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Including vaccinations in the scope of dental practice

The time has come

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The COVID-19 pandemic is having devastating public health consequences, including limiting access to preventive care for patients. On March 13, 2020, the government of the United States declared a nationwide emergency.¹ Since then, the noninfluenza and pediatric measles-containing vaccine administrations recommended by the Advisory Committee on Immunization Practices have dropped significantly.² Similarly, human papillomavirus (HPV) vaccination rates were down 73% compared with the previous year.³

The worrisome decrease in vaccination rates requires immediate attention from physicians and public health officials, including dentists, as vaccination is an important practice to help mitigate the future communicable disease burden in our society. Historically, dentists have been strong advocates of prevention measures and played a significant role in several preventive care campaigns, including cancer and infectious disease prevention.^{4,5} In a 2006 JADA editorial, Dr. Michael Glick underlined the importance of including immunization as part of dental practices to contain infectious disease outbreaks in the public.⁶ Furthermore, a 2018 American Dental Association (ADA) policy statement urged dentists to help promote the HPV vaccine as a form of cancer prevention.⁷ In 2019, the ADA's Center for Evidence-Based Dentistry conducted an umbrella review of systematic reviews summarizing the evidence of the safety, efficacy, and effectiveness of HPV vaccines to help dentists understand the evidence on benefits and potential harms of the HPV vaccine for the general population.⁸

The question of dentists' readiness to engage in promotion and delivery of the HPV vaccine has been raised. A systematic review by Walker and colleagues⁹ indicated that the complex environment for managing HPV-oralopharyngeal cancer education and vaccination communication calls for additional interventions to help dentists engage in delivering effective recommendations. Importantly, surveys of dentist in Arizona and Minnesota reveal the willingness of dentists to receive training regarding HPV discussions and to recommend the vaccine.^{10,11}

This question was further assessed in late 2019 by the ADA, using its private practitioner Clinical Evaluators Panel, in which only 38% of 329 respondents stated that if the scope of dental practice were expanded to include HPV vaccine delivery, they would feel uncomfortable administering the vaccine, largely owing to lack of reimbursement and need for vaccine management and preservation.¹² Yet, most US states prohibit dentists from administering vaccines to their patients. Minnesota and Illinois passed legislation in 2014 and 2016, respectively, that allow dentists to administer influenza vaccines to people 19 years and older after completing a training program through their respective state dental boards.^{13,14} In 2019, Oregon passed legislation to allow dentists to prescribe and administer any vaccine.¹⁵ Oregon has provided a model that may be beneficial for other states to follow.

As we wait for the delivery of the vaccine against severe acute respiratory syndrome coronavirus 2, the virus that causes COVID-19, there is an urgent need to increase patient access to immunization education and services. It was just 10 years ago that vaccine delivery entered the scope of practice of pharmacists in all 50 US states, and the impact of pharmacists as immunizers for the pneumococcal and influenza vaccines has helped increase vaccinations rates.^{16,17} Dentists are also well positioned to increase access to vaccinations, as well as to educate patients on the importance of vaccinations. The role of dentists in promoting HPV vaccination for HPV-associated cancers is a prime example of how the dental community is at the front line of preventive care and can engage

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in primary prevention for oropharyngeal cancers.¹⁸ Furthermore, dentists usually see patients twice as often as primary care physicians and perform comprehensive oral cancer screenings, indicating that dentists play a key role in secondary prevention of oropharyngeal cancers through early detection of potentially malignant and malignant lesions.^{19,20}

One concern of dentists might be how vaccination discussions and delivery would be perceived by patients or parents of minors. A 2020 study from Minnesota reported the attitudes of parents (n = 208) of adolescents aged 9 through 17 years on the role of dentists in HPV prevention.²¹ Most of the parents believed dental providers were well qualified to discuss HPV and administer HPV vaccines, suggesting once again that patients appreciate cancer prevention education in dental settings. Among a majority racial and ethnic minority population of parents of children attending a school-based pediatric dental clinic in Louisiana, 79% indicated acceptance of vaccines delivered by dentists, making dentist-delivered HPV vaccines an additional pathway to addressing health disparities.²²

Oropharyngeal cancer is now the most common cancer attributed to HPV in the United States, surpassing rates of cervical cancer in 2019.²³ Yet, data have shown a constant decline in the awareness of HPV and HPV vaccine since 2013 in the United States.²⁴ The HPV vaccine represents a safe and effective tool approved by the US Food and Drug Administration in 2020 for the prevention of oropharyngeal cancers.²⁵ Millions of doses of the HPV vaccine have been administered so far with few to no adverse effects.²⁶ By increasing HPV vaccination rates, the medical and dental community would be able to prevent thousands of cancers. The HPV nonavalent vaccine (Gardasil 9, licensed in 2014) is available in the United States for the prevention of HPV-related conditions. It contains noninfectious protein antigens for HPV types 6, 11, 16, 18, 31, 33, 45, 52, and 58.^{27,28} The American Cancer Society recommends routine HPV vaccination from the age of 9 through 12 years.²⁹ However, the vaccine can be administered as early as 9 years. Catch-up HPV vaccination is recommended for all people through age 26 years who are not adequately vaccinated.

We acknowledge that there are several barriers that will need to be addressed including vaccine storage, reimbursement, and vaccine tracking records. In addition, comprehensive skills-based training should be integrated into existing dental education programs. The US Centers for Disease Control and Prevention provides interactive, web-based, immunization training through its program called “You Call The Shots,” with topics of relevance to this discussion covering general best practice guidelines on immunization, vaccine storage and handling, and HPV.³⁰ We believe legislative empowerment of dentists to administer vaccines will be the first step in improving access to immunization programs to help prevent transmittable infectious diseases and HPV-associated cancers. The time to act as an advocate for our patients and our profession with our state dental boards and state legislatures regarding the dental practice act and involvement of dentists in vaccination efforts is now. ■

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