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Vulnerable Populations acd.org

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- D. To encourage, stimulate, and promote research;
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Vulnerability means: "loss of opportunities to live better, loss of abilities to live well, and, at its extreme, loss of living."¹

A common definition of vulnerability is: "capable of being physically or emotionally wounded."²

ased on these definitions, at some point in our lives we are all vulnerable, first as infants and children, then if we are injured, become ill, experience loss of income, housing and/or education and . . . as we age. We might also be vulnerable if we are members of a particular group, are in relationships with others, live in particular part of the world and/or experience a natural or manmade disaster . . . even a pandemic. Vulnerability may be transient or it may be permanent. We may be vulnerable in one setting but not another. For these reasons, a collective need to be sensitive to and accommodating of vulnerability exists. As dental professionals, this is especially important and embodied in the American Dental Association Principles of Ethics & Code of Professional Conduct which defines a "true professional" as possessing the "[q]ualities of honesty, compassion, kindness, integrity, fairness and charity . . . "³ The preamble goes on encourage each dentist to "share in providing advocacy to and core of the underserved."³



Vulnerability: Personal, Communal, and Professional

Nanette Elster, JD, MPH, FACD

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This issue of the *eJACD* highlights some aspects of vulnerability that arise not only for dentists themselves, but for their patients and their communities. The articles in this issue look at very broad issues as well as more specific vulnerabilities. The issue begins with a chronological history of how the American College of Dentists has grappled with issues of vulnerability and the questions of equity it raises in "Through the Years: The American College of Access and Equity Among Vulnerable Populations" by Theresa Gonzales.

Taking us to the present, Cesar Sabates considers the role of dentists in improving health equity in his piece, "Taking a Stand on Oral Health Equity: Data Show Oral Health Care System Falls Short of Meeting Needs of Entire Population." In addition to a general discussion about how improving equity and addressing vulnerability is critical to the profession and is an ethical imperative, articles also address specific populations. Highlighting the intersectionality of vulnerabilities, Cothron, Shaver and Boynes present their research in, "Chronic Disease and Rurality Impacts Veteran Oral Health Outcomes: A Behavioral Risk Factor Surveillance System Analysis." Toni Roucka, in her article, "The Challenging Plight of Refugees" writes a moving narrative of her experience working with refugees, sharing her and her colleagues' work with a young refugee women and how the trauma of the woman's experiences impacted her care.

And, taking into consideration the vulnerabilities that exist within the profession and how those vulnerabilities were heightened particularly for students and educators during the Pandemic, Alexander DeGenova, presents, "The Vulnerability of Dental Students: A student perspective on stress, regulation & loss during COVID-19."

The articles in this issue, ranging from personal narratives to empirical research touch on some of the general and specific challenges confronting the profession with regard to patient, student, and practitioner vulnerability. This discussion sets the stage for the Fall issue of the eJACD which will discuss the ethical imperative to improve access to care as way to address, in part, the burdens on the vulnerable and improve outcomes for all.

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Editorial

Addressing Vulnerable Dental Populations



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Ethan Pansick is a prosthodontist in private practice and is a member of the *Journal of the American College of Dentists* Editorial Board.

Vulnerable dental and medical populations can include a wide variety of patients depending upon who is categorizing the patients and what definition of vulnerable they are utilizing. Vulnerable populations are communities that have limited access to healthcare for many reasons including geography, finances, medical status, age, education and historical societal discrimination. Such vulnerability may be temporary or permanent, and status may be improved or exacerbated by social and economic policies at the local, state and federal level. Negative health sequelae of limited access to care among vulnerable populations include disproportionately poor oral and systemic health status and lower utilization rates of preventive services.¹⁻³

As a private practice prosthodontist, my perspectives on identifying and helping treat vulnerable patient populations may indeed be different than those practitioners who treat patients in hospital, educational, institutional or large practice settings.

Dentists who treat patients in hospitals, educational settings and other regulated settings often have well-established procedures and protocols in place to help identify vulnerable patients from the time of their first visit to the provider. Support networks of other medical, dental, and social service providers are readily available and multiple referrals can be accomplished quickly and easily. Specially trained patient coordinators and social workers are often integral members of the care team and, as such, can help guide a vulnerable patient through the processes in place to help obtain treatment, improve their overall health, and, in some cases, follow-up with the patients after treatment.

While the aforementioned models work quite well at addressing the needs of vulnerable patient populations, the majority of dentists who practice in the United States treat patients in different settings. Solo practices, small and large group practices and corporate dental settings provide the bulk of patient care in this country. As such, the identification and treatment of vulnerable patients varies considerably from practice to practice.⁴

Many pediatric dentists take active roles in their communities as advocates for children's health beyond the responsibilities of providing healthcare. It is important that dentists maintain an awareness of the various social determinants of oral health and approach care for their patients with cultural sensitivity. Dentists should be aware of the particular vulnerabilities of their patients when it comes to their health and are encouraged to advocate for and seek out resources that would benefit their patients as individuals and as a community.⁵

Other dental specialists and general dentists can accomplish the same goals by being vigilant in identifying at-risk patients and having the knowledge as to where to refer patients who need treatment that cannot be provided by them.

Many dentists and dental hygienists choose to provide reduced cost or no cost dentistry to patients who they perceive to be members of vulnerable populations. Since this type of treatment occurs inside the confines of private practices, it is difficult to obtain accurate estimates as to how many patients are treated in this fashion, what type of treatment is rendered, and what the dollar value of such treatment is. A range of legislation has been proposed to help track this type of care, however there is no legal or dental board mandated reporting for this type of care required in any part of the United States

Many states promote Mission of Mercy (MOM) events as a way to bring free dentistry to vulnerable populations in their respective states. These events provide various levels of care ranging from basic health screenings, diagnostic radiographs and prophylaxes to more extensive clinics that can provide routine operative dentistry, endodontic treatment, extractions and tooth replacement with removable prostheses. While these events can help many vulnerable patients, they are usually annual events lasting only three to four days in a geographically limited area and are not a long-term solution for vulnerable individuals.⁶

Going forward, as a profession, we must strive to help identify vulnerable patients, help them whenever possible, and, when we are unable to resolve their issues, guide them to a resource that can.

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Editorial

Vulnerable Populations in Healthcare at the Medical-Dental Divide



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The term "vulnerable population" has several interpretations. The words usually imply a disadvantageous and precarious tendency of particular subsets of the community¹ to require heightened care, be afforded special considerations in certain circumstances, and be recognized as being at increased risk in research situations. At some point in everyone's life, they will face vulnerability, such as during hospitalization, having a decreased free will or inability to make informed choices, or when exposed to harm.

Vulnerable populations refer, but are not limited to, children, minors, pregnant women, fetuses, prisoners, military persons, students and employees in hierarchical situations, the terminally ill, comatose, those with intellectual and/or physical disabilities, institutionalized, elderly, those with variations in gender identity, healthy research volunteers, ethnic minorities, refugees, migrants, and asylum seekers, informal and precarious workers, indigenous peoples, and those in rural populations.¹⁻⁷

The healthcare challenges of these various groups can be divided into three basic categories: physical, psychological, and social. The needs of vulnerable populations can be serious, debilitating, and vital, with health challenges identified in any one dimension potentially compounded with significant comorbidities and cumulative risks in yet another aspect of their lives.⁸

Significant disparities exist in healthcare for certain subsets of the US population, particularly notable among the economically disadvantaged and for those with chronic health conditions; for these populations, healthcare issues may be entangled with social complexities. For example, the chronically ill are twice as likely to report poor health days as are those in the general population, and despite their Vulnerable populations refer, but are not limited to, children, minors, pregnant women, fetuses, prisoners, military persons, students and employees in hierarchical situations, the terminally ill, comatose, those with intellectual and/or physical disabilities, institutionalized, elderly, those with variations in gender identity, healthy research volunteers, ethnic minorities, refugees, migrants, and asylum seekers, informal and precarious workers, indigenous peoples, and those in rural populations.

illness, they may find greater difficulty in accessing healthcare services. Additionally, low-income individuals are more likely to have more frequent and severe chronic illnesses, but may have less coverage and again face greater challenges in accessing assistance. Further, the US Department of Housing found in 2017 that over half a million people were homeless on any given night, and that this group is less likely to have a regular source of healthcare and is more likely to forego seeking care.⁹

Greater awareness and understanding of the health limitations experienced by disadvantaged and vulnerable individuals are vital steps towards formulating and implementing necessary specific programs designed to create effective and meaningful policy changes. Professional healthcare organizations and their advocacy components should continue to raise awareness, strive for political action, provide education, publish guidelines, and establish goals for heightened healthcare for the underserved and for those most at risk.¹⁰ It is with urgency that hospitals and other healthcare organizations build affiliations with community stakeholders, including those in the dental service community, to work towards these goals and to collaborate through community health programs in identifying healthcare disparities and aligning efforts to address such.¹¹

In spite of this urgency, and considering the fact that the mouth is a vital part of one's body, it is difficult to understand how in modern health care oral health is viewed as isolated from the rest of the body, especially regarding who pays for and provides that care and how it is accessed. Although separation of medicine and dentistry in the US stems from decisions forged over past centuries, this concept continues to affect millions of Americans, particularly those at highest levels of vulnerability. As an example, only 50% of patients who visit an emergency department with a toothache ultimately visit a dentist or a dental home within 6 months, while 21% of these individuals will return to the emergency department with the same issue.¹²

We have known for decades now that poor oral, particularly periodontal, health gives rise to other health outcomes, such as diabetes, cardiovascular disease, preterm birth, and a variety of other systemic ailments.^{13,14} It has in fact been proposed that providing better dental care might reduce overall healthcare costs and hospital admissions by preventing these affiliated systemic sequelae.¹⁵ While this cost consideration is important, the ultimate purpose in providing greater dental/medical equity is for reasons of greater human comfort, dignity, and overall well-being.

Opportunity exists to close this divide that exists in healthcare, and some groups are proving successful in this regard, such as within sovereign tribal nations where training of unique oral health workforces are being created, or where certain organizations are integrating oral health provisions into primary medical care programs.¹²

Rasmussen et al purport that it is incumbent on healthcare institutions to better integrate oral health into medical education through residency training.¹⁶ Further, Vujicic and Fosse agree that foundational changes should occur in educational healthcare policy to enhance interprofessional training and patient care.¹⁷ They also urge policymakers to consider two vital questions in solving dental-medical inter-professional Kristi M. Soileau, DDS, MEd, MSHCE, FACD, FICD

incongruencies: Should dental care be considered an essential healthcare service for people of all ages within public and private insurance programs? And what is needed to improve care coordination between medical and dental practitioners?¹⁷ These authors state that expanding dental coverage to adults and seniors would decrease overall healthcare costs for those with chronic disease and promote well-being, oral health improvement, and productivity among working age adults.¹⁷ They go on to state that there are 27 million people who visit a dentist, but not a physician — and 108 million people who visit their physician, but not a dentist — in any given year, and so there are likely undetected conditions in both sets of circumstances.¹⁷ Finally, they suggest that collecting and reporting diagnostic data in dental insurance coding would be beneficial to help track outcomes, as well as to contribute to evidence-based dental practice.¹⁷ Such integration of health information through today's technology would also facilitate proper referral processes and more appropriate access to care.¹⁷

Another consideration is the glut of dentists in urban areas and the minimal number in rural sections of the country. Only 14% of dentists practice in rural areas, where 20% of the US population resides. Of those, the majority currently practice in larger rural areas compared to the smaller, more isolated locations.¹⁸ Although the supply of dentists increased nationally by about 10% between 2008 and 2015, the per capita gain continues to be largely noted in the urban locations.¹⁹

For rural patients, the value of integrating oral health care into primary care is particularly welcome, because primary care/ family medicine physicians are equally distributed across the United States, including in rural areas. Unfortunately, however, oral health training does not typically exceed approximately four hours in primary care professional training.¹⁹

Over the last two decades, several initiatives have succeeded somewhat in filling the oral health knowledge gap in medical education through training programs, such as Smiles for Life: a National Oral Health Curriculum, which is a free, openaccess resource that has been available since 2005.20 Another initiative, the Medical Oral Expanded (MORE) Care Program, trains rural primary care physicians in oral disease prevention and aims to integrate the work of medical teams and their oral health counterparts.¹⁹

Henderson-Frost and Deutchman offer further suggestions for reducing oral health disparities through integration into primary care: implement greater teledentistry access, offer oral health services in school-based health centers, and encourage new categories of mid-level practitioners, now licensed in 12 states.²⁰ Additionally, access might be expanded for dental insurance, perhaps to include grants used to offer free or sliding scale services in areas with rural oral health disparities. Policies that include oral health in ACOs, or Accountable Care Organizations, should be explored.²⁰ And finally, incentivizing dentists to accept Medicaid may also prove to be of benefit.²⁰

Dentists across this country, along with the help of the ADA, ACD, and other high-level programs, defended the essential role played by dentists during the recent global crisis, and dental clinicians and educators are well-positioned to promote accessible equitable care. However, this will require support from our medical colleagues, who must recognize the importance of oral health and acknowledge the role dentistry plays in achieving and maintaining overall systemic health for their patients.²¹

This recent COVID-19 pandemic has afforded us many opportunities to truly consider what makes dentistry the essential, time-sensitive therapy we know it to be, and how we can move forward with our medical colleagues towards a brighter future of perfected collaborative care for all.



