



# Patient Attitudes Regarding the Role of the Dentist in Vaccination for Coronavirus Disease 2019 (COVID-19) and Human Papillomavirus (HPV)

Morgan Faist COL 25 PURM

Advised by Dr. Katherine France, School of Dental Medicine and Dr. Tamara Cadet, School of Social Policy & Practice

## BACKGROUND

While no prior research exists to understand patient perspectives of their dentist playing a role in COVID-19 vaccination, past research has evaluated the role of dentists in other vaccination campaigns using several diseases and audiences (Dean et al. 2022). It is important to continue to investigate what role dentists can play in ongoing preventative healthcare priorities. **A survey was validated and distributed to assess patient attitudes and beliefs regarding a dentist's role regarding the vaccination of Coronavirus Disease 2019 (COVID-19) and Human Papillomavirus (HPV).**

## METHOD

### Survey Validation

- A previously published questionnaire was adapted and validated using a quantitative psychometric analysis and quantitative stakeholder evaluation to ensure the accuracy and legitimacy of results and data.
- A focus group was held to evaluate the clarity of the questions. 9 eligible participants consented to participate in the focus group. The focus group meeting was recorded, transcribed, and analyzed similarly to previous studies (Maramaldi et al. 2017).
- A codebook was developed. The first order codes were **behavior, intentions, knowledge, attitudes, self-efficacy, survey changes, acceptability, and feasibility**. Knowledge and attitudes were broken down further into second order and pattern codes.
- Survey changes were made based on results of qualitative and quantitative analysis to maximize clarity and effectiveness of the final instrument.

