieved in the United States over the past several decades is cause for celebration; however, the gains have not been equitably distributed and many challenges remain if good oral health is to become a reality for all Americans.

Members of the dental profession in general, and Fellows of the American College of Dentists in particular, have a responsibility to be aware of not only the health of our individual patients but also the oral health of the public as a whole. Many opportunities to improve dental practice on the individual and community level exist. By taking action to better meet the overall oral health needs of society, the dentist can increase professional satisfaction, improve the health of the public, and enhance the status of the dental profession.

As has been its custom since 1950, the World Health Organization (WHO) holds an annual celebration of World Health Day by focusing on a particular global health issue. World Health Day (WHO) is acknowledged on April 7 each year - the day of the formal adoption of the official constitution of the WHO. The theme for WHO in 1994 was Oral Health for a Healthy Life. Many communities in the United States and around the globe held events celebrating the progress made in pursuit of the benefits of good oral health, while acknowledging the need to do more to extend those benefits to all sectors of society.

This year, the WHO, in cooperation with the Federation Dentaire Internationale (FDI) went beyond just a single day’s acknowledgment and declared all of 1994 as the Year of Oral Health. This joint declaration provides an unparalleled opportunity to raise the public consciousness regarding oral health. In the U.S. activities related to World Health Day and the Year of Oral Health are supported, in part, by the American Association for World Health (AAWH), which serves as the U.S. Committee for the WHO. Recognizing that global health is improved through local action, the AAWH provides resource materials (1) to assist communities in coordinating activities. For several years the rallying cry for the annual AAWH campaigns has been “Think globally, act locally!” The American Dental Association and many other professional organizations are acknowledging the Year of Oral Health during their annual meetings and at other planned events.

Professional and public involvement in the Year of Oral Health can perhaps best be captured by two words: Celebration and Challenge.

Progress in Oral Health

There is much for both the public and the profession to celebrate in this Year of Oral Health. The oral health of the public in the United States has never been better. Largely due to increases in exposure to fluoride, the prevalence of tooth decay in school children has declined substantially over the past two decades (2). Advanced periodontitis afflicts a relatively small proportion of adults (3). Edentulism is clearly on the decline (4). A recent national survey indicates patients appear to be satisfied to a large degree with their dentists (5). Dental insurance coverage and the use of professional services also has been increasing. Although health expenditures as a percent of the Gross Domestic Product (GDP) have been rising, dentistry as percent of health expenditures has been declining (6). In spite of these and other gains, however, many challenges remain.

Remaining Challenges

Health Status

Oral diseases remain among the most ubiquitous of those facing Americans. More than 50 percent of children 5 to 17 years of age, and over 80 percent of 17-year old children, have experienced some dental decay. Not surprising, but perhaps more disturbing, is that the burden of oral disease is not distributed equitably. About 75 percent of the caries in children is found in only 25 percent of the population (6).

Higher oral disease levels are found in minority and low income populations. For example,
Black, Hispanic and Native American children have one and one-half to three times the amount of untreated decay found in U.S. children(7). Low income adults of all ages are much more likely to suffer from complete tooth loss(8). Oral cancer kills approximately 8,000 Americans each year and the five year survival rates for Black and some Hispanic populations are significantly lower than for the White population(6).

Smoking and other tobacco use has been identified as a major risk factor for periodontal disease, oral cancer and other adverse health effects(9-11). Nonetheless, screening for oral cancer may not be a part of all dental exams, and those most at risk, i.e., tobacco users appear to be less likely to be examined for oral cancer(12).

Domestic violence is a growing problem often reflected in injuries to the orofacial complex, yet dental professionals often feel unprepared to intervene(13).

**Access to Dental Care**

Although dental costs as a percentage of health expenditures have been declining, national expenditures for dental services in the U.S. have risen dramatically since 1975. Current expenditures are about $40 billion and are expected to exceed $60 billion by the end of the century.

In the U.S. over 90 percent of dental care expenditures are paid by private sources, either “out-of-pocket” (56 percent) or by private dental insurance (34 percent). Only three percent comes from public sources, such as Medicaid. Dental benefits for eligible children are covered under the Early and Periodic Screening, Diagnosis and Treatment (EPSD’I) provisions of Medicaid; however, the program is so underfunded that each year about 80 percent of eligible children receive no dental care at all. The Medicaid program supports little dental care for adults. Private dental insurance covers about 100 million persons; however, that still leaves about two-thirds of the U.S. population, about 150 million people, with no dental insurance. Furthermore, those least able to afford out-of-pocket expenditures for health care are also those least likely to have private dental coverage. About 85 percent of individuals with the lowest incomes have no dental coverage as opposed to only 40 percent for those with the highest incomes(6).