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Editorial

Taking a Stand on Oral Health Equity

Data Show Oral Health Care System Falls Short of Meeting Needs of Entire Population



Cesar R. Sabates, DDS, FACD President, American Dental Association

Something all dentists can agree upon is that oral health is integral to overall health.

However, access to dental care is often a challenge for many Americans, especially for historically marginalized populations like older adults, racially and ethnically diverse communities and those from low-income households. This is mainly due to barriers such as lack of dental insurance coverage, limited geographic access to quality care (i.e., rural communities with minimal or no access to public transportation) or the Social Determinants of Health (SDOH) which include health literacy and educational levels. Addressing these barriers is key to ensuring that everyone can receive optimal quality and affordable health care. Cesar R. Sabates, DDS, FACD

That is why the American Dental Association (ADA) remains committed to broadening oral health equity through strategic initiatives and legislative advocacy in order for everyone to achieve their optimal level of health. This commitment allows us to further advance the dental profession, while we help address racial and ethnic health care disparities. Our focus is improving health equity and promoting access to patient-centered care.

Racial Disparities and Barriers to Care

Health equity means everyone has a fair and just opportunity to be as healthy as possible. Or as the Institute of Medicine (IOM) defines it, equitable care means "providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location and socioeconomic status."¹ Yet, data indicate that the health care system can fall short of meeting the needs of the entire population equitably.

The COVID-19 pandemic has underscored the systemic health care inequalities that severely impact populations along racial and geographic lines. The data² are clear—communities of color have been disproportionately more affected by COVID-19. But the issue is bigger than this pandemic alone, and the topic of health equity has come to greater prom-

According to the ADA Health Policy Institute (HPI), White children, adults and seniors have higher rates of dental service utilization than Black, Hispanic and Asian patients across all age groups.³ While racial disparities in dental care use are narrowest for children, these disparities widen for adults and seniors. In 2017-18, 54.8% of White seniors visited a dentist compared to 40.5% of Asian, 31.8% of Hispanic and 28.8% of Black seniors.

inence throughout all of health care, especially oral health.

According to the ADA Health Policy Institute (HPI), White children, adults and seniors have higher rates of dental service utilization than Black, Hispanic and Asian patients across all age groups.³ While racial disparities in dental care use are narrowest for children, these disparities widen for adults and seniors. In 2017-18, 54.8% of White seniors visited a dentist compared to 40.5% of Asian, 31.8% of Hispanic and 28.8% of Black seniors. For underserved communities, the barriers to quality dental care often correlate with the SDOH. Economic opportunity, education level, prejudice, as well as point of service quality and access are among the factors⁴ that can determine the extent of a person's sickness or health. Generally, populations in poverty-stricken and remote rural communities have higher rates of dental disease but are less likely to have a dental home.

In addition, Hispanic and Black people across all age groups are most likely to face cost barriers to dental care.⁵ Financial barriers play a larger role in access to oral health care than for any other type of health care, according to the recent report entitled, "Oral Health in America: Implications for Dental Practice," published in the June 2022 issue of the Journal of the American Dental Association (JADA).⁶

The paper highlights key elements of a larger report, "Oral Health in America: Advances and Challenges," released by the National Institute of Dental and Craniofacial Research (NIDCR) and the National Institutes of Health (NIH) and provides a sweeping assessment of changes in the state of oral health in the more than 20 years since the Surgeon General reported on oral health in 2000. The report shows that almost 25% of adults with incomes below the federal poverty guideline deferred needed oral health care because of cost in 2014 and 2015.⁷

While public and private insurance coverage has increased since 2000, coverage and access remain limited for many low-income, minority and older adult populations. The report also reveals that the Centers for Medicare & Medicaid Services (CMS) accounted for 37% of medical care spending but only 10% of dental care spending in 2019.8 This data suggest that the oral health care needs of many vulnerable populations are not addressed adequately by current programs. Consequently, those who lack dental insurance tend to seek care only for emergency needs.

Oral Health Outcomes in America

While the oral health care system has improved over the past 20 years, there is still important work to be done to address the challenges that remain to improve oral health outcomes for all Americans.

As health care providers, we know that prevention and early intervention are the answer to eliminating the vast majority of dental disease. However, when individuals are unable to access affordable dental care, we leave behind too many in our communities who suffer with dental disease which, as a result, impacts their overall health.

Key findings from the NIDCR report show the unequal burden of oral disease:

- There has been no improvement in the prevalence of caries and untreated caries. More than 40% of people who are in low-income groups have untreated caries compared with 9% among those in middle- and high-income groups.⁹
- Racial disparities persist even after controlling for income. Untreated caries prevalence is 36% among Blacks and 23% among Hispanics, compared with 18% among non-Hispanic Whites.⁹
- The prevalence of periodontitis is higher among low-income and racial or ethnic minority populations. Nearly 60% of adults 65 years and older have periodontal disease.¹⁰

The data underscore the major changes needed in the U.S. oral health care system to eliminate barriers and inequities in oral health care access, reduce costs and improve patient outcomes.

Taking a Stand on Oral Health Equity

The ADA believes that dentistry plays a key role in broadening health equity to meet the needs of diverse populations—that is, helping everyone achieve their optimal level of oral health.

As leaders in dentistry, the ADA has a responsibility to shape the discourse on oral health equity and influence future policy on this issue. We have already taken steps in that direction, with efforts like the Emergency Department Referral and Community Dental Health Coordinator programs under the Action for Dental Health Initiative.

Last fall, the ADA passed a policy on health equity, and its Council on Access, Advocacy and Prevention (CAAP) is developing a robust action plan as part of its Health Equity Action Team (HEAT) to reinforce the role of oral health in overall health. Areas of focus include:

- Promoting disease prevention and education through interprofessional channels
- Supporting cultural competency and diversity in dental treatment
- Conducting continued research regarding utilization of dental services
- Supporting efforts to improve equitable access to care

The initiative will also continue to amplify collaborations with the medical community to reinforce the role of oral health within overall health.

Over the next few years, I think we'll see dentistry make greater strides in improving health equity. Given the important role that oral health plays in a person's overall well-being, we could see the beginnings of stronger integration across the health care profession—particularly between medicine and dentistry—for serving the whole-person needs of all Cesar R. Sabates, DDS, FACD

patients, especially those in vulnerable populations.

The ADA is also on the record supporting several bills in the current Congress that address health equity issues, including the Improving Social Determinants of Health Act. If enacted, this bill would require the Centers for Disease Control and Prevention to establish a program to improve health outcomes and reduce health inequities by coordinating activities across the CDC.

Through our continued advocacy efforts, the ADA fulfills our mission to help dentists succeed and support the advancement of public health—and to be led by its vision of achieving optimal health for all.

Medicaid Bears the Burden of Disease

As part of our dental insurance advocacy, the ADA is supporting the Medicaid Dental Benefit Act of 2021, which would make comprehensive dental care a mandatory component of Medicaid coverage for adults in every state.

The COVID-19 pandemic has shone a spotlight on the inadequacies within our social safety net programs, most starkly in oral health care. During the pandemic, nearly half of U.S. adults reported delaying dental care, according to the Journal of Dental Research.¹¹ Unfortunately, this problem has only grown due to the large increases¹² in Medicaid enrollment since the start of the pandemic.

- Between February 2020 and February 2022, enrollment in Medicaid and CHIP increased by more than 16.1 million individuals or 23.6%. Adult enrollment in the program increased 32.4%.
- In February 2022, more than 87.4 million individuals were enrolled in Medicaid and CHIP, compared to roughly 70.7 million in February 2020.

American adults with Medicaid coverage find dental care options vary based on the state, noting that less than half currently provide extensive dental coverage for adults in their Medicaid programs while other states only offer limited benefits, emergency-only coverage or no dental coverage at all for adults. This lack of state coverage is particularly problematic because the millions of adults who rely on Medicaid are the least likely to access dental care (including preventive services) and face the highest cost barriers to dental care.

Ensuring that states provide comprehensive dental services to adult Medicaid beneficiaries is a sound economic and equitable investment. To help with these efforts, state dental associations are working closely with their Medicaid officials to improve state dental Medicaid for both patients and providers, making it possible for more patients to get the essential health care they need.

Racial Disparities in the Dental Workforce

The work doesn't stop there. There remains a major opportunity for dentistry to meet the needs of an increasingly more diverse U.S. population.

Racial diversity in dentistry has not kept pace with that of the overall U.S. population. Although Asian dentists account for much of the workforce's diversification, the share of Hispanic and Black dentists has gone up only slightly since 2001, according to new data from HPI.¹³

While we are seeing slight increases in the diversity of the dentist workforce over time, the current workforce and the dental students that will soon become part of the workforce do not yet reflect the vast diversity of our country. HPI data from 2020¹⁴ indicate that, of the U.S. population, Hispanic individuals constitute 18.4% and Black individuals constitute 12.4%. However, when looking at the distribution of the dental workforce by race, populations represent these only 5.9% of Hispanic dentists and 3.8% of Black dentists—as well as 10.8% of Hispanic dental students and 6.2% of Black students, when looking at first year dental school enrollees.¹⁵

The ADA is imagining what's possible for its members in the spaces of diversity, equity and inclusion. Through the work of its Diversity and Inclusion Committee, the ADA has made considerable strides toward embracing the diverse segments of its membership and diversifying its leadership to mirror the demographics of its membership. Programs such as the Institute for Diversity in Leadership, the Accelerator Series, Amplifying Voices and our brand new Diversity and Inclusion Champions Network are magnifying the valuable perspectives and experiences of dentists from traditionally underrepresented backgrounds.

Conversely, ADA HPI projects gender parity to reach the dentist workforce in 2040, as more women continue to pursue dental careers.¹³ In 2020, for example, women comprised 34.5% of the dentist workforce, a jump from 20% in 2005. On average nationally, the majority of dental students are now women.

Racial and gender diversity within the dentist workforce have implications on health access and equity—nearly half of female dentists participate in programs like Medicaid or CHIP, compared to 41% of male dentists. Black, Hispanic and Asian dentists are more likely than White dentists to participate in Medicaid or CHIP.¹⁴

With a profession that is more representative of the patient community—together with better relationships and communication between providers and patients who share the same racial/ ethnic background—there will likely be improvements to greater access to and use of care.

Embracing Diversity, Equity and Inclusion

The ADA is imagining what's possible for its members in the

spaces of diversity, equity and inclusion. Through the work of its Diversity and Inclusion Committee, the ADA has made considerable strides toward embracing the diverse segments of its membership and diversifying its leadership to mirror the demographics of its membership. Programs such as the Institute for Diversity in Leadership, the Accelerator Series, Amplifying Voices and our brand new Diversity and Inclusion Champions Network are magnifying the valuable perspectives and experiences of dentists from traditionally underrepresented backgrounds.

We want to build an Association that provides members an equitable opportunity to thrive in their careers and at the ADA, including within leadership positions. We want to build an Association where all members feel seen, heard, valued, validated and cared for.

Embracing diversity, equity and inclusion ensures that we stay in alignment with dentistry's foremost obligation to help and heal. It not only helps us keep the ADA's fundamental promise to serve and support the talented thousands who comprise our Association and drive dentistry forward each day, but it also allows us to help close the health equity gap.

I believe that it would be unconscionable not to lend our strength to meeting the national challenge of health equity. At the ADA, we have a historic opportunity to lead that change and work for improved oral health of every American. If we don't, the ADA would fall woefully short of its vision to achieve optimal health for all.

The ADA challenges all health care professionals and health policy makers to raise awareness of the importance of oral disease prevention and to advocate for health care policies that will improve oral health care in the U.S. as equitably as possible.