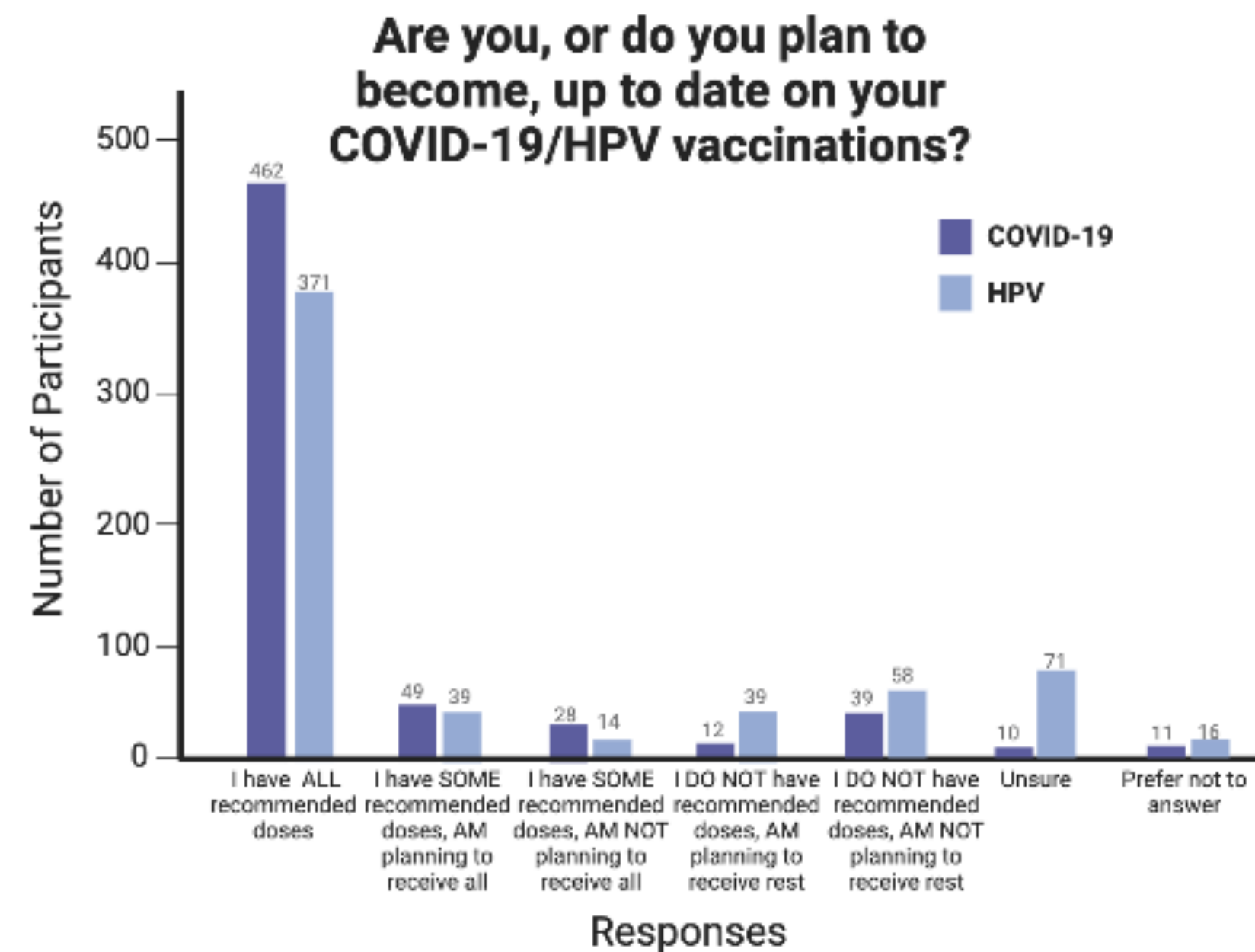
### Survey Distribution

- Eligibility: 18-45 years old
- 600 surveys
- \$20 Target gift card incentive
- Survey was administered in person on an iPad using REDcap
- Participants were provided with background paragraphs on COVID-19 and HPV prior to completing the survey on the iPad, and an infographic was provided upon completion
- Advertisements on social media and around the dental school
- Potential eligible participants were recruited in various locations