Access to dental care, as measured by at least one visit per year, has risen from 37 percent to 57 percent in the U.S. from 1958 to 1989. However, the most rapid growth came during 1958 through 1975, when the private dental insurance industry was rapidly expanding in the U.S. From 1975 to 1989 growth was much slower. As a result, it appears that we may have plateaued in terms of access to dental care(14). In such an environment, one would not expect to see gains in access to care for underserved groups. In fact, there are some data which now indicate that dentist to population ratios may be increasing in high income areas but declining in low and medium income areas(15).

Although there are certainly nonfinancial barriers to receipt of dental care, it is clear that the ability to afford care, either from out-of-pocket or through insurance coverage, is critical to access. Individuals with private dental insurance are much more likely to have a dental visit than those without coverage(8). Furthermore, there is increased use of dental services with increasing income. Over 70 percent of those with the highest levels of income have at least one dental visit per year compared to only 40 percent of those with the lowest incomes(6).

Ironically, those most in need of oral health care are least likely to receive it. The proportion of minority Americans with a dental visit for any reason is much lower than for White Americans, a difference that holds true at every age(8). When they do receive treatment, minority children are more likely to have teeth extracted(6). Low income seniors are least likely to have dental insurance and to seek dental care(16).
and Medicare does not cover dental services.

**Preventive Services**

Fluoride and dental sealants have proven ability to dramatically decrease the incidence of dental decay. The dental profession can rightly cite its long-standing support for fluoride as a major contributor to the decline in oral disease. Nevertheless, the public understanding of the benefits of fluoride continues to be inadequate\(^{(17)}\), a situation which may inhibit a wider adoption of this significant preventive measure. As a result, are these services reaching those most in need?

Over the past nearly 50 years, water fluoridation has been demonstrated to be effective in reducing caries. Because everyone consumes water, the benefit is distributed across the entire community regardless of race or socioeconomic status. In view of their lower exposure to dental care and supplemental forms of fluoride\(^{(8)}\), the poor may benefit to a greater extent from water fluoridation.

About 135 million Americans, 54 percent of the U.S. population and 62 percent of those on public water supplies, receive drinking water that contains fluoride in amounts adequate to prevent tooth decay. The largest U.S. communities that are not fluoridated are concentrated on the east and west coasts, with over half the communities found in California\(^{(1)}\). California is home to a large proportion of many minority populations in the U.S.. Los Angeles, California is our largest non-fluoridated city, as well as home to the largest Hispanic-American community. Fluoridation of such communities would be expected to yield significant benefit for the oral health of minority populations.

The increased availability of fluoride in the U.S. has been especially effective in preventing smooth surface caries. As a result, over 85 percent of tooth decay in children is now found on the pit and fissure surfaces, decay that could be prevented with dental sealants. A U.S. national health objective was established that 50 percent of all children should receive protective dental sealants by the year 2000\(^{(7)}\). Unfortunately, there has been very slow acceptance of this measure in the U.S. Although some state data\(^{(18-20)}\) offer hope for improvement, results from the 1989 National Health Interview Survey\(^{(8)}\) indicated only about 11 percent of children had received dental sealants, a very modest increase from about seven percent in 1986.

Many poor Americans are unable to obtain this relatively inexpensive preventive service\(^{(6)}\). Less than five percent of children from families with the lowest incomes have received sealants, compared to 17 percent for those with the highest incomes. Because minority families are more likely to have lower incomes, it is not surprising that their children have lower exposure to dental sealants. For ages 9 to 11, only six percent of Black and 10 percent of Hispanic and other minority children had sealants, compared to 21 percent for White children. Overall, it is clear that target groups within the U.S. that could benefit most from preventive services are least likely to receive them.

To summarize the challenges to additional progress in oral health:

- Persons with lower incomes tend to have higher rates of active oral disease and total tooth loss.
- Use of services that could prevent or control oral disease is much less common among persons without dental insurance or substantial income.
- Private dental insurance is largely limited to those with higher incomes and the growth in private dental insurance appears to be leveling off.
- The public sector provides very little dental coverage. Thus, it should hardly be surprising that the poor and minorities are less likely to obtain dental care and when they do, it is more often for relief of pain. As a result, caries, periodontal disease, oral cancer and tooth loss pose a heavier burden for minority populations and the poor.

What might be done in the U.S. to address disparities in oral health and access to care? There are two national initiatives, as
well as many local and regional efforts, that have potential for further improving oral health.