Through supporting oral health equity and reforms, we can ensure that everyone can achieve optimal oral and overall health. With careful planning and stakeholder collaboration, oral health equity is achievable. Cesar R. Sabates, DDS, FACD

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Through the Years:

The American College of Dentists' Response to the Challenges of Access and Equity Among Vulnerable Populations



Theresa S. Gonzales, DMD, MS, MSS, FACD Executive Director, The American College of Dentists Federal Healthcare Executive

From the Digital Archive:

ver the past 102 years, the American College of Dentists has championed both national and international dialogue and funded numerous studies aimed at looking at vulnerable populations in society and the problem of access to available dental services. The problem of accessing health care for vulnerable populations is generally well known but the solutions to the problem have been far more evasive. Our ability to recognize vulnerable populations or populations at risk is crucial in scaling the problem and creating opportunities within the existing health care delivery systems.

on Medical Education in the United States and 1910 by Abraham Flexner

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Theresa S. Gonzales, DMD, MS, MSS, FACD

As a general rule, with all others thing being equal, disease tends to disproportionately affect two groups - the very young and the very old. The fundamental problem is of course— that all other things are not equal. Population health experts posit that disparities and inequity in oral health care may serve as a barometer of social inequality and reveal vulnerabilities in the oral health care delivery system. Vulnerable populations are created and perpetuated when the need for resources exceeds the availability of resources. Globally, disparities in access to oral health have a disproportionate effect on individuals who are of low socioeconomic status, on members of racial and ethnic minorities, on refugee populations, and on the generationally poor. In disadvantaged populations and underserved communities, oral disease risk is elevated and perpetuated throughout life. Poor nutrition, an appalling lack of preventive health care, and minimal access to restorative care create a perfect storm for this cycle of disease to perpetuate.

The American College of Dentists has regularly provided input to this long-recognized challenge. Their stated first goal was to improve the education of the dental workforce. The second goal was to deploy the workforce to meet the need of the growing population. The third goal was to study populations at risk and look at the provision of essential services. These efforts were followed in rapid succession by discussions of prevention of disease and the development of robust public health policy. Finally, there were the necessary and often fractious discussions on how to pay for these essential services. The following information is drawn from the organizational archive for your reading pleasure. For more information, please visit <u>www.acd.org</u>

In the early history of the organization, there was a major focus on establishing educational standards for the profession of dentistry. The stated objective of the College as originally adopted "was to elevate the standards of dentistry to encourage graduate study, and to grant fellowship



to those who have done meritorious work." The Flexner Report in Medical Education in 1910 had aroused all the professions to greater responsibility in their respective fields and dentistry particularly sensed its responsibilities.

According to ACD Editor emeritus, Dr. David Chambers probably during "no single decade in the history of dentistry was so much attention focused on the multiple alternatives that could define a profession. The choices made then, and those not made as well, continue to define the identity of oral health care today... In 1921, Gies was tapped by the Carnegie Foundation for the Advancement of Teaching to head a comprehensive study of dentistry and dental education similar to the Flexner Report that had revolutionized medicine 12 years earlier. He was instrumental in the merger of four organizations into the American Association of Dental Schools (now ADEA). In 1931, Gies and four other members of the AmeriThe American College of Dentists has regularly provided input to this long-recognized challenge. Their stated first goal was to improve the education of the dental workforce. The second goal was to deploy the workforce to meet the need of the growing population. The third goal was to study populations at risk and look at the provision of essential services. These efforts were followed in rapid succession by discussions of prevention of disease and the development of robust public health policy. Finally, there were the necessary and often fractious discussions on how to pay for these essential services.



can College of Dentists established what was to become the American Association of Dental Editors. He was a creator and the first editor of the Journal of the American College of Dentists. Gies represented dentistry at the American Association for the Advancement of Sciences, and in 1923 he became the only nondentist ever granted regular membership in the ACD. He also served as assistant secretary of the College from 1934 to 1942.1 The 1926 publication of the landmark Gies Report had permanently identified dentistry in the United States as an autonomous health care field although it was heavily patterned on the field of medicine and more often than not, academically co-located. The overall effect was the iterative development of a well-trained and credentialed workforce for the provision of oral health care for those who could afford it.

Dr. Charles E. Rudolph discussed the plight of indigent patients in his address entitled *Dentistry's* Social Responsibilities which was delivered before the ACD Convocation in Milwaukee, Wisconsin, on Sunday, July 16, 1939. "The American College of Dentists, attempting to live up to its avowed declaration of principles with which you are familiar, is now embarking upon the next step of its recognized duty. In line with this, at the last session of the Board of Regents of the College, the Economics Committee was admonished to study the voluntary insurance and deferred payment plans and to formulate a step at least, in advance of any it had taken before."² The address concluded with the intent to demonstrate the reasonableness of our autonomy and with that as a foundation, to look clearly into the future and make dentistry more useful to the public and to the profession.

In his 1952 address to the ACD Convocation in Washington, DC, Dr. Leonard Scheele, adopted a more global perspective and addressed postwar world health problems and activities. He suggested that "the speed with which the free world's need for better health services and better facilities is met depends in no small measure upon this country's maintaining its participation in international health activities-both through the WHO and other international agencies and through our own bilateral programs. The progress that has been made in the past three years has been made possible on the proverbial "shoe-string." We cannot afford to let down the countries that have made a good beginning, nor to fail in extending the frontiers of world health to other nations now struggling to remain free. A reduction in United States support will force the international agencies and our own bilateral health programs to curtail their already too meager efforts for a healthier, happier, peaceful world."³

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The entire address can be accessed at:

https://www.acd.org/wp-content/ uploads/1952_19_02.pdf

Since its inception, The American College of Dentists has been acknowledged to underwrite the the continuing freedom of the profession and its value to society, largely determined by the willing responsibility of its members to monitor its professional affairs. Early examples of the dynamic influence of the ACD in the advancement of the profession include but are not limited to:

- The 1932 published report entitled *The Way of Health Insurance*
- The 1932 publication from the College's Committee on Journalism entitled *The Status of Dental Journalism* which made the compelling argument that the profession exercise complete control of its literature to maintain high standards and scientifically-based publications.
- The College presented one of the first studies of health care programs *The Costs of Dental Care for Adults*
- In 1965 and 1969 respectively, the College presented workshops on Enhancing the Image of Dentistry and Dental Manpower both offering significant insight to the profession for the time.

A companion book commissioned by the American College of Dentists entitled, *The Evolution of Dental Education*, was published in 1960 and it recounted the long and deliberate struggle to ensure that dental education addressed the needs of the profession and the public in the service of humanity.

This was followed by the 1968 American College of Dentists publication entitled, *Workshop on Dental Manpower*, which was produced in cooperation with the United States Public Health Service. Dr. Leonard



Fenninger, in his role as Director, Bureau of Health Manpower, US Public Health Service, reported at a 1968 meeting devoted to developing solutions to the health manpower problem that "availability or the lack thereof, of health services of all types for all members of our society has become a matter of deepest public concern. The origins of our acute discomfort are many, and in some ways, they are related to the successes of research in the health sciences, the education of the pump public to expect and demand good healthcare, and the success of our national productivity which has placed at our disposal resources to assure the availability of healthcare to those who need access. Our dilemma also derives from a social decision that financial barriers, barriers of race and creed, areas of cultural difference should not exclude anyone from receiving healthcare when they seek it The increasing impatience and dissatisfaction with current health services is a measure of acute public awareness of the difference between what is and what could be and certainly we in the health professions, in light of the knowledge and experience at our command, cannot ignore the fact that gross inequities do, indeed, exist."4

Historically, from a purely policy perspective, the dental workforce community tended to focus on the quality of oral health care services and public health officials primarily focused on the evaluation of resources that are available in the community and the actual utilization of these resources. That said, prevention had long been a critical component of the public health response to oral disease. Notably, the public health community advocated for the affordable and effective use of fluoride in a variety of forms to preserve tooth structure and thereby, reduce the burden of disease in the population. They also recognized that better nutrition was crucial and reducing the intake of dietary sugars also reduced a variety of health-related co-morbid conditions including diabetes and obesity. Over the past decades, the social determinants of health have factored into the ongoing discussion of access and equity. The entire address can be accessed at:

https://www.acd.org/wp-content/ uploads/1968_35_02.pdf

In the 1970s, The College began to look oral health in aging populations. Dr. Helen Gift provided insight in her article entitled, The Seventh Age of Man: Oral Health and the Elderly. She reported that "over the years, a number of efforts have been made to improve the dental health status of all Americans through such activities as water fluoridation, improved materials and practice procedures and more extensive health education. While the focus may have been in large part, on improving the oral health of children and young adults, there was an assumption that such programs would pay benefits, as well, throughout life and into old age. Unfortunately, there is little in the way of trend data that allows us to compare changes in the oral health status of the elderly. The only real comparison over time is the proportion of denture wearers, which may be a proxy measure of some value in ascertaining levels of oral health. Comparing 1960 and 1975 studies performed by National Family Opinion for the American Dental Association, one traces a reduction in the percentage of the adult population (more than 29 years of age) from 35.2% to 24.7% who wear at least one complete denture; among those 60 years of age or older, a reduction is seen from 62.5% to 40.8% wearing at

least one complete denture. As more elderly people retain their natural teeth, they will have a need for more comprehensive dental services."⁵ The address can be accessed in its entirety at:

https://www.acd.org/wp-content/ uploads/1979_46_04.pdf

In 1985, ACD Fellow, Dr. Harold T. Perry acknowledged the following in his report presented as a part of a symposium at the annual meeting of the American College of Dentists, October 20, 1984. "It will be our responsibility to see that any changes are for the greatest good based upon our professional judgment; also, that any changes will be for the enhancement of dental health for the total population which now includes the uncared for or the minimally cared for members of our society."⁶ The address can be accessed in its entirety at:

https://www.acd.org/wp-content/ uploads/1985_52_01.pdf

In the 1995 Spring Issue of the *JACD*, the College turns its attention back to education and responds to the recommendations of the 1994 Institute of Medicine Report. At the turn of the 21st century, President Richard "Dick" Bradley acknowledged "as we enter this new century, it is obvious that many problems and issues still need to be addressed by the dental profession, and in turn by the ACD, in order to sustain our important role in the health care of the nation. We need to continue to support dental education in efforts to incorporate an understanding of what professional ethics means and how important it is to the proper treatment of our patients.⁷ The entire article can be accessed at:

https://www.acd.org/wp-content/ uploads/1995_62_01.pdf

In the Winter of 2008, the Journal of the American College of Dentists examined the "School's Role in Access. Nationally recognized thought leaders provided commentary and insight on the issue. In an article written by D. Gregory Chadwick, DDS, MS, FACD and James R. Hupp, DMD, DDS, JD, MBA, FACD they conclude that "unless special efforts are

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made to recruit applicants from underrepresented and underserved populations and mentor students and provide them community based extramural experiences, most dental school graduates practice in middle- and upper-income urban or suburban areas."⁸ The entire article can be accessed at:

https://www.acd.org/wp-content/uploads/JACD-75-1-2008-4.pdf



The American College of Dentists early on, demonstrated a unique effectiveness in making objective observations, examinations and appraisals in social, economic and professional aspect of dentistry for the benefit of humanity. Many of the College's recommendations regarding research, education and delivery of service were adopted as a function of time and have proven to be of significant value to the profession and to society. Perhaps, nowhere is this more evident than in the ongoing discussion of health care ethics and for these reasons, the College engaged in a full-scale ethics review. In 2015 the Board of Regents authorized the American College of Dentists Ethics Report: New Professionalism. The model for this project is the 1926 Carnegie Foundation study of dental education in the United States and Canada conducted by the assistant secretary and editor of the College, John Gies. The distinguishing features of both reports include extensive collection of data as opposed to expert opinion, attention to defining the issue and its causes rather than advancing solutions, and abstaining from making recommendations regarding what others should do.

As our long and laudable history suggests, the problem of access to care for vulnerable populations is not new and cannot be solved with the thinking that created the issue. But it can be solved. Former US Surgeon General David Satcher reminded us more than two decades ago that "you cannot be healthy without oral health."9 The principal challenge of our time is the that of creating a system of oral health and primary health care delivery with a focus on equity of available services. More recently there been targeted interventions to reduce disparities in oral health care by empowering primary care practitioners who care for vulnerable and underserved populations with basic clinical competencies and this shows some promise. To be fair, progress has been made in the reduction of disparities in access to oral health over the past decade. We have enjoyed the benefit of both universal and targeted prevention approaches. Additionally, in recent years there have been enhanced efforts to transform the education of health professionals to create a more socially accountable health workforce. Many contend that in the final analysis cultural competencies may be no less critical to health care outcomes than our clinical and public health competencies. Clearly, there is a great deal of work to do and we are committed to this end.

Please search the archive for these and other articles related to vulnerable populations in our online archive at <u>www.acd.org</u>

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The Vulnerability of Dental Students:

A Student Perspective on Stress, Regulation and Loss During COVID-19



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Introduction

It is common knowledge that dentistry is a stressful occupation. Managing demanding patients, management of an office, compliance with continuing education, adherence to legal regulation, and comprehensive care of patients; to name a few stressors, is no easy task. Dentistry has always attracted independent, self-driven, entrepreneurial individuals. It should be no surprise then that stress among dental students has long been the subject of interest by researchers world–wide. COVID-19 has subjected dentistry to a range of challenges, adding to existing burdens and responsibilities in a significant and novel way.¹ The COVID-19 pandemic has posed unprecedented difficulties, the likes of which the United States has never seen before, further complicating an already stressful time in the life of US dental students and recent graduates. These obstacles have taken a toll on physical and mental health, as well as quality of dental education. Yet, there is much that can be done to surmount these obstacles. These hardships should be viewed as an opportunity to review, recover, regenerate and remember.

