Title
Dentist-administered vaccines An American Dental Association Clinical Evaluators Panel survey

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Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Dentist-administered vaccines

An American Dental Association Clinical Evaluators Panel survey

Survey Results

Data reflect the responses of 330 American Dental Association Clinical Evaluators (ACE) Panel member dentists in the United States.

Awareness

42%

of respondents do not know which vaccines their states permit them to deliver*

Willingness

55%

of respondents are willing to administer COVID-19 and influenza vaccines

Current status

2%

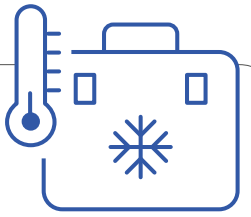
of respondents are currently administrating vaccines

Top 3 resources that would be helpful in overcoming barriers related to vaccine administration

1. Training or education in safe vaccine delivery and adverse events

- **75%** of respondents had **no** didactic training
- **81%** of respondents had **no** clinical training
- **59%** **do not know** what methods of training they have access to

2. Financial support to purchase necessary storage equipment



3. Access to protocols for handling vaccines

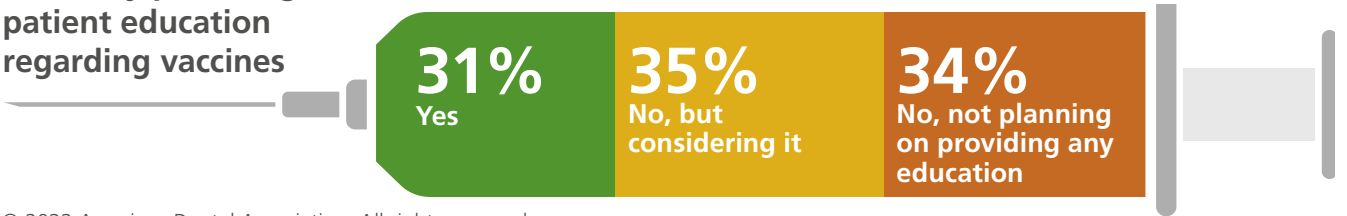
Role of the dental hygienist

91%

of respondents indicated that the dental hygienist should be involved in vaccine administration in certain capacities†

1/3 of respondents indicated that the dental hygienist should administer vaccines

Currently providing patient education regarding vaccines



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Demographics (n = 330)

Age, Y, Mean (Standard Deviation)	56.0 (13.5)
Female/Male, %*,†	26.1/73.6
Region, %*,†	
Northeast	19.1
Midwest	27.3
West	26.7
South	27.0
Race or Ethnicity, %*,†	
White	77.6
Asian	9.23
Hispanic or Latino	3.1
Black	2.2
Native Hawaiian or other Pacific Islander	0.6
American Indian or Alaskan Native	0.9
Other or multiracial	6.5
Practice Type, %	
General practice	87.6
Specialty	12.4
Occupation, %	
Full-time practice (≥ 30 h/wk)	72.4
Part-time practice (< 30 h/wk)	7.3
Dental school faculty	8.8
Part-time faculty and practice	2.4
Other	9.1

*Respondent-identified sex: 1 person preferred not to answer; region: missing for 15 respondents; race or ethnicity: missing for 5 respondents.; †Percentages do not sum to 100% owing to rounding.

Clinical Insights

A person's level of immunity can help fight against disease-causing organisms that are dangerous and life threatening. Vaccines work with the body's immune system to reduce the risk of developing infection as well as develop the body's natural defense system to become immune to certain diseases. There are several types of vaccines (for example, mRNA, inactivated, live-attenuated).[1] Most vaccines introduce a small amount of antigen into the body to activate a person's immune system to produce antibodies and T lymphocytes without causing disease.[2,3] In addition to the antigen, other ingredients in vaccines may include, but are not limited to, adjuvants, stabilizers, and preservatives. Each ingredient plays a vital role in helping the body strengthen its immunity and keep the vaccine safe and effective.

Safe and proper delivery of vaccinations to patients is imperative. Health care providers who administer vaccines undergo comprehensive competency training that covers topics such as patient assessment and patient education, as well as proper handling, storage, delivery, and documentation of vaccines. With most US states allowing dental providers to participate in administration of the COVID-19 vaccine,[4] discussion is building around expanding the scope of dental practice to include the administration of other vaccines.

Dental care professionals play a critical role in the delivery of oral health care and disease prevention. They might add to their continuous preventative work and increase access to care by expanding their scope of practice to include vaccine administration and counseling. Although wider integration of vaccine administration into clinical practice may not be problem free, there may be state, federal, and organizational support available to help address challenges such as cost and reimbursement, provider training and education, and public education and trust.

* 44% of respondents are not willing to administer any vaccines.

† Includes 1 or more of the following: initiate conversations with patients (75%), review patient medical history for vaccination status (70%), promote obtaining vaccinations if the practice offers them (59%), refer patients to a provider who can administer vaccines (56%), or administer vaccines (32%).

Address reprint requests and requests to use ACE Panel graphics to the American Dental Association Council on Scientific Affairs, 211 E Chicago Ave, Chicago, IL 60611.

This article has an accompanying online continuing education activity available at: https://ebusiness.ada.org/education/viewcourse.aspx?id=576.