**Healthy People 2000**

Healthy People 2000 is a national effort designed to improve the health of Americans through the widespread promotion of healthy behaviors by the public, health care providers, and organizations\(^7\). It proposes quantified targets for 300 different health status, risk reduction, and health service objectives. The effort is heavily tilted to the primary prevention of diseases and conditions. The Healthy People 2000 objectives are designed to:

- increase the span of healthy life;
- reduce disparities in health status;
- and increase access to preventive services.

Oral health is one of the 22 national health priorities included in Healthy People 2000. There are 16 oral health objectives in the areas of health status, risk reduction and services and protection. They address: improved health status in regard to caries, edentulism, periodontal disease and oral cancer; reducing the risk of disease through use of fluorides, sealants and education; and protecting health by ensuring access to care. In addition to objectives aimed at the nation as a whole, there are objectives targeting population groups for which special efforts are needed\(^21\). The American Dental Association and many other major organizations in the U.S. have adopted the objectives of Healthy People 2000\(^22\).

In support of meeting these objectives by the year 2000, a special vehicle — Oral Health 2000 — has been created. Oral Health 2000, organized by the American Fund for Dental Health, is the largest collaborative effort undertaken on behalf of the oral health of Americans\(^23\). The Oral Health 2000 National Consortium involves corporations, service organizations, the education sector, and many voluntary and professional organizations.

Former U.S. Surgeon General C. Everett Koop serves as spokes-
Oral health services that prevent or intervene early in the disease process should be broadly available because they are effective, relatively inexpensive, and can make a valuable contribution to quality of life. All persons should have access to emergency services to treat infection or pain. Prevention, on both a community and individual basis, and early recognition and treatment would make it possible to preserve health and limit costs that would otherwise be associated with rehabilitative care.

person for Oral Health 2000 and continues to promote the concept, “Without oral health, you are not healthy!” Dr. Koop himself, with support from both academia and industry, is promoting the early involvement of medical and dental students in the preschool environment to teach oral health habits as a first step to incorporating disease preventive practices into one’s lifestyle.

State consortia are now being developed or expanded in states (e.g., Kentucky, Texas, Rhode Island and others) to develop Oral Health 2000 on the local level\(^\text{(24)}\). The consortia offer opportunities for involvement of dental professionals, industry, academia and many others in projects designed to identify needs, deliver services and make referrals. Oral Health 2000 presents unlimited opportunity for collaborations that can promote public understanding of the importance of oral health and increase access to care. Most importantly, Oral Health 2000 is an overarching symbol of the spirit of voluntary cooperation that underlies many projects meeting public needs.

There are programs in many communities that offer opportunities for dental professionals to offer their services to those in need. A recent edition of the ADA News\(^\text{(25)}\) described a number of specific examples of volunteer-based access programs in settings that include private offices, dental schools, community clinics and mobile units. The ADA’s Council on Community Health, Hospital, Institutional and Medical Affairs provides assistance to state and local dental societies interested in developing programs for underserved populations.

In addition, the National Dental Association has been very active in promoting access\(^\text{(26)}\) and the newly formed Hispanic Dental Association is mobilizing to do so.

Health Care Reform

On the heels of Healthy People 2000 has come the U.S. health care reform movement. President Clinton’s Health Security Act and most of the proposals considered by the U.S. Congress include preventive services and basic dental care for children, with emergency services for adults.

Oral health services that prevent or intervene early in the disease process should be broadly available because they are effective, relatively inexpensive, and can make a valuable contribution to quality of life. All persons should have access to emergency services to treat infection or pain. Prevention, on both a community and individual basis, and early recognition and treatment would make it possible to preserve health and limit costs that would otherwise be associated with rehabilitative care.

Public Expectation

As technology makes tolerance of the status quo unnecessary, public expectation appears to change accordingly. Mecklenburg\(^\text{(27)}\) has described four eras of changing public expectation and professional response in relation to oral health: resignation, replacement, repair and protection. Prior to the establishment of
dental science the public was resigned to oral pain, loss of function and ultimately, tooth loss. In the 19th century, extraction was still the norm, although replacements for function and aesthetics were possible. In the 20th century, the dental profession was able to intervene earlier in the disease process and repair dental defects as an alternative to extraction.

