

STUDIES SHOW

The Pandemic Was Bad for Our Teeth. Will It Change Oral Health Forever?

The rise of teledentistry and other alternatives have the potential to fix some of the disparities in care.

By Kim Tingley

May 19, 2021 Updated 7:29 a.m. ET

There are early indications that the pandemic is taking a serious, and potentially long-lasting, toll on our oral health. In September, even before the winter coronavirus surge in the United States, an American Dental Association survey found that more than half of the dentists who responded were seeing an increase in stress-related conditions among patients. These included teeth grinding, cracked and chipped teeth and symptoms of temporomandibular joint dysfunction, like jaw pain. More than a quarter of the dentists reported an increase in cavities and gum disease — quite likely a result of changes in people’s diets and hygiene. Americans have also had difficulty accessing dental care: A report last month by the CareQuest Institute for Oral Health, a nonprofit research and advocacy group, found that six million adults had lost their dental insurance because of the pandemic, and more than one in 10 had delayed getting care because of cost, lack of insurance, fear of exposure to the virus or a combination of those factors.

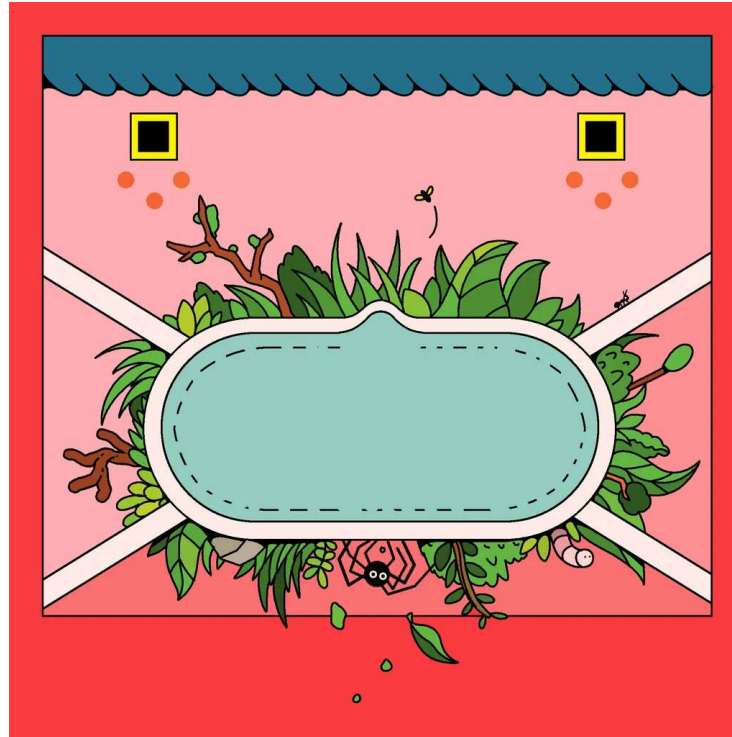
A major challenge for providers is that routine dental procedures generate aerosols, which increase the risk of viral transmission. How much is unclear. (“There are currently no data available to assess the risk of SARS-CoV-2 transmission during dental practice,” according to the C.D.C., which offers guidance for dental settings on its website.) As precautions, many clinics have added space and time between appointments, reducing the number of patients they can see. That and other issues have worsened longstanding disparities in who receives oral health care: By mid-April, almost 60 percent of private practices were operating at full capacity, compared with roughly 35 percent of their public counterparts, according to A.D.A. polling.

But the pandemic has also inspired remote adaptations — ones that could help address these inequities. “We had to start thinking differently about how we were going to meet the needs of those children and families” who couldn’t come to a clinic or be treated at a school or other community site, says Antonina Capurro, the Nevada state dental health officer, “and how we were going to reach them.”

Throughout the history of modern medicine, the mouth has, rather strangely, been viewed as separate from the rest of the body. Preventive visits to a dentist typically are not covered by health insurance, unlike annual visits to a primary-care physician. Only within the past few decades have researchers begun to appreciate the extent to which oral health is inextricable from a person’s overall physical, emotional and

psychological well-being. Gum disease has been linked to a wide array of disorders, including diabetes, Alzheimer's disease, cardiovascular disease, premature birth and even respiratory infections. Along with tooth decay, it is also associated with poor socioeconomic outcomes. Children who have cavities, for instance, tend to miss more school days and fare worse academically than those who don't.

It's almost impossible, however, to determine whether poor oral health helps cause these outcomes or whether they occur together because they share risk factors, such as a diet high in refined sugar; smoking and substance abuse; financial insecurity; and difficulty accessing preventive dental care, including fluoride, education on how to brush and sealants for children's teeth.