This opinion paper addresses some of the many issues faced by students and faculty throughout these last two years. There are also many day- to-day stressors; such as balancing school, personal life, and the occasional tragedy, all of which compound upon stress derived from the worldwide pandemic. Things such as school building failures, storms, issues within families, maintaining relationships, and personal injury can contribute to feelings of despair, or sentiment that current demands placed on students.

Multiple stressors among dental students

A 2017 questionnaire answered by 289 dental students in Saudi Arabia showed high levels of depression, anxiety and stress, and it was determined that providing support programs to students, especially for those most susceptible to these psychological conditions, should not be understated.² It should be recognized that individual responses to stress are unique. Some students are more sensitive to changes in their environment. Students in the same class at the same dental school may react in markedly different ways, despite similar conditions and environmental factors. Some students may thrive in post-COVID-19 conditions; whereas others may struggle just to get by. Students demonstrate difference in perceived experience.

Further, a 2018 study performed at Portsmouth Dental Academy and King's College in London, found that the most commonly mentioned stress-inducing issues among dental students were examinations and grades, workload, patient care, and graduation requirements. In the study, students indicated a need for intervention and discussion of such issues earlier in their curricula, for purposes of reduction of these stress-inducing factors.³ The pandemic has increased such tension notably. In my personal experience, COVID-19 has made many of these common stressors worse-many requirements for graduation, for example, have been more difficult to come by,

as restrictions were placed on patient care. Similarly, some patients have been reluctant to seek treatment. Not only does this adversely affect their health and quality of life, but also makes it difficult for the dental student to gain clinical experience. Greater emphasis was placed on dental emergencies-not prophylactic care. For example, a patient may not seek treatment for a carious lesion approximating the pulpal chamber of an affected tooth until it develops into a dental emergency-reducing restorability, risking systemic illness, increasing antibiotic use, reducing quality of life, and increasing costs of treatment. Patients were told to forego "nonessential" treatments by leaders in both health administration and government, in order to reduce transmission of COVID-19.

A study of 355 dental trainees at the University of Washington School Of Dentistry completed an 83 question survey in late 2020.4 The study investigated self-reported predictors of anxiety, burnout, depression, and the impact on mental health by COVID-19, generally. The intention of the study was to determine if students might be intending to leave dental school, and if so, for what reasons.⁴ The study determined that poor mental health is common among dental trainees and was the factor most associated with intent to leave the program.⁴ It determined that the COVID-19 pandemic and the subsequent response exacerbated these sentiments. The importance of providing wellness

resources was highlighted.⁴ The pandemic, transformed normal activities and requirements into nearly insurmountable tasks due to compounding variables, such as fundamental ability to complete the task at hand in an efficient manner.

Researchers at a dental school in Maharashtra, India investigated the stress of dental students during the pandemic by analyzing data collected from surveys of 118 respondents.⁵ Ninety-three percent of those surveyed reported suffering from an impact on their mental well-being, mostly due to loss of part of the academic year and from patients missing appointments.⁵ This study indicated that mental health of students should be carefully monitored to prevent crises and to better learn how to take preventive measures in the case of similar future situations.⁵

A 2021 study out of Toronto found that in their four-year dental program, students were most likely to report major depressive symptoms in their first and third years.⁶ Students reporting anxiety, depression, or burnout were significantly more likely to report intent to leave their dental programs; furthermore, they reported that the pandemic impacted their mental health significantly enough to cause them to consider doing so.⁶ Additionally, a 2013 study from the University of Seville reported no differences in gender when studying burnout, depression, and suicidal ideation and how these were affiliated one

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to the other.⁷ From personal experience I can confirm that my first and third years of dental school were the most mentally difficult periods of time for me in dental school. This might be explained by the fact that for many, the first and third years are periods of transition-first year is the year a dental student is introduced to dentistry and dental school in general. Enrollment in dental school is a fundamental change in the life of any student, with a host of new requirements and stressors that make first year of school different than experiences with previous undergraduate education. Similarly, third year is a period of transition for many students into a clinical role: a point in which their dental education shifts from a didactic focus to a clinical one. This is another point of change that understandably requires a period of adjustment.

Impediments to patient access and provision of care and the effects on skill and confidence

In a dental school in Gaziantep, Turkey, 259 dental students, 60% of whom were females, all participants aged 20 to 25, were asked to assign value to their levels of depression, anxiety, and stress levels and causes of such.⁸ In the number of students polled, 91.5% of respondents stated concerns that online learning platforms were insufficient for developing adequate clinical competence, and that 82.6% feared exposure to COVID-19 while performing their professional duties on patients.⁸ These sentiments were significant enough that 29% considered a career change due to the effects of the pandemic.⁸ Those individuals affirming severe depression, anxiety and stress were respectively 82%, 80%, and 73%, with higher values in females than in males (p<0.05).⁸

In a study by Agius et al, 88 students at a dental school in Malta answered 13 questions regarding their personal concerns relative to the pandemic.⁹ In general, students were most fearful of losing their manual dexterity skills and had anxiety related to both taking examinations in a different format as well as how their longterm plans would be affected.⁹

Dental schools should prepare to adapt rapidly to similar situations in the future; customizing necessary alterations to curricula and student experiences as dictated by need and level of dental education. An example of this would be sending students home with handpieces in order to continue development of hand skills at home, as was done at the University of Kentucky.¹⁰ Another solution worth considering is establishing lines of communication with class representatives to as address concerns about examination processes and formats and shortcomings and to facilitate educational experiences.

Interrupted socialization amongst dental student classes

In the August 2021 issue of the ADA News, at least three of the five students interviewed commented on their appreciation of the social interaction that is possible only through live coursework.¹⁰ A third-year Meharry Medical College School of Dentistry student said, "virtual learning and social distancing protocols have [challenged administrative efforts using technology and simultaneously] pushed students further away from connecting with one another."10 He also felt that this has challenged students to reach out more to one another and be more authentic when granted the opportunity to interact, as well as to be creative in how social connections are maintained.¹⁰

At my dental school, the firstyear class was divided into groups to reduce risk of transmission. For the majority of their first year, half of the class had never even met the other half in person before. Because our first two years are primarily didactic, the second year was much the same. Dental school demands connection between students, not only for mental health, but for success and survival. Doing well in dental school is impossible without a support network, in which students can disseminate essential information and materials amongst one another.



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Much is still uncertain regarding the COVID-19 pandemic, as well as our response to it, and how it affected and will continue to impact our society. However, one thing is certain: we should extrapolate all the knowledge that we can from this experience, to better prepare ourselves for the future, and make ourselves better clinicians. We should take steps to alleviate the effects that a similar situation in the future would have on dental education, patient care, student and faculty mental health, uncertainty as to one's ability to thrive and graduate as a competent dentist.

The importance of this cannot be overstated. Personally, I can confirm in my experience that all classes affected by the pandemic seemed to place a higher priority on authenticity of interaction between fellow classmates.

Faculty challenges

The pandemic brought no shortage of burnout of dental school faculty in the midst of upholding space limitations, ameliorating patient scarcity, assuring PPE availability, and being gate-keepers for patient/student health and safety. In addition to dental students, COVID-19 has shown to have a negative effect on members of faculty and other staff.

A study of 216 dental school faculty members in four states was performed by Smith et al. in the sixth and seventh months of the pandemic response.¹¹ They found that faculty reports of burnout and loneliness were higher than that of the general public.¹¹ On a scale of five, with five indicating extreme burnout, average personal burnout was reported as 2.7 and work-related burnout as 2.8, both types decreasing with increasing age.¹¹

Work-related stress was significantly higher among full-time faculty, females, and those living alone.¹¹ Among respondents, the most stressful parts of of their roles were clinical care at 36% and administrative responsibilities at 29%, while separating for full-time faculty varied somewhat, with administrative stress at 35%, followed by clinical care at 30%.¹¹

Conversely, the most notable cause of happiness in both groups came from teaching, with all respondents at 43% and full-time faculty at 35%.¹¹ is the data suggests a need for dental school administrators to address stress, loneliness, burden of responsibility, and occupational unfulfillment brought on by unusual circumstances such as the pandemic. Additionally, it follows that faculty burnout affects student success and mental positivity as well.

Uncertainties for seniors during preparation and logistics for licensure exams

Personally, I find that this was probably the least affected aspect of the dental school experience in terms of COVID-19. Students have had a lot of time at home or otherwise alone thanks to social distancing protocols. For the most part, I believe this positively affected students' preparation for licensure exams. Some, however, may have difficulty focusing on studying or paying attention to lectures attended remotely. Techniques such as studying in different environment than one's place of residence or adhering to a schedule can help reduce these concerns.

What can we learn from the pandemic?

We should reflect upon both the past as well as the future to form our present. Much is still uncertain regarding the COVID-19 pandemic, as well as our response to it, and how it affected and will continue to impact our society. However, one thing is certain: we should extrapolate all the knowledge that we can from this experience, to better prepare ourselves for the future, and make ourselves better clinicians. We should take steps to alleviate the effects that a similar situation in the future would have on dental education, patient care, student and faculty mental health, uncertainty as to one's ability to thrive and graduate as a competent dentist. As a dental student in Louisiana and having experienced multiple hurricane responses from our dental school, I can attest that there is often nothing that can be done to prevent a disaster from occurring; what's more important is how resilient you can make yourself to a constantly changing and inhospitable world. Such a goal should be easily attainable with all the data we have collected.

Experts on the subject of mental health recommend adherence to a self-care plan that includes physical, professionmental, al, and personal strategies and practices. This includes developing healthy hobbies and setting aside free time for oneself, as well as seeking out intervention when necessary.7 Our profession is old. Our profession is ethics-based. Our profession is vital to the health of every human being. Let's support one another in staying healthy inside and out.

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Chronic Disease and Rurality Impacts Veteran Oral Health Outcomes: A Behavioral Risk Factor Surveillance System Analysis





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BACKGROUND

The Department of Veterans Affairs (VA*) began in the early 1900s, near the end of World War One, offering benefits to veterans who were injured as a result of their military service.¹ As wartime efforts continued, commensurate federal benefits and infrastructure to support veterans increased, eventually resulting in a comprehensive healthcare system, the Veteran Health Administration (VHA).¹ Today, the VHA is the largest integrated healthcare system within the United States, with more than 1200 facilities providing services to approximately 9 million veterans.²

Veterans qualify for primary and specialty care through the VA according to priority groups³ designated by the US Congress under federal code Title 38 U.S.C.§§1710(c).⁴ At present, VA facilities can treat veterans from all priority groups, but the types of care provided depend upon the associated priority group and service-connected disabilities. Veterans who qualify for dental care within the VA must do so through a service-connected disability or otherwise be totally disabled (100% disability rating).⁵ Under some conditions, veterans may also qualify for limited VA dental care, typically as a one-time trial ruled a medical necessity.⁶ According to the most recently available data, only 1.4 million veterans (15%) qualify for comprehensive dental care under current congressional standards. In 2021, 535000 eligible veterans received 3.9 million dental procedures during 1.4 million VA visits, showing that about one-third of veterans who are eligible for comprehensive care actually utilize this benefit.⁷ Taken together, data indicate more than 85% of veterans access care outside of the VA.⁸ Veteran care in the private sector is therefore influenced by cost, social determinants of health, and available access points, much like healthcare for most Americans.

^{*} The Department of Veterans Affairs manages the Veteran Health Administration. For the purposes of this paper, the term "VA" is used to denote both the healthcare delivery system and benefit administration.

Veterans consistently rank dental care as one of the top unmet needs, according to surveys administered by the Department of Veterans Affairs. Poor oral hygiene, dental infections, and missing teeth can impact employment, compounding poor health with economic instability. Lack of dental care access, coupled with the high prevalence of chronic disease conditions among veterans, necessitates more focus on the underlying health conditions and influencing social determinants for veteran oral health.