As the 21st century approaches, further technical advances have given us the tools to prevent much of the oral disease which afflicted previous generations. Mecklenburg argued that public expectation as a whole may lag behind but is, nonetheless, moving in the same direction. Thus, there is growing awareness that protection from disease offers the potential for both an improved quality of life and substantial cost-savings for the patient and the public as a whole. Nonetheless, public knowledge about the appropriate methods for preventing dental disease continues to be inadequate, especially in ethnic and racial groups with low levels of formal education. If the Healthy People 2000 oral health objectives are to be attained, increased oral health educational efforts and access to affordable care must become a reality17. Basis for Intervention

Maslow described five hierarchical needs critical to human development: physiological (food and water); safety; love and belongingness; self-esteem; and self-actualization, or the need to pursue one’s goals28.

Maslow argued that lower level needs critical to individual survival must be met before the human organism can pursue higher levels. A profession displays its finest characteristics by providing its members the opportunity to attain self-actualization. It has been argued that self-actualization can result only from the efforts of a dedicated teacher29. The term doctor in fact comes from the Latin docere, to lead or to teach. Thus, although dental professionals may meet physiological and safety needs by virtue of the income generated by a dental practice, and belonging and self-esteem needs through family and professional organization activities and service delivery, they achieve self-actualization through teaching; by doing so, they make it possible for others to take action to meet their own needs. As a learned profession, dentistry should mold public expectation toward protection. Researchers must continue to develop improved methods for protecting health and communicate them to the profession and the public in a timely manner. The academic community must prepare today’s students to be leaders in advocating prevention — with a special emphasis on identifying and nurturing those who are most likely to aid underserved populations. Today’s practitioners must continue to seek educational experiences in not only the more technical aspects of dental practice but also in those that will enable them to help patients help themselves to remain in good health.

Comedian/philosopher Charlie Chaplin once said, “Man is an animal with primary instincts of survival. Consequently, his ingenuity has developed first and his soul afterward. Thus the prowess of science is far ahead of man’s ethical behavior.” The business and professional aspects of a dental practice will always present potential conflicts. Society does not expect dentists to take vows of poverty. It does expect us to share the increased knowledge we have received and should continue to
pursue for the benefit of society. A true profession is where science and ethics come together for the benefit of society; Fellows of the ACD are expected to be leaders in this area.

The purpose and objectives of the American College of Dentists' seem a perfect framework for pursuing the best that our profession has to offer. In general, they are intended to:

- Extend measures to control and prevent oral disorders.
- Encourage careers in dentistry so that dental health service will be available to all.
- Promote research.
- Improve the public's understanding of oral health service and its importance to optimum health.
- Make visible to professional persons the extent of their responsibilities to the community as well as to the field of health service and to urge acceptance of them.
- Encourage individuals to further the above objectives and to recognize contributions to areas which contribute to human welfare.

In a very real sense, science gives us the technical skills and judgment to provide dental care, conduct effective research, and instruct others. The underlying rationale for these activities comes from ethics, i.e., we choose to use our talents for the nobler intention of improving the health of the public. As professionals we may be rewarded (and usually are) by a higher income but that is secondary to the primary professional precept of service. A strong sense of ethics helps us to rise above our primal instincts, reach beyond our personal concerns, and assign ethical behavior its rightful place alongside science.

**Strategies for Action**

As individuals we have many ways to pursue the ideals of the Year of Oral Health. Actions one might take include: devoting a portion of one’s practice time to those unable to obtain care elsewhere; adding oral cancer screening/tobacco counseling services; providing services to the needy on a part-time basis in a community clinic; contributing to the professional knowledge base through teaching or research or contacting public officials or professional organizations in support of expanding oral health care to those in need. On a larger scale, one might consider organizing a state/local Oral Health 2000 consortium; chairing the access committee of a local dental society; encouraging organized dentistry to better define ways in which the current system can expand services to the dentally underserved; or assisting in national health care reform efforts.

opportunities to improve public health exist within the clinical practice setting. Health care professionals have a responsibility to ensure that the approximately 60 million people who continue to use tobacco understand the consequences of their behavior and facilitate a transition to a tobacco-free state. Assisting patients in eliminating or preventing the use of tobacco products is an important means of improving not only oral health but general health as well. Have we made a serious attempt to incorporate tobacco use policies into our practices and extend counseling services to patients?

Although many dentists are not comfortable in serving as tobacco counselors, the preventive orientation of most dental visits is an excellent setting for incorporating this service into routine care. Studies have shown the
necessary activities to be feasible and acceptable to both patient and dentist⁹³.

The dental profession also has a role to play in dealing with the growing social consequences of domestic violence⁹⁴. Have we educated ourselves to look at domestic violence as a public health problem? Have we determined an appropriate role for ourselves in assisting victims of abuse? Dental practitioners can and must do more than just treat the orofacial injuries that often result from abuse. There is a responsibility to be aware of community resources available to support victims and to make appropriate referrals⁹⁵.