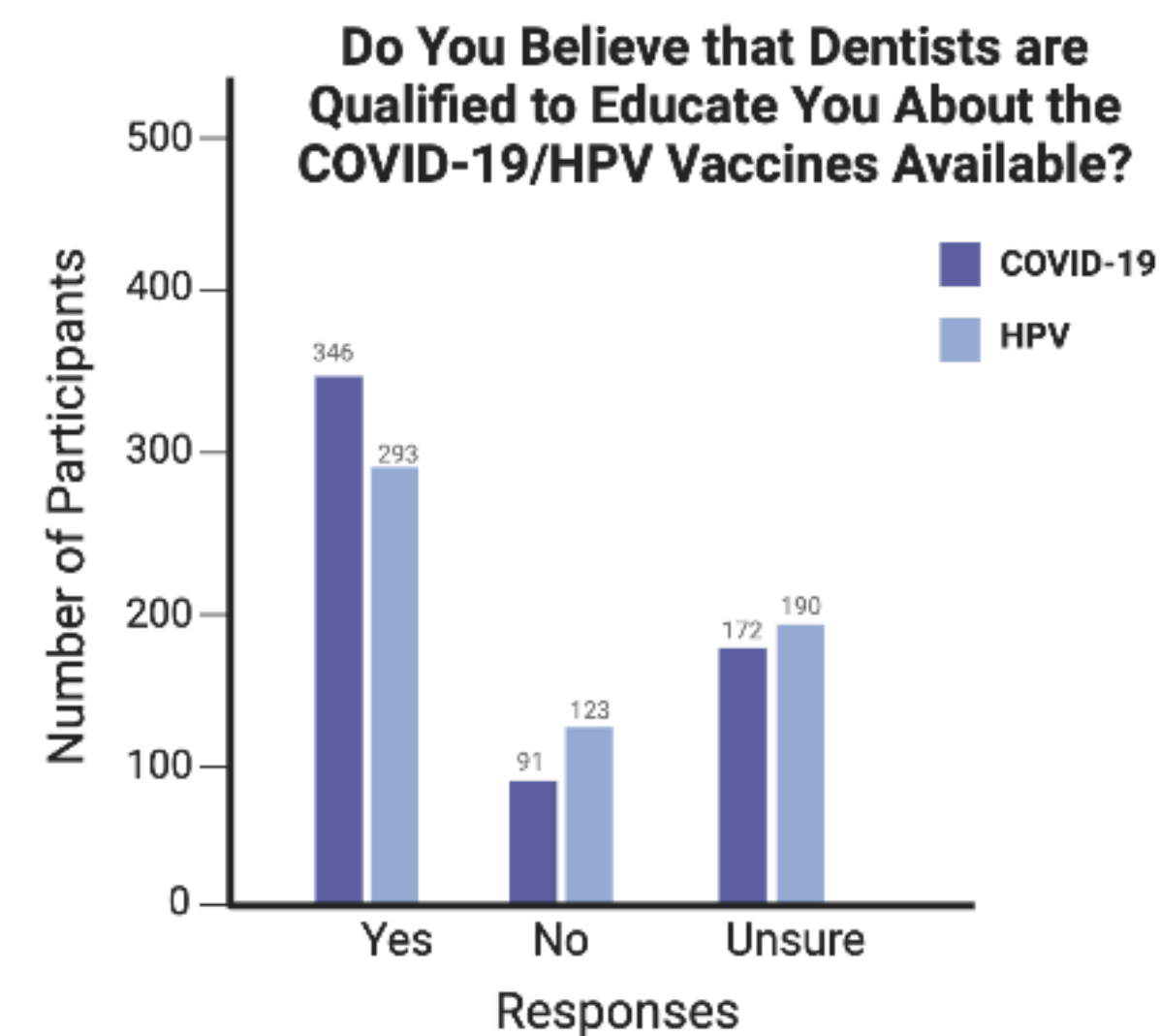
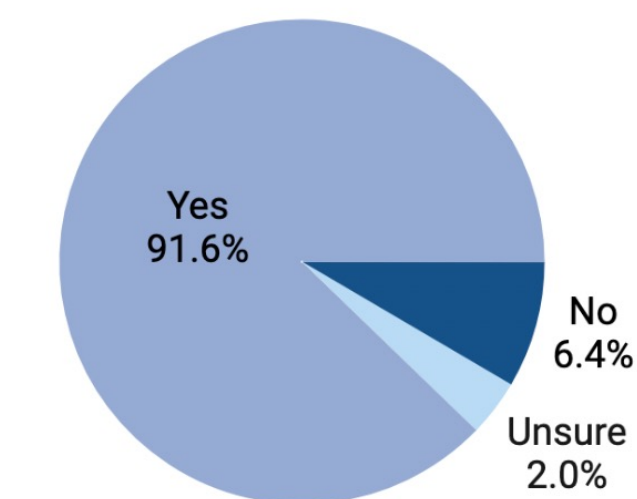
## SURVEY CHANGES

- Defined "completely vaccinated" in regards to the COVID-19 vaccine and HPV series in the following questions:
  - "Are you, or do you plan to become, up to date on your COVID-19 vaccinations? This could include the 1 dose of the Johnson and Johnson vaccination or the 2 doses of the Moderna or Pfizer vaccinations, plus any boosters applicable to you."
  - "Are you, or do you plan to become, up to date on your human papillomavirus (HPV) vaccination? This could include 2 doses of the Gardasil 9 vaccination if received before 15 years of age or 3 doses if received at or after 15 years."
- Expanded answer choices to include all possible vaccination statuses and intentions
- Added "prefer not to answer" as an answer choice about vaccination status and intentions
- Changed the wording "dental professional" to "dentist"
- Added the vaccine name Gardasil to question inquiring about HPV vaccination status and intentions