US veterans face significant barriers to effectively accessing dental care, including VA eligibility standards, lack of insurance coverage, unaffordable treatment, the geographic location of treatment facilities, chronic disease conditions, and the perceived need for care.^{9,10} In a 2021 survey, 44% of veterans reported needing dental care over the past year but did not see a dentist due to cost.¹¹ Many veterans are unable to receive necessary care due to transportation problems, distance, and advancing age. Despite these challenges, evidence suggests that, when veterans are able to have comprehensive and consistent access to dental care, they are more employable, financially stable, and can remain more self-sufficient.12

Insufficient access to dental care leaves veterans, like many Americans, with poor oral health outcomes as a result of episodic care. More than half of the veterans surveyed in the National Health and Nutrition Examination Survey (NHANES) said their oral health was "fair" or "poor," indicating both an awareness of oral health status and the need for improved oral health.¹⁰ Veterans surveyed in the National Survey of Veterans were more likely to report having a disability than those with better oral health, underscoring connections between overall health status and oral health outcomes.¹⁴ Moreover, veterans experience chronic disease conditions at a higher rate than nonveterans as a result of their military service. Nearly 20% of veterans experience heart disease, and a similar percentage is living with diabetes.¹¹ These particular chronic disease conditions are exacerbated by poor oral health, leading to poor quality of life and physical disability.¹⁶ The higher prevalence of chronic disease conditions. paired with severe lack of access to dental care, intensifies negative oral health outcomes.

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analyze the associated influences of chronic disease conditions.

METHODOLOGY

DATA

The Behavioral Risk Factor Surveillance System (BRFSS) is a national telephone survey collecting self-reported health and wellness indicators from adults aged 18 and older, weighted to represent the general population.¹⁹ BRFSS data are collected in all 50 states, with more than 400000 surveyed annually. In the 2020 BRFSS wave, 401958 adults were surveyed across 279 variables. Approximately 12% of respondents (47599) identified as ever having served or currently serving in the armed forces. Data from all 50 states and Washington, DC, were analyzed, excluding data from Guam and Puerto Rico.

ANALYSIS

Data from BRFSS were analyzed using IBM SPSS version 27 and examined descriptive and inferential analyses. Data were weighted using the BRFSS multi-stage, complex sampling approach to ensure representation of non-institutionalized US adults.¹⁹ Missing and unknown variables were removed. Demographic variables, including age, race, gen-

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der, education, geographic location, and income, were evaluated by veteran status. Some variables (income and education) were recoded as binary variables for analysis. Linear regression models were developed to assess predictive ability of demographic variables, heart disease, mental health condition, and diabetes in dental care utilization and edentulism (toothlessness).

LIMITATIONS

Data collection for the BRFSS relies on self-reported responses from individuals with telephones. Data gathered through self-reporting are subject to both recall and response bias.²⁰As a result of recall bias, people may report attitudes or health statuses in a socially desireable manner, or report data with different definitions and terms. Lastly, data weighted for this survey were representative of the US adult population in age, race, and gender using complex sampling procedures. Data were not weighted to be representative of a veteran population or rural population, two key variables in the present analysis.

RESULTS

DEMOGRAPHICS

Among the 47 599 veterans surveyed, most were white and identified as male, which is similar to the larger veteran population.²¹ The sample was slightly skewed such that veterans aged 65 and older were overrepresent-

ed (41.2%). More veterans lived in urban areas (84.4%), compared to rural areas (15.6%). Most veterans had attended some college or technical school (65.7), which was higher than the proportion of nonveterans (58.8%). Roughly one-third of the sample had an annual household income over \$75000, a similar proportion to nonveterans (30.6%). Almost 14% of the veteran sample reported living in poverty (less than \$25000 annual income), while roughly 20% of nonveterans were living in poverty. Demographics are referenced in Table 1.

ACCESS TO CARE AND ORAL HEALTH INDICATORS

Veterans and nonveterans had a similar self-reported frequency of dental visits such that 65.8% of veterans visited a dentist in the past year, compared to 66.6% of nonveterans. Despite similar levels of self-reported utilization between veterans and nonveterans, veterans experienced poorer oral health outcomes, compared to nonveterans, in that 41.4% of veterans, vs. 35.0% of nonveterans, have had at least 5 permanent teeth extracted. This trend is even more apparent when comparing edentulism in survey participants, in that twice as many veterans (8.0%) as nonveterans (4.3%) have lost all their permanent teeth. Access to care differs when considering rurality. Rural veterans were far less likely to have seen a dentist in the last year (42.6%) than nonrural

veterans (33.1%). This disparity was reflected in oral health outcomes for rural veterans such that nearly twice as many rural veterans were fully edentulous (13.8%), compared to nonrural veterans (7.6%).

MENTAL HEALTH, OVERALL HEALTH, AND CHRONIC DISEASE CONDITION

Veterans self-reported more favorable mental health statuses, compared to nonveterans. The majority of veterans (74.0%) reported having zero poor mental health days in a month, compared to 62.2% of nonveterans (Table 2). Similarly, fewer than 10% of veterans reported having more than 14 poor mental health days in a month, compared to 12.4% of nonveterans. This trend did not continue when examining physical health status. More veterans (18.5%) self-reported fair or poor general health, compared to 15% of nonveterans. Similarly, more veterans (13.1%) reported having more than 14 days in a month where physical health was not good, compared to 10.4% of nonveterans. Self-reported poor physical health may be connected to chronic disease burden in that veterans have a higher prevalence of chronic disease conditions, including diabetes (19.0%), skin cancer (15.7%), and other types of cancer (14.0%). Most significantly, veterans had nearly three times the prevalence of heart disease (11.7%), compared to nonveterans (4.8%).



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Oral health access and outcomes were evaluated for veterans with chronic disease conditions. Veterans with diabetes self-reported a slightly higher prevalence of having had a dental visit in the past year, compared to nonveterans (61.0% vs. 56.0%, respectively.) This trend continued for veterans with heart disease in that 61.0% had visited a dentist in the past year, compared to 55.0% of nonveterans. When evaluating edentulism, more veterans with diabetes were edentulous (15.3%), compared to nonveterans with diabetes (11.5%). Veterans with heart disease also reported being edentulous (17.2%), compared to nonveterans with heart disease (13.5%).

REGRESSION ANALYSIS FOR DENTAL VISITS AND EDENTULISM

Regression models were developed to evaluate veteran status, gender, rurality, age, income, and education for predicting whether someone had a dental visit in the previous year and edentulism. Heart disease, diabetes, and self-reported mental health were included alongside demographic variables in additional regression models. Veteran status was not a significant predictor of dental visits, meaning veterans and nonveterans were equally likely to have had a dental visit in the last year. Education was a significant predictor among veterans who had seen a dentist in the previous year such that veterans who had some college (or higher) were 1.68 times more likely to have visited a dentist, compared to veterans with a high school diploma ($\beta 1 =$.524, P<.001). Lastly, education was a significant predictor among veterans who saw a dentist in the last year such that veterans who had annual household incomes of \$50000 or more were 2.53 times more likely to have visited a dentist, compared to veterans whose household incomes were less than $50000 (\beta 1 = .928, P < .001)$. There were no other significant predictors for having had a dental visit in the previous year (Table 3).

Regression models evaluating predictive variables for losing all natural teeth (edentulism) revealed many significant results. Veteran status significantly predicted edentulism such that veterans were 1.93 times more likely to have all permanent teeth removed, compared to nonveterans, $(\beta 1 = .658, P < .001)$. The strongest predictors were rurality, age, heart disease, and diabetes. Veterans who lived in a rural area were 1.25 times more likely to be edentulous, compared to veterans living in an urban area, $(\beta 1 =$ -.224, P=.013). Age was a significant predictor of edentulism such that veterans aged 35 or older were 6.34 times more likely to be edentulous, compared to veterans younger than 35 years of age, $(\beta 1 = 1.847, P < .001)$. Veterans living with diabetes were 1.42 times more likely to be edentulous, compared to veterans who had not been diagnosed with diabetes, ($\beta 1 = -0.351$, P < .001). Lastly, veterans living with heart disease were 1.31 times more likely to be edentulous, compared to veterans who had not been diagnosed with heart disease, ($\beta 1 = 0.274$, P < .001). Additional significant predictors are reported in Table 4.

DISCUSSION

ACCESS TO DENTAL CARE

Results from the BRFSS analysis reveal an interesting trend. Veterans reported having dental visits in the last year at similar frequencies to nonveterans. Despite similar self-reported utilization of dental care, associated health and oral health outcomes differed between veterans and nonveterans, indicating that access and utilization are not the only associated health influencers. These results warrant further exploration as to why routine dental visits are not resulting in more effective oral health outcomes and chronic disease management for veterans, compared to nonveterans.

While veterans experience poorer health outcomes compared to nonveterans, disparity exists among subgroups of veterans when considering rurality, education, and income. The present research adds to the established body of evidence that rural, undereducated, and low-income Results from the BRFSS analysis reveal an interesting trend. Veterans reported having dental visits in the last year at similar frequencies to nonveterans. Despite similar self-reported utilization of dental care, associated health and oral health outcomes differed between veterans and nonveterans, indicating that access and utilization are not the only associated health influencers. These results warrant further exploration as to why routine dental visits are not resulting in more effective oral health outcomes and chronic disease management for veterans, compared to nonveterans.

veterans struggle to consistently access dental care.^{22,23,24} These social determinants not only exacerbate oral health outcomes for veterans, but also for most Americans experiencing poor oral health.

Rural veterans in our analysis had a higher prevalence of heart disease and diabetes and were also less likely to have had dental visits in the previous year. Previous research validates that factors unique to a rural setting may affect rural dental care utilization,²⁵ thereby intensifying the challenges to equitable oral health experienced in rural communities. Rural residents and veterans reported being more likely to delay dental visits until they experienced pain,²⁶ a choice which is a byproduct of financial and geographic barriers to accessing dental care.²⁷ Considering that rural service members are overrepresented in the military, a more dedicated focus on the factors influencing care utilization, including dental care, is needed.

ORAL HEALTH AND OVERALL HEALTH

Veterans in the BRFSS sample had higher rates of many chronic disease conditions, including heart disease, diabetes, and cancer, while also experiencing poor overall health and mental health. Other national surveillance systems, like NHANES and the National Survey of Veterans, have captured similar results, indicating a pattern that has not improved over time, and which has even worsened in some conditions.14,29 Established connections between oral health and overall health underscore the need for a more robust integrated care model to increase dental care utilization and improve outcomes.³⁰ Given that veteran patients have a higher incidence of cancer, diabetes, and mental health conditions, improved access to dental care could help to achieve better outcomes for these chronic conditions.³¹ Results revealed that one-third of veterans did not report a dental visit in the past year, while onefifth have seen a medical provider. Veteransare more likely to visit their physician than their dentist every year, creating opportunities for more effective prevention if oral health is integrated with medical visits.³² Attending dental appointments regularly, particularly in connection to medical appointments, could increase

earlier detection of oral cancer, improving outcomes.³³

When chronic disease conditions cannot be managed effectively, oral health is negatively impacted, thereby increasing the disparities in treatment between veterans and nonveterans.

In oral health, edentulism is considered the "final marker of disease burden."8 This destructive condition directly affects a person's quality of life, through associated poor health outcomes, sexual functionality issues, inconsistent diet and nutrition, lower satisfaction with health, low self-esteem, and difficulty finding employment.¹⁴ The current study reinforces similar results to general population studies such that rurality, age, and income are predictors of edentulism.^{10,34} This analysis presents a stronger connection between diabetes, heart disease, and edentulism in the veteran population, compared to nonveterans.^{31,35} Chronic periodontal disease, a common cause of tooth loss by veterans, causes increased inflammatory mediators that are associated with poorer outcomes for diabetes and heart disease, linking oral health and physical health to overall qualChronic Disease and Rurality Impacts Veteran Oral Health Outcomes: A Behavioral Risk Factor Surveillance System Analysis

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Eligibility to access dental care should be expanded to include more veterans. Many veterans access their primary care through VA facilities, creating opportunities to connect oral health to other healthcare treatments. Given that the VA is the largest integrated health system in the nation, veterans who are living with heart disease and diabetes have the most to gain by managing their chronic disease conditions through oral healthcare provided through the VA. Recent research underscores an estimated \$5.6 billion in annual cost savings associated with periodontal care for veterans with heart disease and diabetes, indicating not only improved health and well-being but also a demonstrated financial gain through expanded VA coverage.

ity of life.³⁰ A recent analysis of closed-panel cohort study data from the Department of Veterans Affairs Dental Longitudinal Study found that edentulism was associated with an increased risk of all-cause mortality.³⁶Taken together, implications from the present BRFS data analysis, coupled with additional research trends, indicates that the high edentulism rates in veterans with associated chronic disease conditions have a critical impact on their health, well-being, and lifespan.