Participating in community-wide strategies offers the dental professional an opportunity to make a contribution to the public health on a larger scale. Activities such as promoting water fluoridation can have an impact well beyond the boundaries of a clinical practice. The U.S. Public Health Service has cited fluoridation as one of the most economical preventive measures in the nation, one that, if extended to underserved populations, could result in substantial health care savings and improved oral health⁹⁶. Getting involved might be as simple as making a conscious effort to discuss fluoridation with patients or as complex as leading a community initiative to begin fluoridating. If dental practices are to become more effective in creating access to care, health services research will be essential to achieving a better understanding of the effectiveness of various health care services and systems, developing appropriate practice guidelines, and, ultimately, improving the oral health of the public. Common problems faced by clinicians may offer them opportunities to develop and participate in their own education and research agenda⁹⁷. On a larger front, have we thoroughly explored the issue of access to dental care for underserved populations? Do we believe the status quo to be acceptable? If not, have we made an individual assessment about the best way to increase the availability of services for those in need? Is access to some minimal level of dental services a necessity for all citizens? If so, how should this best be attained? Voluntary programs? Universal coverage? Regardless of one’s answer, the key is to ask ourselves these questions, use our knowledge and the range of information available (not just what others would have us believe), arrive at a good faith decision, and act upon it. By pursuing any of the above or similar activities, dentists demonstrate their understanding of the true meaning of a profession. In doing so, they celebrate the positive effect the dental profession has had on the oral health of the public while accepting the challenge to always seek a higher standard and pursue the goal of oral health for all⁹⁸.

In 1994 more Americans than ever enjoy the benefits of good oral health due, in large measure, to our professional predecessors who wholeheartedly supported fluoride and other preventive measures. The status the dental profession enjoys today may well be due to society’s recognition of dentists as a community willing to put public good above personal financial gain⁹⁹.

Conclusion

In 1994 more Americans than ever enjoy the benefits of good oral health due, in large measure, to our professional predecessors who wholeheartedly supported fluoride and other preventive measures. The status the dental profession enjoys today may well be due to society’s recognition of dentists as a community willing to put public good above personal financial gain⁹⁹. The challenge to continue to be worthy of this recognition remains.

Even the best of professionals can’t do everything. All of us,
however, can find ways to improve our practices and to reach out to our communities. By so doing, we enhance our profession and improve oral health. The Year of Oral Health provides a unique opportunity to call attention to the importance of good oral health and to refocus our efforts to assist the public and our patients in attaining it.

As professionals we have an obligation to examine and understand the larger societal context and then take appropriate action to maximize our personal contributions to the social good. I can think of no saying that captures this approach more succinctly than: “Think globally, act locally”!

The Year of Oral Health offers an opportunity to renew our efforts. Our fellowship in the American College of Dentists expects no less!

REFERENCES

15. Greene JC. Diversity and access to care: National initiatives and local actions. 29th Annual Meeting of the United States Public Health Service Professional Association; 1994 Apr 7-9; Baltimore (MD).
FROM THE ARCHIVES

Robert J. Collins, DMD, MPH


39. Nash DA. A tension between two cultures: Dentistry as a profession and dentistry as proprietary.
CALL FOR PAPERS

Ethical and Professionalism Issues in Augmented/Artificial Intelligence in Dentistry and Related Professions

Submission deadline: September 1, 2023
Expected publication: November/December 2023

Guest Editor
Michael McCarthy, PhD, HEC-C

BACKGROUND
The Journal of the American College of Dentists is a scholarly publication presenting proactive and informative perspectives on issues affecting the dental profession and society. The Journal has been published since 1934, and its first editor was Dr. William John Gies. We invite submissions for this issue of the journal focused on issues of ethics and professionalism in the development and use of AU/AI in dentistry and related professions.

SUBMISSION DETAILS
Submissions to this call should address ethical and professionalism issues raised by the development and/or use of AU/AI in dentistry and related health professions. Potential topics of interest include, but are not limited to: Research ethics questions related to the development of AU/AI tools for diagnostics; the potential for bias in the development and use of AU/AI tools; how or whether to integrate AU/AI into dental education; ethical best practices for integrating AU/AI into practice; and health literacy of patients the value of interprofessionalism in developing and applying AU/AI.

Only full-length manuscripts will be considered. All submissions will be peer-reviewed and therefore, not all submissions will be accepted.

Papers should be submitted to suzan@acd.org.
Please put “Ethics & Professionalism in AU/AI” in the subject line.