Ori Toor

Complicating matters, the mouth also harbors bacteria and other microorganisms that interact with bodily systems in ways that are only starting to be understood. “Just having a systemic infection” — like Covid-19 — “can change the microbiome,” says Kevin Byrd, a research scholar at the A.D.A. Science and Research Institute, who was an author of a paper published in Nature Medicine in March showing that the coronavirus can infect cells in the mouth and salivary glands and be transmitted by saliva. (This may help explain why dry mouth, loss of taste and oral lesions are common symptoms of Covid-19.) Stress and dietary changes can alter the oral microbiome as well. All of which

suggests that the pandemic could affect people’s oral health — and thus the rest of their biology — in unpredictable ways, says Mary Northridge, director of dental research at N.Y.U. Langone Health. “My fear,” she adds, “is that the populations that were vulnerable before Covid-19 are going to get walloped.”

SIGN UP FOR THE NEW YORK TIMES MAGAZINE NEWSLETTER: *The best of The New York Times Magazine delivered to your inbox every week, including exclusive feature stories, photography, columns and more.*

[Sign Up](#)

The groups hit hardest by Covid-19 — among them older adults and Black, Latino, Indigenous and immigrant communities — were already the most likely to suffer from cavities, gum disease and oral cancer, the most prevalent oral-health problems in the United States. And before the coronavirus, about a third of adults were not receiving preventive oral health care. This deficit has become “a marker of poverty” in America, says Northridge, an author of a January 2020 article on oral health care disparities published in *The Annual Review of Public Health*. “If you can’t afford good oral health care and you can’t afford nutritious meals and you can’t afford good mental health care so you turn to substances, then you are vilified for it. Because you do not have beautiful shining teeth.”

The pandemic, though, has inspired changes in practice and policy that could help improve access to care. A commentary in the journal *Preventing Chronic Disease*, a C.D.C. publication, argues that shifting to lower-tech approaches that focus on prevention would reach more people while reducing the need for procedures that produce aerosols. Teledentistry has expanded significantly during the pandemic, says Jane Weintraub, one of the commentary authors and a professor of dental public health at the University of North Carolina at Chapel Hill.

In Nevada, for example, Capurro and colleagues came up with a program to mail fluoride varnish to patients’ homes and supervise virtually as parents applied it to their children. Twice-yearly applications of the varnish are highly effective at preventing cavities, especially for those who lack access to fluoride toothpaste or treated tap water. The virtual sessions also allowed dentists to see patients in their homes — “maybe for the first time,” Capurro says, “to address issues related to nutrition or hygiene in a really personal way.” In remote consultation with a dentist, hygienists have also been able to practice more independently in the field at sites like nursing homes, providing preventive services and basic treatments using hand instruments and topical applications that don’t generate aerosols and are cheaper than surgical interventions.

The need to reduce risk by limiting aerosols “has led to the recognition that not everything that we used to do with the drill needs to be done with the drill or the ultrasonic scaler,” says Habib Benzian, co-director of the World Health Organization Collaborating Center for Quality-Improvement, Evidence-Based Dentistry at New York University. “There are alternatives,” says Benzian, the lead author of a December paper published in *The Journal of Dental Research* about oral health care policies during the pandemic. “Very cost-effective ones.” But that is not how dentists are used to working, he adds, which contributes to “inertia” when it comes to their adoption.

Prioritizing low-cost preventive services going forward, Weintraub points out, is going to require changes in the reimbursement process — “changes in Medicare and Medicaid policies and what insurance companies are paying.” Routine dental care is not covered by Medicare (whereas emergency-room visits for oral pain are), and Medicaid coverage for adults varies widely by state.

It will also be crucial, Northridge says, to overcome our cultural obsession with bright-white teeth and focus on “improving health rather than just appearance.” For example, a painless, low-cost way of stopping tooth decay without drilling out the rot and adding fillings or crowns — a painted-on substance called silver diamine fluoride — is not widely used because it leaves behind a permanent dark stain on the enamel. Yet it might be an ideal treatment for the most vulnerable patients, from young children to elderly adults. “We need to find better ways of reaching different populations at all ages,” she says. “Meet them where they are and provide them with what’s possible. Instead of some far-off mirage.”

Kim Tingley is a contributing writer for the magazine.

A version of this article appears in print on , Page 18 of the Sunday Magazine with the headline: Even as the pandemic seems to have been bad for our teeth and gums, it has highlighted ways to fix some disparities in oral health.