STRATEGIC RECOMMENDATIONS FOR IMPROVING ACCESS AND OUTCOMES FOR VETERAN ORAL HEALTH

Integrated healthcare that prioritizes a personalized approach to care will yield the best outcomes for both oral health and overall health: an impact even more pronounced among veterans

with chronic disease conditions that are exacerbated by poor oral health.^{37,38} Mental health is infrequently considered in relation to managing oral health but is a critical link in facilitating a whole-person approach to care for veterans.^{39,40} Our analysis also revealed that veterans have a higher prevalence of heart disease, diabetes, skin cancer, other cancers, and poor mental health: all of which should be managed in the context of dental care delivery, given the conditions' demonstrated impact on oral health outcomes.³¹

Many veterans are unable to access affordable dental care due to strict eligibility surrounding congressionally mandated guidelines for VA coverage. Eligibility to access dental care should be expanded to include more veterans. Many veterans access their primary care through VA facilities, creating opportunities to connect oral health to other healthcare treatments.¹¹ Given that the VA is the largest integrated health system in the nation, veterans who are living with heart disease and diabetes have the most to gain by managing their chronic disease conditions through oral healthcare provided through the VA. Recent research underscores an estimated \$5.6 billion in annual cost savings associated with periodontal care for veterans with heart disease and diabetes, indicating not only improved health and well-being but also a demonstrated financial gain through expanded VA coverage.42 Veterans have sacrificed greatly for their country and experience a disproportionate burden of disease and disability as a result. Veterans deserve accessible, high-quality, affordable dental care to ensure optimal health and well-being.

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APPENDIX

TABLE 1: DEMOGRAPHICS

Basic Demographic Table by Veteran Status (N = 399431)								
	Vete	erans	Nonveterans					
	Weighted Estimate (%)	SE for Estimate	Weighted Estimate (%)	SE for Estimate				
Urban/Rural Designation								
Urban counties	93.31%	0.17%	93.66%	0.06%				
Rural counties	6.69%	0.17%	6.34%	0.06%				
Sex								
Male	87.84%	0.38%	44.22%	0.20%				
Female	12.16%	0.38%	55.78%	0.20%				
Race/Ethnicity								
White only, Non-Hispanic	69.13%	0.58%	59.06%	0.20%				
Black only, Non-Hispanic	13.00%	0.43%	11.50%	0.13%				
Other race only, Non-Hispanic	4.14%	0.30%	7.63%	0.14%				
Multiracial, Non-Hispanic	1.40%	0.09%	1.27%	0.03%				
Hispanic	9.52%	0.44%	18.59%	0.19%				
Don't know or Not sure or Refused	2.80%	0.20%	1.97%	0.05%				
Age Categories								
Age 18 to 24	5.05%	0.27%	12.87%	0.15%				
Age 25 to 34	11.89%	0.41%	17.99%	0.16%				
Age 35 to 44	11.43%	0.39%	16.92%	0.15%				
Age 45 to 54	13.82%	0.37%	16.05%	0.15%				
Age 55 to 64	16.61%	0.42%	16.42%	0.14%				
Age 65 or older	41.20%	0.51%	19.74%	0.14%				
Education Level								
Did not graduate High School	5.26%	0.27%	13.28%	0.17%				
Graduated High School	28.68%	0.50%	27.52%	0.18%				
Attended College or Technical School	37.96%	0.55%	29.56%	0.19%				
Graduated from College or Technical School	27.71%	0.43%	29.22%	0.16%				
Don't know or Not sure or Missing	0.39%	0.09%	0.42%	0.03%				
Income Level								
Less than \$25000	13.95%	0.36%	20.81%	0.17%				
\$25000 to less than \$50000	21.43%	0.43%	17.56%	0.15%				
\$50000 to less than\$75000	16.22%	0.43%	12.09%	0.13%				
\$75000 or more	33.47%	0.53%	30.61%	0.18%				
Don't know or Not sure	4.42%	0.20%	9.00%	0.11%				
Refused	10.51%	0.33%	9.92%	0.11%				

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TABLE 2: HEALTH INDICATORS

Visit to Dentist in the Last Year (Adults)	Veteran	Unweighted Col. (%)	Weighted Estimate (%)	Nonveteran	Unweighted Col. (%)	Weighted Estimate (%)
Yes	31724	65.79%	65.70%	233803	66.57%	63.77%
No	16010	33.20%	33.48%	113369	32.28%	35.00%
Don't know or Not Sure or Refused	487	1.01%	0.82%	4038	1.15%	1.24%
Have had permanent teeth extracted (Adults)						
Not at risk	19893	41.25%	48.38%	188036	53.54%	58.49%
At risk	26906	55.80%	49.21%	155014	44.14%	39.53%
Don't know or Not Sure or Refused or Missing	1422	2.95%	2.41%	8160	2.32%	1.98%
COMPUTED MENTAL HEALTH STATUS						
Zero days when mental health not good	35668	73.97%	69.98%	218276	62.15%	60.08%
1-13 days when mental health not good	6866	14.24%	15.72%	82705	23.55%	24.61%
14+ days when mental health not good	4732	9.81%	12.27%	43370	12.35%	13.34%
Don't know or Refused or Missing	955	1.98%	2.04%	6859	1.95%	1.96%
DIABETES						
Yes	9059	18.79%	16.70%	42765	12.18%	10.50%
No	37774	78.34%	80.90%	297187	84.62%	86.10%
Don't know or Not Sure	49	0.10%	0.10%	429	0.12%	0.10%
Refused	38	0.08%	0.10%	208	0.06%	0.10%
HEART DISEASE						
Yes	5611	11.64%	9.20%	16858	4.80%	3.50%
No	42023	87.15%	89.90%	331735	94.45%	95.90%
Don't know or Not sure	541	1.12%	0.80%	2387	0.68%	0.60%
Refused	46	0.10%	0.10%	230	0.07%	0.10%
SKIN CANCER						
Yes	7582	15.72%	11.70%	28653	8.16%	5.40%
No	40390	83.76%	88.00%	321618	91.57%	94.40%
Don't know or Not sure	208	0.43%	0.30%	755	0.21%	0.20%
Refused	41	0.09%	0.10%	184	0.05%	0.00%
OTHER CANCER						
Yes	6731	13.96%	11.20%	29872	8.51%	5.90%
No	41 294	85.63%	88.50%	320438	91.24%	93.80%
Don't know or Not sure	146	0.30%	0.20%	638	0.18%	0.20%
Refused	50	0.10%	0.10%	262	0.07%	0.10%

TABLE 3: REGRESSION ANALYSIS FOR DENTAL VISITS

Progressive Regression Models Predicting Dental Visit in the Last 12 Months with Veterans Only (N = 21343)								
	Model 1							
Variables in the Equation	В	S.E.	Wald	Sig.	Odds Ratio	95% C.I. for OR lower	95% C.I. for OR upper	
Rural Status	0.103	0.077	1.793	0.181				
Urban counties					Reference category			
Rural counties					0.902	0.777	1.049	
Sex	-0.195	0.153	1.611	0.204				
Male					Reference category			
Female					1.215	0.9	1.64	
Age	0.061	0.222	0.076	0.783				
Age less than 35					Reference category			
Age 35 or older					0.941	0.608	1.454	
Education	-0.524	0.074	50.067	< .001				
HS Grad or Less					Reference category			
Some College or Greater					1.689	1.461	1.953	
Income	-0.928	0.076	147.393	< .001				
Less than \$50000					Reference category			
\$50 000 or more					2.529	2.177	2.938	
Mental Health								
0-13 days when mental health not good								
14+ days when mental health not good								

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Model 3									
Variables in the Equation	В	S.E.	Wald	Sig.	Odds Ratio	95% C.I.for OR lower	95% C.I.for OR upper		
Rural Status	-0.236	0.091	6.79	0.009					
Urban counties					Reference category				
Rural counties					1.266	1.06	1.512		
Sex	0.32	0.146	4.793	0.029					
Male					Reference category				
Female					0.726	0.545	0.967		
Age	-1.736	0.42	17.055	< .001					
Age less than 35					Reference category				
Age 35 or older					5.677	2.49	12.943		
Education	0.625	0.082	57.875	< .001					
HS Grad or Less					Reference category				
Some College or Greater					0.535	0.456	0.629		
Income	1.131	0.085	175.184	< .001					
Less than \$50000					Reference category				
\$50 000 or more					0.323	0.273	0.381		
Diabetes	-0.351	0.092	14.565	< .001					
No					Reference category				
Yes					1.42	1.186	1.701		
Heart Disease	0.274	0.104	6.953	0.008					
Yes					1.315	1.073	1.613		
No					Reference category				

TABLE 4: REGRESSION ANALYSIS FOR EDENTULISM

The Challenging Plight of Refugees – A Story



Toni M. Roucka, RN, DDS, MA, FACD

Associate Dean of Academic Affairs at Marquette University School of Dentistry University of Illinois Chicago College of Dentistry

"Refugees are the human casualties that stream from the world's trouble spots. They are driven from their homelands by major crises such as war, religious and political persecution, brutal regimes, ethnic cleansing, military uprisings, and anarchy. Very few refugees emerge from their experiences without having endured or witnessed some form of physical or psychological trauma. The long-term physical and psychological sequelae resulting from this exposure are common features of the 'refugee experience'."

Refugee Health Care: A handbook for health professionals¹

The world is currently witnessing in real-time how refugee crises unfold. In the summer of 2021, the world observed the mass evacuation of Afghan citizens from their country due to political unrest. We are now witnessing the raw beginning of the war in Ukraine and the massive refugee crisis occurring in Eastern Europe. The shock, the despair, and the cruelty of senseless aggression are obvious. For the Afghan and Ukrainian people, this is their new reality. For distant observers, this is a reminder, of the unpredictability and fragility of life and social constructs. These are just two of the many such crises occurring at this time around the globe. On the faces of the victims, the toll of their plight is evident. Their lives and those of generations to come are changed forever. Conversely, I find it inspiring to see first responders, international governments, and ordinary citizens alike rising up to lend aid to millions of desperate refugees, sacrificing their own safety and financial security to do so. Much of the world has come together for these new refugees but the reality of how this story ends for them is still unknown. I have seen firsthand the backside of another, long-standing refugee crisis in a dichotomous part of the world. The truth is that the plight of refugees is desperate, in the short and long term. In resettlement countries, the refugee experience continues, as communities struggle to adapt to new Toni M. Roucka, RN, DDS, MA, FACD

The host country's policies govern refugee access to healthcare systems. Refugees in some countries have the same access to national health systems and services as nationals. Refugees in other countries can only use national health services as foreigners (often meaning at a higher cost). In addition, there are host countries where refugees are unable to access national healthcare due to national policies or geographical inaccessibility. Private healthcare costs in these countries are frequently prohibitive, creating a financial barrier to accessing healthcare.

locations and rebuild their lives.¹ At the end of 2020, 82.4 million people worldwide were forcibly displaced as a result of persecution, conflict, violence, human rights violations, or events seriously disturbing public order. Among them are nearly 26.4 million refugees, around half of whom are under the age of 18.²

The United Nations High Commissioner for Refugees (UNHCR) was established in 1950, in the aftermath of World War II, to assist millions of Europeans who had fled or lost their homes. Today, more than 70 years later, the organization is still working hard to protect and assist refugees all over the world.³ Many refugees find their way to the relative security of refugee camps in neighboring countries. The UNHCR provides refugees in camps fundamental services such as housing, food, and clean water, and they facilitate health care services. The host country's policies govern refugee access to healthcare systems. Refugees in some countries have the same access to national health systems and services as nationals. Refugees in

other countries can only use national health services as foreigners (often meaning at a higher cost). In addition, there are host countries where refugees are unable to access national healthcare due to national policies or geographical inaccessibility. Private healthcare costs in these countries are frequently prohibitive, creating a financial barrier to accessing healthcare.⁴

I traveled several times to far western Tanzania to aid in the refugee camps scattered about this region. In 2006, The American Dental Association (ADA) the Centers for Disease Control and Prevention (CDC) and the Tanzania Red Cross (TRC) developed a collaboration to bring dental services to three Tanzanian refugee camps occupied by Burundian and Congolese refugees fleeing civil war and political persecution. In Tanzania, the Tanzanian Ministry of Health supported basic medical care and hospital services to camp residents, but not dental care. The need for dental care in the Tanzania camps was great as determined by a needs assessment conducted by the CDC prior to the launch of this initiative. Tanzania has very few dentists and they do not ordinarily provide care to refugees. The dentist-patient ratio in Tanzania is still estimated to be approximately 1:360,000.5 The objective of this collaborative dental mission was to develop and implement a program to train refugee camp health care providers to treat basic dental emergencies safely and effectively and to build relationships with dentists in the region as a referral network. I was selected with a team of four other dentists to develop and implement this program. I would like to share with you my story.