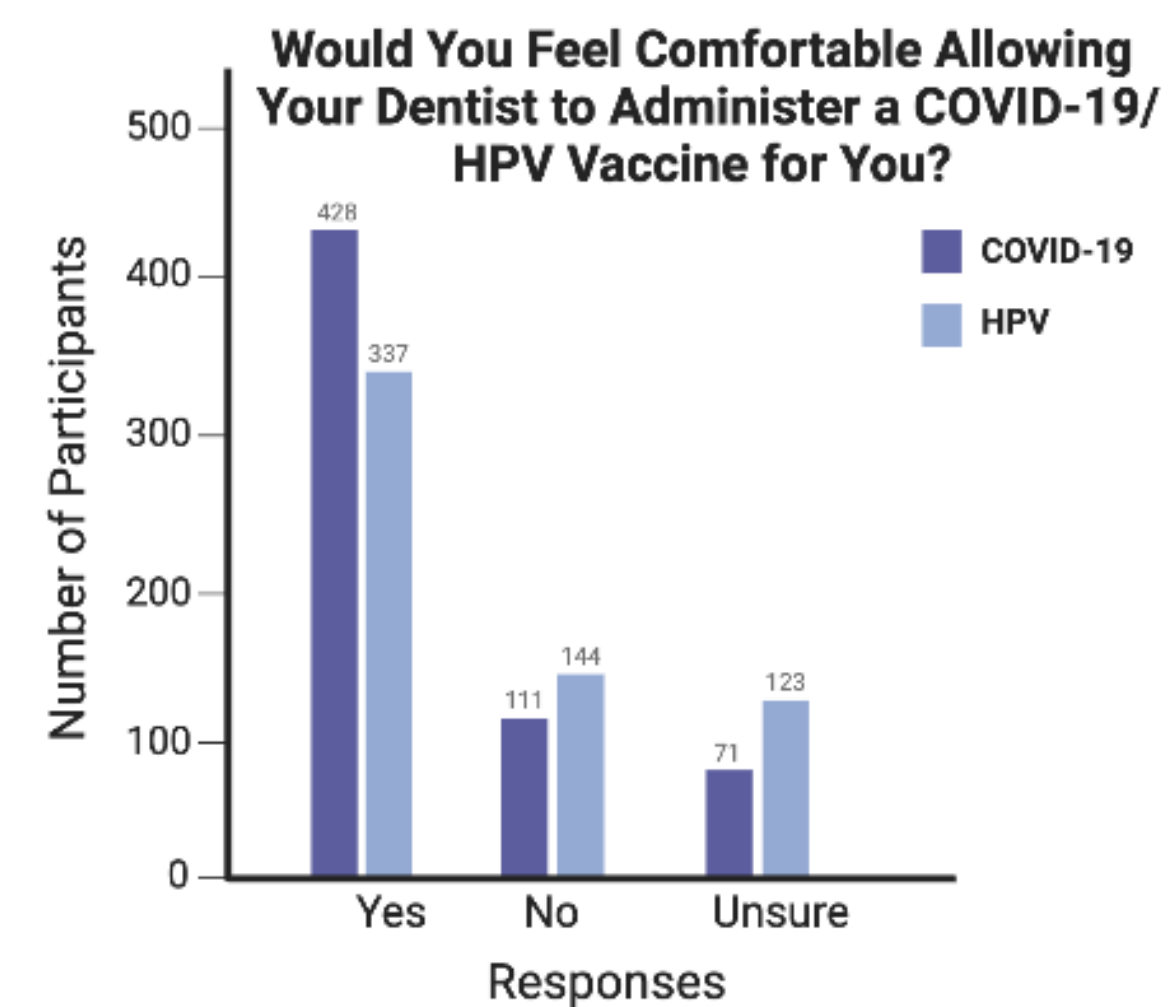
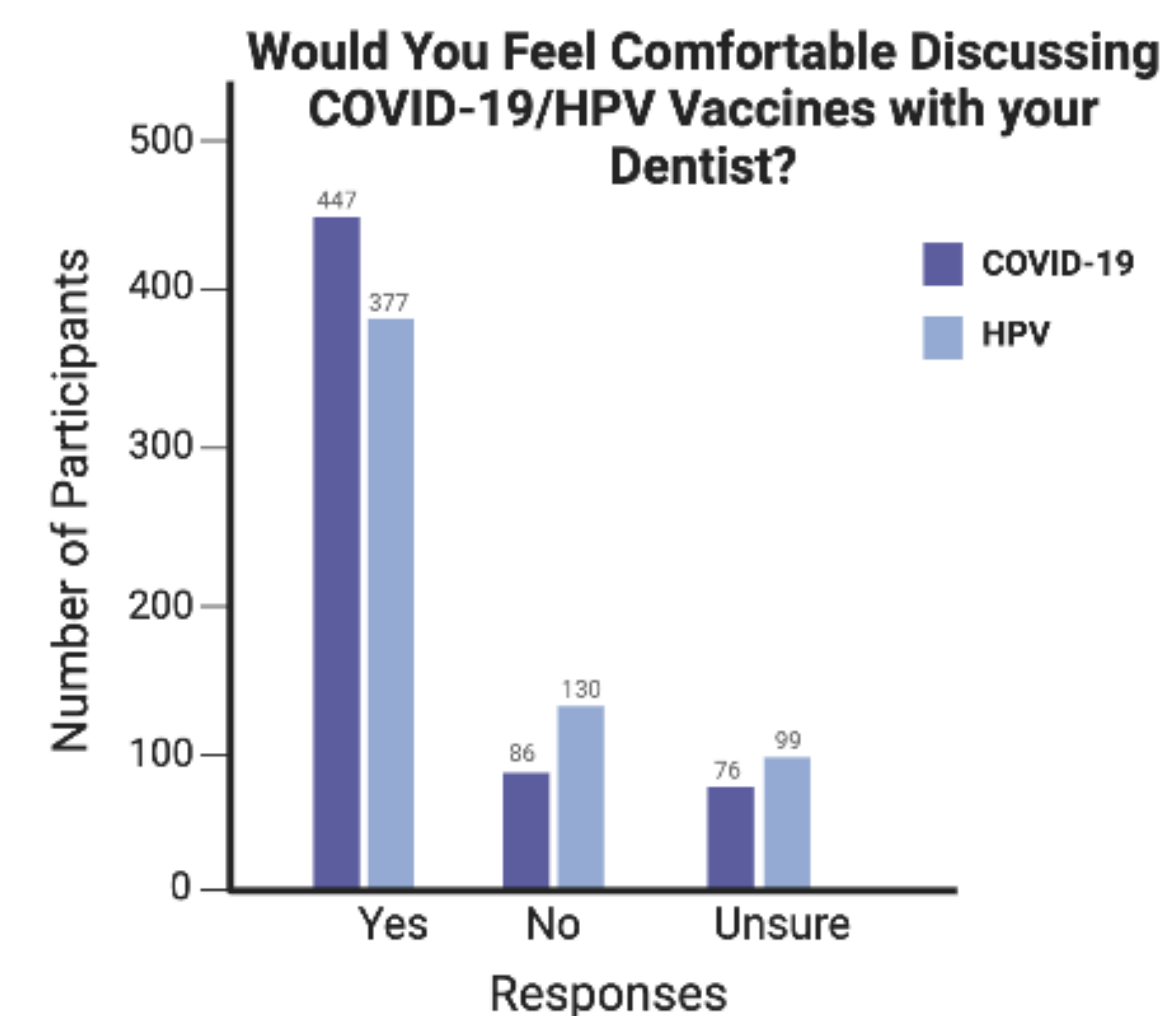
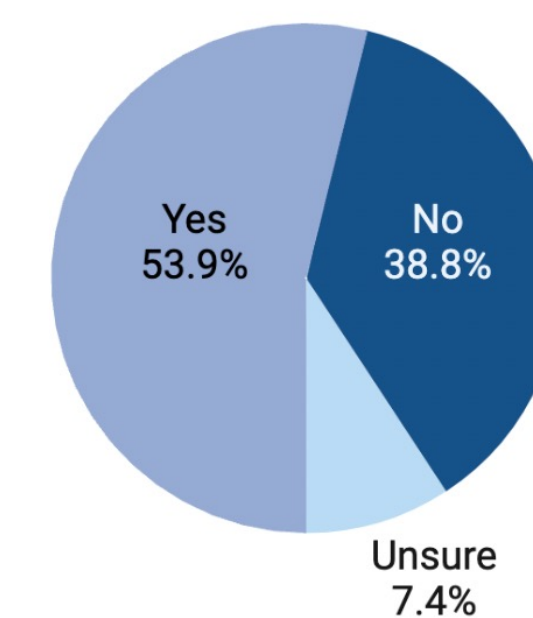
## SURVEY RESULTS



