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PERSPECTIVES

The case for tying specialty status to completion of dental residency: Dental education's stake

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Abstract

Background: The American Dental Association's (ADA) specialty recognition process has long been the gold standard in dentistry. Specialty advertising regulations have been challenged as inconsistent with commercial speech rights of dentists wishing to advertise as specialists in areas not recognized as ADA specialties. Commission of Dental Accreditation-approved postdoctoral education exists to support this process using standard-based education, continuous quality review and accountability.

Purpose: In 2017, a federal court declared Texas dental specialty advertising rules unconstitutional noting the state did not present evidence demonstrating the public was being misled. A state dental association commissioned a professional survey to assess state residents' understanding of the term "specialist" in dental advertising.

Methods: Telephone interviews conducted with 812, 18+-year-old Ohio residents focused on advertising related to dental implants and TMJ disorders (not recognized specialties) and orthodontics and oral surgery (recognized specialties).

Results: Respondents indicated they would be inclined to think a dentist who advertised as a specialist had completed an accredited dental residency program and was more qualified to perform specialty care than a general dentist. Respondents also indicated that they would be less likely to choose a dentist who advertised as a specialist who did not have accredited residency training.

Conclusions: Tying specialty status to completion of a residency program accredited by an agency recognized by the U.S. Department of Education is important to the public's expectations and has implications for dental education.

KEYWORDS

advanced dental education < clinical skills/topics, dental specialties & sub-specialties, accreditation < professional interest, licensure and certification < professional interest

1 | INTRODUCTION

For decades, the American Dental Association (ADA) has been the gold standard for recognizing specialties in dentistry. States have relied on the ADA in laws and regulations on dental specialty recognition and advertising, allowing only dentists who satisfy required criteria in areas recognized as ADA specialties to advertise as specialists. The educational system feeding specialty dental care and insuring upstream quality evolved in concert with state regulatory mechanisms and the 2 work together.

Recently, specialty advertising regulations have been challenged in some states as inconsistent with dentists' First Amendment commercial speech rights to advertise as specialists

in areas not recognized as ADA specialties. Some of these challenges questioned the ADA's specialty recognition process, which until recently gave its House of Delegates (HOD) (comprised of general and specialty practitioners with no particular expertise in specialty recognition) final say over acceptance of new specialties.

Specialty recognition received even more attention in 2017 when a panel of the United States Court of Appeals for the Fifth Circuit upheld a district court's decision that the Texas State Board of Dental Examiners' dental specialty advertising regulations were unconstitutional. The regulations in question essentially limited specialty advertising to the 9 ADA-recognized specialties recognized at the time: endodontics, oral and maxillofacial surgery, orthodontics and dentofacial orthopedics, pediatric dentistry, periodontics, prosthodontics, dental public health, oral and maxillofacial pathology, and oral and maxillofacial radiology.

In affirming the district court's decision, the Fifth Circuit noted that the state did not present sufficient evidence demonstrating potential for the public to be misled or that the state's substantial interest in protecting the public from false and misleading advertising was advanced by its approach to regulating dental specialty advertising.[1] The Fifth Circuit held that the Texas Dental Board could have satisfied its burden of justification by presenting empirical data, studies, anecdotal evidence, history, consensus or simple common sense to demonstrate that harms it is concerned about are real and its regulations will in fact alleviate them to a material degree. Following the Fifth Circuit's decision, legal challenges to dental specialty regulations in Ohio and other states were threatened as well.

In 2017, the ADA HOD approved creation of a new specialty recognition process by authorizing formation of the National Commission on Recognition of Dental Specialties and Certifying Boards (NCRDSCB). This new independent commission was charged with developing, implementing, and following objective standards for specialty recognition "to protect the public, nurture the art and science of dentistry, and improve the quality of care."[2] The NCRDSCB re-recognized the ADA's 9 existing dental specialties, and in 2019 recognized dental anesthesiology as the 10th, and first new, specialty since oral and maxillofacial radiology in 1999.

In light of the Fifth Circuit's decision, threat of litigation against Ohio's specialty designation and advertising rules, and the decision by the ADA to depoliticize its specialty recognition process, the Ohio Dental Association (ODA) commissioned an Institutional Review Board-exempt independent survey of Ohio residents to assess their understanding of the term "specialist" in dental advertising and to better understand the public's reaction to the term "specialist" in their decisions about dental care services. Information gained would be valuable in understanding the public's view of and reaction to specialty advertising and choice of provider. Moreover, as courts, policymakers, and regulatory boards weigh issues related to specialty advertising, survey results would be useful in assessing the likelihood of the public being misled or harmed by certain claims of dental specialty.