In the remote, western edge of Tanzania bordering the Democratic Republic of the Congo (DRC) and the tiny country of Burundi, traditions run deep. Societies defined by cultural tribalism dominate and ban coexistence. This part of the world has suffered from tribal war and political unrest for decades, peaking in the late 1990s-early 2000s.⁵ At the height of the refugee crisis, Tanzania housed nearly 1 million refugees who fled the wars in Bu-



Toni M. Roucka, RN, DDS, MA, FACD

rundi and the DRC into the relative safety of Tanzania and other surrounding African nations.⁶ Today, around 207,000 men, women, and children remain in three refugee camps in this region and 55% of camp residents are children under 18.⁷

Few narrow dirt roads connect communities in this region and those that exist are unreliable and dangerous. Bandits, flash floods, and wild animals are variables frequently encountered when venturing there. Travel by foot is the primary mode of transportation for the locals with the occasional brave soul on a battered bicycle. Motorized vehicles are rare and predominantly fall into three categories; United Nations transport trucks bearing the bold, black UN logo on each door, outfitted with large luggage racks on the roof and nudge bars on the grill, International Red Cross vehicles, usually mid-sized SUVs, emblazoned with the famous red cross symbol on each side and, beat up passenger transport vans of every bright color, brimming with humanity, traveling to and from the tiny villages and refugee camps that splatter this region.

The local airport and gateway to the region, Kigoma airstrip, consists of nothing more than a single dirt runway and a dusty white cinderblock building with a rusty red metal roof emblazoned with the words "Welcome to Kigoma Airport". The regional airline I took, ironically named Precision Air, boasted a couple of 50 passenger, late model, dual-engine prop planes that flew to and from the Tanzanian capital city, Dar es Salaam (DAR) several times per week. The bumpy two-hour flight from DAR over the African savanna was an adventure in and of itself. On my first trip to Kigoma, peering out the window, red dirt and golden sand dominated the landscape, with the occasional scrubby shrub or tree. In the distance, I could make out multiple puffs of smoke and a lingering haze...charcoal fires. The struggling local economy has resulted in mass deforestation as charcoal can be made from trees and selling it at local markets is profitable. The prop engines of the clunky plane roared loudly and the variation in elevation as the flight progressed was unnerving. My seat sagged in the middle and I felt the metal frame hard and humming against my bottom as the plane droned along. Nary a building came into view the entire flight save for a few thatched huts and makeshift scrap metal structures isolated in the desert until we approached Kigoma. The pilot landed the plane on two hops and thanked us for "choosing" Precision Air. This flight was the safest and most efficient way to get from DAR to the camps at the time so it was not much of a choice at all. Upon landing, what stood out most was the vast expanse of burnt sienna-colored soil. It was everywhere and got into everything.

After three days travel from the U.S. to Kigoma, arriving at the multi-building TRC compound felt like arriving at a military outpost with secured and fenced in facilities. The TRC Director's quarters reminded me of a large utilitarian brick ranch home, sprawling with sparsely and modestly furnished common areas and a multitude of bedrooms. After a restless first night's sleep and a hardy breakfast of fresh eggs, fruit, and coffee in the morning, at 6:45 am, the TRC Director and the training team were off in the Jeep to take the short 15-minute drive on the dusty red roads, to the camp. And so began the program routine. Up at 6, out the door at 6:45, end the workday at 4 pm, dinner at 6 pm, catch up on emails and other work from 7-10 pm, sleep, and repeat.

Driving slowly through the camp for the first time, what impressed me most was the bustling of activity. This particular day was "food distribution day". Camp residents had ration cards and lined up at particular times to receive their prescribed allotment of food for the week. Rations were calculated based on family size and the number of children in the family. We would soon learn that nothing else mattered much in the camp on food distribution day, much less dental services. The refugees carried large sacks of flour, maize, and other goods on their shoulders and heads to their tiny red mud-brick homes. The water

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wells were another central hub of activity where mostly camp women with tiny babies on their backs and other children in tow. gathered to wash and collect drinking water in large buckets which they skillfully balanced on their heads when full. With rare exception, they dressed in kanga, a brightly-colored cotton garment wrapped neatly around their bodies from neck to toe, their hair wrapped in matching cloth. Unsurprisingly, everyone's garments and any exposed flesh contained a coating of the red dirt.

The appointed building transitioned to a dental clinic in which we worked was a small gray cinderblock structure with worn white wooden shutters and running water but no electricity. The single dental chair was donated second-hand and circa the 1920s. Fortunately, it was foot peddle powered and served its purpose well. The walls of the clinic were lined on two sides with old wooden backless benches where the didactic instruction took place. One faded wooden table stood in the corner and held the dental supplies. The camp hospital supplied anesthetic, syringes, surgical drapes, instrument sterilization, gauze and cotton rolls, medications, and other basic medical supplies. The training of these students was to include only supplies which would be available to them after the training was over. However, the team from the United States did bring donated surgical instrumentation which could last many years if cared for properly. The view from the windows of the clinic was of one of the water wells, and I was able to interact with women and children as they went about their daily routine in between teaching duties. Many children suffered from malnutrition but were able to receive intensive nutritional therapy from the children's center located in the camp. This was difficult to see but it was good to know these children were getting much-needed support.

The 12 dental trainees were Tanzanian citizens and pre-selected by the TRC in consultation with camp leadership. They ranged widely in skill level. Ten of the students were working in at least one camp as health care providers in some capacity. Although none had any formal dental training, some had been performing dental services in the camp medical clinics. Two of the students were from the nearby Kabanga Hospital which, until our team arrived, had no formal association with the camps. The training course consisted of topics focusing on health promotion and the relief of dental pain and infection with the following goals in mind;

To train and teach camp health care to providers to:

- Provide safe, emergency dental care in the field
- Know their limits and know when to refer patients to the hospital
- Teach community based dental health promotion

The depth of the inequities of health care access in this region compared to other parts of the world became crystal clear to me very quickly. The UNHCR provided the best services possible under the prevailing conditions in this remote area of the world, however, the remoteness itself was an extremely limiting factor to the acquisition of resources and medical personnel. Through a Swahili / Kirundi/ English translator (three languages were spoToni M. Roucka, RN, DDS, MA, FACD

ken there), we were able to develop and teach the program and meet our objectives. The cultural divide was as immense as it gets between students and teachers, but our common goal of successful teaching, learning and patient care made it possible for us to get the work done. The days were long and the work exhausting. We treated oral-facial infections of adults and children and provided antibiotics. We held lectures in the small space, discussed techniques and problems, and in the intense heat and humidity of the utilitarian clinic, we extracted teeth and treated periodontal disease. We even traveled to the camp schools where refugee children receive an elementary school education, to give oral hygiene and nutrition counseling sessions.

The patients in the camp were among the most complex I had ever treated, not so much physically but psychosocially. Refugees are a unique population as by life circumstances they have suffered great trauma. They have unwillingly fled their homes and countries in order to save their lives. They may have witnessed their family or friends brutally murdered. Women are frequently raped, their genitalia mutilated, or worse. Children are displaced from schools and social connections with friends. Even if refugees are provided with the means to satisfy their most basic human needs, they have lost their homes, freedom, and security in the process. Once you flee to save your life, you lose it.

The complexity of patient care became very evident when a 16-year-old old female came in with a toothache as most other patients did. She was dressed in full kanga of a vibrant yellow, red and green. Like most young women her age at the camp, she had children of her own in tow, an infant slung on her back and a toddler, both of whom were entrusted to another woman as she entered the clinic. Upon examination, it was determined she needed an extraction of a molar due to a chronic infection. Like most other patients she was nervous about getting this diagnosis and reluctantly consented to the procedure through the translator. She took to the anesthesia without incident and was numb in the surgical area by standard assessment. I didn't think twice when she began to fuss a bit during the extraction as I thought her nerves may be getting the best of her, but nothing prepared me for what came next. The procedure was nearly finished when she began writhing and screaming shrilly as two students worked on her tooth. The other students took notice. She became combative and tried to flee the dental chair, obviously panicked. The two students, then joined by the rest of the team, jumped on top of her, forcefully trying to hold her down to finish what they had started. This was a

fatal error. They finished the procedure and plugged the socket with gauze to stop the bleeding and at the same time it muffled her screams. The situation quickly escalated out of control. This patient, unbeknownst to me at the time, was the victim of gang rape. This dental procedure, performed by a team of young men trying to hold her down triggered a full-out post-traumatic stress incident. The more the students tried to restrain her, the worse it became. Although I tried to intervene quickly, by the time I got to the chairside, it was too late. The trigger was released and she was hysterical beyond consolation. She had to be physically restrained and carried out on a stretcher. Ultimately, she suffered a traumatic psychotic incident and was admitted to the camp psychiatric ward under heavy sedation for over a week. Needless to say, it was a humbling and distressing experience for everyone on the team and a horrible one for the patient, however, the team learned the importance of culturally sensitive and trauma informed care and trainers and trainees alike were much more attuned to the unique needs of this patient population going forward.

All in all, the program was a success. We built skills, relationships, and a primary dental care referral system with the local hospital. Two subsequent trips to the region assessed the sustainability of the program.⁷

"How wonderful it is that nobody need wait a single moment before starting to improve the world." – Anne Frank

The United States has had a long tradition of assisting families fleeing war and persecution for an opportunity to rebuild their lives in safety. In 2021, the U.S. welcomed over 70,000 Afghan refugees suddenly forced to flee their country due to political unrest.⁹ Other refugees arrive here daily. Dentists as members of the healthcare team may have the opportunity to help transition refugees to their new homes in the U.S. by providing needed dental screenings and services through dedicated clinics, non-governmental organizations, and private practice. I would encourage any dentist who has the desire and opportunity to get involved to do so. Refugees are a very special patient population.

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Honoring Autonomous Decisions



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ental referrals between general dentists and dental specialists do not often produce moral conundrums. Typically, general dentists have a significant role in referral of patients to dental specialists.¹ There are instances in which dental specialists may need to refer to a general dentist if patients do not already have a general dentist. The ADA's "General guidelines for referring dental patients" states the following:²

"Dentists shall be obliged to seek consultation, if possible, whenever the welfare of patients will be safeguarded or advanced by utilizing those who have special skills, knowledge, and experience. When patients visit or are referred to specialists or consulting dentists for consultation:

- The specialists or consulting dentists upon completion of their care shall return the patient, unless the patient expressly reveals a different preference, to the referring dentist, or, if none, to the dentist of record for future care.
- The specialists shall be obligated when there is no referring dentist and upon completion of their treatment to inform patients when there is a need for further dental care."

Referral dynamics are rarely problematic. However, there are ethically compelling instances in which a patient will ask the specialist to refer to a colleague to complete a procedure previously planned by the referring general dentist. There is little in the way of guidance to navigate this challenging situation. It has been hypothesized that shared decision making plays an important role in dentistry.^{3,4} Here, we present a hypothetical but representative scenario to underscore pertinent ethical issues and particularly those related to the obligation to respect patient autonomy. Further, we consider ways to navigate this potentially awkward situation while still meeting the ethical and professional obligations inherent in the role of a Dental professional. We refer to the dental specialist as the "consultant" and the referring dentist as the "referring dentist."

Mrs. Kelly Mason is a resident of a large city in the Midwest, the home of a major medical center that includes a specialty dental practice. She is a 46-year-old office manager who is a patient of Dr. Keith Tell, a dentist in private dental practice in the local community. Dr. Tell has performed all of her dental procedures and continues to monitor her oral health status every four months. By all accounts, Mrs. Mason and Dr. Tell have enjoyed a very good therapeutic relationship over the years. Recently, a tooth that was treated endodontically over twenty years ago became symptomatic, eventually leading to extraction by Dr. Tell. He then referred Mrs. Mason to the specialty division of the major medical center, for surgical placement of a dental implant in the site of extraction. Mrs. Mason's out-of-pocket expense for the surgical placement of the dental implant is significantly less at the medical center; thus, she prefers to have the procedure accomplished there. Dr. Tell's referral letter, including the statement that "subsequent to placement and integration of the dental implant I will provide restoration" was mailed to the specialty division, along with appropriate clinical and radiographic information. Mrs. Mason proceeded to the appointment on the scheduled date.

During the implant consultation, Mrs. Mason mentions to the consultant that a friend of hers had an implant restored by another dentist in town. She went on to ask the consultant "Can you provide me a referral to be seen there instead?"

This vignette highlights a potentially awkward set of dynamics that may challenge interpersonal relationships between several dyads of persons involved. Thus, the consultant may feel compelled to resist this referral in deference to the professional relationship and perhaps personal friendship with the referring dentist; concerns that may be in direct conflict with their obligation to respect the preferences and values (autonomy) of the patient. To honor the request and make the referral may result in a degradation of trust between referring dentist and consultant and negatively influence further referrals and working relationships. Moreover, consultants, who are dependent on referrals from referring dentists, take great care to avoid the perception that they "steal patients", a concept we explore further below. To decline to make the referral introduces an element of paternalism into the dynamics of the patient-consultant relationship and risks introducing significant conflict in the working relationship between them.⁵ The study of respect for patient autonomy has also been called for in other countries to help improve on the quality of care and in the principles of patient-centered care.6-8

At the core of this controversial scenario is a Principlist construct, "respect for patient autonomy."^{9, 10} Dentists incur a fiduciary obligation to respect patient autonomy when licensed to practice dentistry.¹¹ At its core, this moral principle refers to respect for the latitude of any autonomous agent to assess relevant circumstances and reach conclusions that align with their personal preferences and values.