**Have you been informed that the COVID-19 vaccine can prevent severe illness caused by COVID-19?**



**Have you been informed that the HPV vaccine can prevent some types of head and neck cancer?**



## SURVEY DEMOGRAPHICS

Variable	Statistic
<b>Sex Assigned at Birth</b>	
Male	221 (35.8%)
Female	397 (64.2%)
<b>Current Gender Identity</b>	
Male	211 (34.2%)
Female	380 (61.6%)
Transgender	5 (0.8%)
Non-binary	18 (2.9%)
Gender variant/Nonconforming	3 (0.5%)
Other	0 (0.0%)
<b>Age</b>	
Count	580
Mean (SD)	28.09 (7.34)
Median (IQR)	26.00 (11.00)
<b>Race*</b>	
White	267 (43.3%)
African American/Black	179 (29.1%)
Hispanic/Latin-x	58 (9.4%)
American Indian/Alaska Native	6 (1.0%)
Asian	113 (18.3%)
Native Hawaiian/Other Pacific Islander	5 (0.8%)
Prefer not to say	16 (2.6%)
Other	16 (2.6%)
<b>Education</b>	
<= High School	10 (1.6%)
High School Diploma or Equivalent	108 (17.6%)
Some College	153 (24.9%)
Bachelor's Degree	219 (35.6%)
Master's Degree	76 (12.4%)
Doctorate/Professional Degree	49 (8.0%)
<b>Household Income</b>	
<20k	123 (20.0%)
20k-35k	81 (13.2%)
35k-50k	107 (17.4%)
50k-75k	87 (14.2%)
75k-100k	65 (10.6%)
>100k	151 (24.6%)

\*Percentages sum to over 100% as participants were asked to select all categories that apply

## DISCUSSION

The survey results show a majority of patients accept their dentist having a role in vaccine-related efforts. Participants are more accepting of their dentist's role with COVID-19 vaccinations than HPV vaccinations. Participants are also more informed about COVID-19 vaccines than HPV vaccines. This exhibits a need to increase the public's education about HPV and its relation to oral health. Access to care, vaccine uptake, and disease prevention could increase if a dentist's role were expanded to include vaccine education and administration.

## REFERENCES

- Dean TC, Gilliland AE, Cameron JE. 2020. Parents' receptiveness to oral health clinic-based vaccination. *Vaccine*. 38(27):4226-4229.
- Meramaldi, P., Cadet, T., Burke, S., Lecloux, M., White, E., Kinnunen, TH., Kalendarian, E. 2017. Administrators' Perceptions of Oral Health Care and Cancer Screening in Long-Term Care Nursing Facilities. *Journal of Applied Gerontology*, 38(10), 1391-1420.