Abstract

Background. With many states in the United States permitting dentists to administer the COVID-19 vaccine, there is much discussion about their scope of practice in relation to delivering other vaccines.

Methods. Survey questions were developed to assess dentists' awareness about their vaccine administration scope of practice and attitudes and barriers if choosing to incorporate vaccine delivery into their practice scope. The survey was deployed electronically to members of the American Dental Association Clinical Evaluators (ACE) Panel (N = 989) on September 2, 2021, and remained open for 2 weeks. Data were summarized descriptively in Qualtrics and SAS Version 9.4.

Results. Of the 330 ACE Panel members who responded to the survey, 42% were not aware of which vaccines their state permits them to deliver. More than one-half (55%) would be willing to administer influenza or COVID-19 vaccines in their practice setting, but at present only 2% of respondents administer vaccines. To overcome vaccine administration barriers, the top 3 resources respondents want access to are the following: training or education, financial support, and access to protocols. Of all the respondents, 91% indicated the dental hygienist should be involved in certain capacities.

Conclusions. Few dentists are administering vaccines, possibly owing to a number of challenges. Dental hygienists may play an integral role in the administration of vaccines in the dental clinic, but few dentists are educating their patients about vaccines.

Practical Implications. Although dentists wishing to administer vaccines in their practice may encounter barriers, support at the state, federal, and organizational levels could help them overcome these challenges.

American Dental Association Clinical Evaluators Panel Methodology

History of the American Dental Association Clinical Evaluators Panel

The American Dental Association Clinical Evaluators (ACE) Panel[5] was first convened in 2006 as a volunteer group of American Dental Association (ADA) members who provided clinical feedback on professional product evaluations for a professional product evaluation newsletter known as the *ADA Professional Product Review*.

In 2013, the ADA Division of Science received software to conduct its own surveys, and the first professional product review survey was deployed in September 2013 to the ACE Panel and a separate random sample of 3,000 dentists. Since then, ADA Science Institute and, later, ADA Science and Research Institute (SRI), staff members have worked with the ACE Panel Oversight Subcommittee of the Council on Scientific Affairs to generate ACE Panel survey results reports.

As of January 2020, the ACE Panel is used to take the pulse of ADA member perceptions and feedback regarding professional products, materials, and clinical techniques. The ACE Panel comprises 1,000 ADA members who have the opportunity to participate in quarterly surveys.

Purpose of the American Dental Association Clinical Evaluators Panel

The ACE Panel is a network of practicing ADA members who want to learn from one another by sharing clinical insights and experiences that can help build science content focused on dental materials and clinical-based research. The ACE Panel is a valuable resource in that it enables dentists to expand their clinical knowledge about dental products, materials, devices, and drugs. In addition, the ACE Panel provides a platform for ADA members to expand their professional network of dental experts and clinical scientists. ACE Panel members also have the opportunity to identify knowledge gaps and areas of future research for the ADA SRI.

Panel Recruitment and Composition

The ADA SRI actively recruits new ACE Panel members through the ADA Annual Meeting, targeted email campaigns, ADA News stories, the ADA Morning Huddle, and science-related ADA continuing education courses for clinicians. Any ADA member can join the ACE Panel by visiting the ACE Panel home page.

Survey Development

A subcommittee of the ADA Council on Scientific Affairs selects topics for each survey on the basis of suggestions from the ACE Panel and ADA SRI priorities. After topic selection, the subcommittee and the ADA staff methodologist (O.U.) develop the survey content in the Qualtrics Research Core platform.[6] When a topic is outside the expertise of the subcommittee, ADA SRI staff members and subcommittee members consult subject matter experts. Before deployment to the ACE Panel, ADA SRI staff members and the subcommittee conduct an iterative process of

pretesting the questions with another group of ADA SRI staff members and the subcommittee members to help ensure the comprehensiveness of answer choices, brevity (that is, surveys should take approximately 5 minutes to complete), clarity in question wording, logic, and response options and response scales (for example, Likert scales and numerical rating scales), among other survey methodology best practices. ADA SRI staff members and the subcommittee deploy the surveys to the ACE Panel electronically via email, including a link to access the questionnaire. All links are set to expire 2 weeks after deployment. One week after deployment, ADA SRI staff members and the subcommittee send email reminders to nonrespondents.

Data Analysis and Reporting

After respondents take the survey, they immediately have access to an interim report containing aggregate data from all respondents to that particular point in time. Two weeks after deployment, ADA SRI staff members export the final data set from Qualtrics Research Core platform to a .csv file and import the file into SAS Version 9.4 for data cleaning, relabeling of variables, and conducting exploratory and descriptive analysis (for example, participant demographics [including respondent-identified sex, age, region, race or ethnicity, practice type, and occupation] and means for continuous variables and proportions for discrete variables). These analyses provide insights as to which data will be prioritized for reporting and in which format. Next, in consultation with a graphic designer, ADA SRI staff members develop infographics to illustrate the most relevant results and elaborate clinical insights to facilitate the use and contextualization of the information from the survey. The collection of final reports for ACE Panel surveys are published in *The Journal of the American Dental Association* and are available electronically in the ACE Panel report library.[5]

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