The role of a dentist in the patient-doctor relationship includes the responsibility to facilitate a person's understanding of the rationale, risks, benefits, alternatives, and goals of any recommended treatment so that the patient may then assess options and make choices independent of any undue pressure, manipulation, or coercion. Most adult patients have autonomous agency; that is, they are capable of making decisions that reflect their rightful conclusions about what is best for themselves even if the attending dentist disagrees with or is personally offended by their ultimate decisions. The role of the dentist is to educate patients about recommended treatments and to undertake a process to inform them about recommended treatment, thereafter, respecting the autonomous choice of that patient to consent or decline. To assert that "they stole my patient" is a resounding reflection of the antiquated paternalistic model of patient-docKevin I. Reid, DMD, MS, MA, HCEC-C, FACD; Miao Xian Zhou, DMD, MS

By definition, autonomy exists only when a person is able to make decisions of her own volition and on the basis of having been informed to the extent that any reasonable person would want to be informed in order to make a rationale decision about their healthcare. Thus, if the consultant either overtly or covertly attempts to influence the patient with regard to consulting with their colleague instead of following through with the referring dentist, the consultant has thereby vacated responsibility to respect the autonomy of that patient and has established a paternalistic dynamic into the working relationships of all parties involved. The outcomes in this scenario are very likely to produce conflict among referring and consultant dentists and place the unsuspecting patient in a vulnerable position.

tor relationships and at worst insinuates ownership and at the very least reflects a lack of respect for the autonomous agency of persons.

It is critical to highlight the fact that as autonomous agents, patients have an ethical right to inquire about options, request referrals, and chart their own preferred course of healthcare treatment and from whom they receive treatment, independent of the concerns of the referring dentist. This is not to invalidate the referring dentist's concerns but is rather to acknowledge that healthcare ethics are not grounded in competition and patients are not commodities.¹² They may make choices with which their dentist disagrees and ones that could have negative financial impact on the referring dentist, all of which are possible outcomes when patients exercise their autonomous agency.

Autonomous choices are those that are derived without undue pressure, manipulation, or coercion. By definition, autonomy exists only when a person is able to make decisions of her own volition and on the basis of having been informed to the extent that any reasonable person would want to be informed in order to make a rationale decision about their healthcare.⁹ Thus, if the consultant either overtly or covertly attempts to influence the patient with regard to consulting with their colleague instead of following through with the referring dentist, the consultant has thereby vacated responsibility to respect the autonomy of that patient and has established a paternalistic dynamic into the working relationships of all parties involved. The outcomes in this scenario are very likely to produce conflict among referring and consultant dentists and place the unsuspecting patient in a vulnerable position. Our account above and below assumes that this egregious behavior is rare. Thus, our account is developed on the assumption that in the majority of instances, the patient request is innocent, and the consultant responds with professional integrity, consistent with their professional and moral obligations.

What is the ethical responsibility of the consultant in our vignette? Patient welfare supersedes all other concerns in an ethically grounded practice of any healthcare profession. Thus, respecting the autonomous wishes of patients to seek other opinions or to transfer their care is a matter of patient-prerogative that should be not only welcome but also facilitated without undue influence or pressure by the consultant. However, the consultant incurs equally compelling obligations of Beneficence (to do good)



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and Non-Maleficence (to avoid harm where possible) and therefore, it may be ethically justifiable for the consultant to respectfully suggest that referral to another provider, someone other than the referring dentist, could be detrimental to her oral health. If patient is medically complex such that warfarin therapy has been adjusted for anticipated treatment, interruptions in continuity of care may result in adverse outcomes. In another scenario, patients undergoing delay in start of IV bisphosphonate therapy in anticipation of completing dental care or those waiting to be cleared dentally prior to undergoing cardiac surgery are just a few examples of whereby interruption in the original dentist-patient relationship may be detrimental to the patient's health. If clinical circumstances clearly indicate that it is likely in the best interest of the patient to continue treatment with the referring dentist, the consultant has an obligation to inform the patient of the clinical opinion in that regard. To do otherwise, would omit a critical piece of information without which the relatively unaware patient could not possibly make an informed decision. To help with adherence, some providers institute contracts with patients that have chronic conditions with the intent of improving compliance with care.¹³

The expectation of patients is that dentists refrain from making decisions that are influenced by anything other than what is best for patients.¹⁰ This vignette presents a potentially distressful relational dilemma for the consultant who doesn't want to be perceived to have "stolen" or redirected the patient who the dentist referred with expectations that, like a parcel, would be "returned" to the referring dentist. The implications are not insignificant in terms of dentist-dentist trust, not to mention the potentially negative practice and financial outcomes for the consultant. Worried about the dissolution of a previously stable collegial referral relationship, perhaps friendship, potential loss of a source of referrals, and the daunting prospects of gaining a reputation for perceived disrespect of "stealing patients", the consultant may conclude that it is in their best interest to refuse to refer, or to formulate reasons to insist that the patient first confer with the referring dentist. Anyone who has practiced dentistry understands this conundrum. However, to ignore or deflect the patient's autonomous request for referral, the consultant becomes complicit in a host of ethical transgressions, beginning with the failure to meet the obligation to respect patient autonomy and thus assume a paternalistic posture with someone who has autonomous agency but only when provided all relevant information. What is the morally justifiable solution to this complex dilemma?

Our account holds that all interactions should be informed by the principle of respect for patient autonomy, first and foremost. This does not mean that the consultant should mindlessly acknowledge and facilitate the patient's request for referral as implied above. Grounded in the respect for patient autonomy, the consultant may wish to begin with an acknowledgement of the request but then engage the patient in a discussion about the reasons for the requested referral and to then provide clinically relevant information that may be important in coming to that decision.

CONSULTANT AND PATIENT

This is the relationship wherein the dilemma is ostensibly triggered. We assert that it is in the dynamics of this encounter that the situation may evolve into one of conflict or, ideally, include an opportunity to navigate the patient's request so that conflict is minimized. Again, we contend that the only ethically justifiable response is to sincerely acknowledge the patient's autonomous agency.

As unsavory as it may feel, the consultant-patient encounter is a moral moment that is independent of all other relationships, though the consultant should carefully assist the patient to consider the options and ramifications of the request in light of their oral health. Thus, the consultant may respond that "we can pursue that if you wish," followed by another key component of respecting one's autonomous agency in healthcare by probing further into the patient's reasoning - without imposing one's own

preferences or values. The dentist thus inquires, "Can you tell me more about why you are interested in this referral?" This invites greater understanding and possibly an opportunity to educate the inquiring patient and thus to deepen understanding of issues she may not have considered. To inquire the patient's understanding and reasoning for the request and to then take an opportunity to educate the patient about relevant clinical risks, benefits, and outcomes of the decision is to facilitate better understanding so that the individual may go on to make choices grounded firmly in their own preferences and values; the essence of respect for autonomy. If the patient responds by saying that she had "just heard that Dr. Jones (another dental provider) does the restoration too", the consultant responds, indicating that "Yes, that is true" but goes on to clarify that "your dentist does this procedure as well and it may be in your best interest to complete your treatment with him since he knows your circumstances far better than anyone else. It could be that continuity of care will provide the best outcomes for your oral health, especially if you intend to continue to obtain dental care with the dentist that referred you to me." In the most satisfying of outcomes, the patient, of her own volition, elects to discuss this with her dentist or indicates that based on the discussion she prefers to continue with her referring dentist. All other responses are potentially more challenging if not contentious. For example, when the patient remarks that "I hear Dr. Jones is really the best at this procedure, so I want to see her; I'd like for you to make the referral," the consultant must once again be mindful of this patient's ethical right to make decisions for herself that should be received and processed by the consultant without overt or covert attempts to "change her mind" or to manipulate her perspectives.

It is no secret that this part of the discussion introduces temptation for the specialist to respond in ways that will not upset the referring dentist and potentially risk professional and personal relationships. But, this temptation is borne of an unspoken ethically indefensible covenant presumption that patients belong to anyone other than themselves;

that they belong to, are socially, personally, professionally or contractually obligated to the referring dentist and to deviate from that unspoken covenant equates with abandonment and moral transgression with potential financial, professional, and personal implications for the referring dentist. Note here that those implications are focused on the welfare of the referring dentist and possibly the consultant - not necessarily the patient. This hidden covenant is deeply rooted in paternalistic and antiquated concepts of doctor-patient relationships heavily affected by the power differential between patients and healthcare providers.^{14,15,16} Based on a fiduciary obligation of all dentists to respect patient autonomy, we contend that the only ethically defensible response in this situation is to acknowledge the patient's perspectives and to arrange for the referral. But, as indicated above, the consultant may wish to divulge her sincere concerns that this referral could impose tension, cause disruption in the clinical integrity of her oral healthcare and respectfully suggest that she may wish to let her dentist know of her preferences. Thus, "Ms. Smith, I fully respect your request to see Dr. Jones and will arrange for that referral. However, I would be remiss not to make you aware that this could introduce some tension in your relationship with your dentist and while this will not affect my willingness to refer to Dr. Jones, I just want to suggest you take that into consideration." There is perhaps no greater vulnerable position in which the consultant specialist may find themselves than at this point in the conversation, professionally speaking. The consultant is not accountable for the wishes of the autonomous patient, nor is the consultant in control of the response of the referring dentists who may very well be incensed when they learn of these events. Thus, we suggest that consultant take great care to clearly document the exchange, accurately recording the patient's verbiage and the consultant's responses.

If dental patients are satisfied with the relationship and care received from their referring dentist, we speculate that the probability of occurrence of the dilemma described above is low.

Noting that patients may perceive significant differences in the ethical components of their dental experience with what they consider to be ideal, we

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hypothesize that a primary focus on patient welfare, genuine and forthright communication prior to referral, and an understanding and respect for patient autonomy will serve to prevent these occurrences.¹⁰ However, if and when they do, the same virtues will serve to reduce tensions and preserve dentist-dentist personal relationships, grounded in the understanding that patient autonomy is to be respected and should not be subject to manipulation or attempts to control.

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FROM THE ACD HISTORICAL RECORD: **Past is Prologue**

In 1934 Dr. Carr was inducted as a Fellow of the American College of Dentists. He became active in the organization and was elected president for the 1945–1946 term.



"The noblest motive is the public good."

In his 1945 inaugural address, delivered in New York City, the inimitable Dr. Malcolm Wallace Carr reflected on the need for disciplined journalism and responsible public policy. As the last of the wartime presidents of his era, President Carr stressed some of the problems facing the profession and the College in the postwar world. These remarks could easily be applied to our current discussions of both quality journalism and addressing the health care needs of vulnerable populations. These are timeless truths.

"During the past guarter of a century the College has made notable contributions to the advancement of the dental profession which have had far reaching effects. I shall not attempt to describe the many accomplishments of the College during this comparatively brief period of time-I leave that task for future historians to catalogue and to evaluate. It is appropriate, however, to contemplate a few of the outstanding contributions which have had far reaching effects and to give credit to those who have contributed with high purpose to the success of these achievements. From its very beginning the College has championed professional journalism and has forcefully and militantly pursued its conviction in support of professionally controlled journals. A report of the Commission on Journalism of the American College of Dentists was published in 1932, under the title of, "The Status of Dental Journalism in the United States." This report was a monumental contribution which presented the subject for the first time in a complete monographic form and embraced the results of an intensive three-year study. The impact of this report upon dental journalism, and the changes brought about since its publication may well reward the Commission on Journalism for its heroic effort and the College for its encouraging leadership. In 1933 the Journal of the American College of Dentists was founded and since its beginning this journal has been a living example of dental journalism at its highest level. In more recent years the College became aware of the many unmet needs for more and better dental care which exist in all parts of this country.

It recognized also that really adequate and competent dental care are beyond the financial resources of an appreciable proportion of the population. Persuaded that these needs must be met and the conditions corrected, the College undertook to study the ways and means this may be achieved. Although the problem is acknowledged to be both enormous and complicated, the Committee on Socio-economics set out to initiate a study which would be helpful in understanding the fundamentals of the problem, and as the result of its efforts published in 1943 a volume entitled, "Cost of Dental Care for Adults under Specific Clinical Conditions," which was an exploration of general issues, on the basis of initial and maintenance care experience of 485 patients of the Dental Health Service in New York City. This volume was dedicated to the "fulfillment of the ideals of adequate dental care as a health service for the entire nation." It may well be remembered that it was Virgil who said, "The noblest motive is the public good."

These remarks made more that 75 years ago seem particularly prescient as we reevaluate oral health and oral health care delivery in the College's second century of service to the profession and the public we are privileged to serve.

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