2 | MATERIALS AND METHODS

The survey was constructed by an academically trained political scientist researcher and professional surveyor with over 30 years of experience. Two dental content experts each with a minimum of 30 years' experience provided input for question construction. The survey consisted of 812 6-minute telephone interviews conducted by experienced, trained, and calibrated interviewers employed by the research firm. Interviewers followed a script that served as an algorithm depending upon answers provided by participants who were 812 Ohio residents, 18 years or older, selected at random from a sampling frame provided by Survey Sampling International (SSI, Perrysburg, OH). Those excluded were nonstate residents, state residents under 18 years of age, and those who could not converse via telephone or communicate in English.

Data resulting from interviews were weighted to reflect Ohio's adult population on several identified demographic variables including gender, age, race, education, and housing.

All respondents were asked general questions about their dental health history and recent visits to a general dentist, dental specialist, or both. The survey then addressed 4 areas of dentistry. Two—orthodontics and oral surgery—are specialties recognized by the ADA/National Commission on Recognition of Dental Specialties and Certifying Boards (NCRDSCB) and 2—dental implants and TMJ disorders—are not recognized as specialties by the ADA/NCRDSCB. At the time the survey was conducted in February and March of 2018 and for decades prior, only specialties recognized by the ADA/NCRDSCB were recognized as specialties in Ohio pursuant to state law. To minimize fatigue, each respondent was queried on only 2 of the 4 areas, assigned randomly across the 12 possible conditions (Table 1). This approach produced at least 400 interviews, with a margin of error no greater than ± 4.9 percentage points at the 95% level of confidence, for each area of dentistry.

Items composing the questionnaire were designed to determine whether adult residents of Ohio:

- Had been to a dentist in the past 2 years;
- Had visited a general dentist, a specialist, or both—and type of specialist, as appropriate;
- Were inclined to think a dentist who advertised as a specialist in a particular area of dentistry had completed an accredited residency program in that area, in addition to dental school;

TABLE 1 Telephone queries by specialty or area and combinations

Dental specialty or area[a]	Queries per each dental specialty or area	Combinations and order of dental specialty or area queried[a]	Number of queries per combination
O	407	O/S	60
		O/D	69
		O/T	75
S	407	S/O	71
		S/D	75
		S/T	64
D	409	D/O	66
		D/S	70
		D/T	63
T	401	T/O	66
		T/S	67
		T/D	66

[a]O, Orthodontics and Dentofacial Orthopedics; S, Oral and Maxillofacial Surgery; D, Dental Implants; T, TMJ Disorders

- Were inclined to think a dentist who advertised as a specialist in a particular area was more qualified than a general dentist performing services related to that area; and
- Would be more or less likely to choose a dentist who advertised as a specialist in a particular area of dentistry if it were learned the dentist had not completed an accredited residency program in that area.

3 | RESULTS

Data revealed that 82% of respondents had been to a dentist in the 2 years preceding the survey. This is as expected when compared with other available data. For example, Kaiser Family Foundation data for Ohio indicated that in 2018 about 67% of Ohio adults visited a dentist in the previous 1-year time period.[3] Among those respondents, 75% reported having been to a general dentist only, 3% reported having been to a specialist only, and 1 out of 5 (20%) reported having been to both.

Respondents who saw a specialist offered myriad replies when asked to identify the type of specialist that treated them. Five of the 10 ADA/NCRDSCB-recognized specialties were mentioned either by name or a brief, but telling description, with oral surgeon, orthodontist and endodontist being most common. Respondents also mentioned providers not recognized as specialists by ADA/NCRDSCB, including implant and cosmetic dentists.

Table 2 highlights the results of questions involving the 4 areas of dentistry queried (Orthodontics, Oral Surgery, TMJ disorders, implants). It shows that for each area:

- Respondents (from 7 to as many as 9 out of 10) were inclined to think that a local dentist who advertised as a specialist had completed an accredited residency program in the promoted specialty, in addition to dental school;
- At least 2 out of 3 respondents were inclined to think that a local dentist who advertised as a specialist was more qualified than a general dentist who provided the same services; and
- At least 7 of 10 respondents were less likely to choose a dentist who advertised as a specialist if they learned the dentist had not completed an accredited residency program in the advertised area.

3.1 | Summary discussion and implications for academics and practice

These results may prove valuable as states re-evaluate their laws and regulations on dental specialty recognition and advertising. The Fifth Circuit made clear that states have "substantial interest in ensuring accuracy of commercial information in the marketplace, establishing uniform standards for certification and protecting consumers from misleading professional advertisements."[4] States are faced with the challenge of balancing interests of dentists who wish to be recognized and to advertise as specialists with the states' obligation to ensure appropriate standards for specialty status and protect the public from false and misleading advertising. To do this, states must make data-based decisions. Some of those data are presented here.

For example, results from the initial set of questions revealed a fair amount of public confusion over who is a specialist in dentistry, with several respondents reporting they saw a "specialist" in areas of dentistry not recognized, including implantologist, cosmetic dentist, and oral hygienist specialist.

Moreover, results also indicated the public tends to believe that a dentist advertising as a specialist in a certain area of dentistry (e.g., orthodontics, oral surgery, TMJ disorders, and implants), has completed an accredited residency program in that area, in addition to dental school. This may be because in most of health care, including medicine, completion of an accredited postgraduate residency program is required to attain specialist status.[5]

Survey results also revealed the public tends to believe a dentist who advertises as specialist in a certain area of dentistry is more qualified in that area than a general dentist. Finally, a majority of respondents indicated they were less likely to choose a dentist who had advertised as a specialist if they learned he or she had not completed an accredited residency after dental school.

A perspective that has been missing in the debate and discussion of specialty status is the implications for advanced

TABLE 2 Survey results regarding training and expertise

		Dental implants (n = 410)	Orthodontics (n = 408)	TMJ disorders (n = 400)	Oral surgery (n = 407)
If a dentist in your community advertised as a specialist in _____, would you be inclined to think that he or she had **completed an accredited residency program** in _____, in addition to dental school, or not?	**Yes**	**78%**	**88%**	**73%**	**90%**
	No	14%	8%	15%	5%
	Don't know	8%	4%	12%	5%
If a dentist in your community advertised as a specialist in _____, would you be inclined to think that he or she was more **qualified**, less qualified, or just as qualified as a general dentist who does _____?	**More qualified**	**68%**	**70%**	**65%**	**68%**
	Less qualified	5%	6%	4%	5%
	Just as qualified	23%	21%	26%	24%
	Don't know	4%	3%	5%	3%
If you learned that a dentist in your community who advertised as a specialist in _____ had not completed an accredited residency program in _____, would you be more likely or less likely to **choose** that dentist, or wouldn't that make a difference?	More likely	5%	5%	5%	5%
	Less likely	**79%**	**81%**	**70%**	**79%**
	No difference	15%	13%	23%	15%
	Don't know	1%	1%	2%	1%

dental education. The use of the ADA process as the foundation of specialty designation in states implicitly accepts and relies upon a long-established continuum of scope of practice, validation of training in academic centers, and periodic assessment through accreditation review and specialty board certification—all under the aegis and recognition of the U.S. Department of Education.[6] As courts and dental boards look for alternatives to ADA specialty designation, they will need a new formula for an educational framework with established and accepted rules and principles, proven evaluative mechanisms, and perhaps most importantly, external periodic review and renewal.

In recent years, private entities have formed alternative specialty recognition boards outside the traditional ADA/NCRDSCB process, and additional claims for dental specialty status have been pursued by private certifying boards and others in areas such as implantology, cosmetic dentistry, and sleep dentistry. States are struggling to establish appropriate standards to evaluate such claims for specialty status and searching for an infrastructure similar to that offered by the current educational system to insure scientific and clinical integrity and public safety. To date, no alternative process for specialty designation outside the ADA/NCRDSCB process provides an equivalent proven educational pathway or gained widespread acceptance.

Anchoring specialty training to recognition is not unique to the U.S. or medicine. In the European Economic Community, specialist designation is reserved for residency educated practitioners.[7] Some dental specialty care is provided by generalists and specialists in a number of countries, including Sweden and Australia, for example.[8] But the problems treated, the complexities of the care, and the appliances used are quite different between generalists and specialists.[9]

We believe that the criteria for specialty status should continue to include completion of an accredited postgraduate advanced education program (i.e, dental residency) in a specified area of dentistry along with other requirements regularly associated with specialty status, including demonstrated ability to form a certifying board, a distinct and well-defined field requiring unique knowledge and skills beyond general professional education, and knowledge and skills separate and distinct from any other specialty.

Tying specialty status to completion of a residency program accredited by an agency recognized by the U.S. Department of Education, such as the Commission on Dental Accreditation, has several attributes to protect the public. It ensures that every dental specialist has completed advanced training that has met applicable education standards established through the rigorous accreditation process and ensures consistency among training programs within a particular specialty and among specialty areas. It will also ensure that specialty training maintains those standards through the current process of on-going periodic accreditation assessments.

This approach also ensures that those advertising as dental specialists have the training traditionally required of specialists in other areas of health care, including medicine, and that dental specialty status is consistent with the public's expectations, as demonstrated by the Ohio survey.

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AUTHOR CONTRIBUTION

Henry W. Fields: conception and design of the study, analysis and interpretation of data, drafting and revising the article. Paul Casamassimo: conception and design of the study, analysis and interpretation of data and revising the article. David J. Owsiany: conception and design of the study, analysis and interpretation of data, drafting and revising the article. Martin Saperstein: conception and design of the study, data acquisition, analysis and interpretation of data and revising the article.

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