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Intimate partner violence screening in the dental setting

Results of a nationally representative survey

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ABSTRACT

Background. The dental setting is a potential venue for identifying patients experiencing intimate partner violence (IPV). The study objective was to assess dentists' current practices and attitudes about IPV screening.

Methods. A nationally representative survey of US general dentists assessed dentists' use of health history forms that queried about IPV and their acceptance of IPV screening as part of their professional roles. Parsimonious Poisson regression models were used in multivariable analysis to estimate risk ratios for the 2 dependent variables.

Results. Almost all dentists did not include a question to screen for IPV on their patient history forms. More than one-half of dentists also did not know of a referral place for patients experiencing IPV and did not believe that IPV screening should be part of their professional roles.

Conclusions. Uptake of IPV screening and favorable attitudes toward screening were low among dentists studied. However, prior IPV training and clinical knowledge plus awareness of IPV referral mechanisms were positively associated with greater screening uptake and attitudes.

Practical Implications. The inclusion of brief, focused IPV interventions in dental education and the establishment of collaborations between dentists and IPV agencies for referral mechanisms, in conjunction with an overall shift in dentists' attitudes about their professional responsibilities, may facilitate IPV screening uptake in the dental setting.

Key Words. Intimate partner violence; oral health; screening.

JADA 2018;149(2):112-121

<https://doi.org/10.1016/j.adaj.2017.09.003>

Intimate partner violence (IPV) has been identified by the Centers for Disease Control and Prevention (CDC) as a serious and preventable public health issue, affecting millions of people in the United States.¹ According to the CDC's National Intimate Partner and Sexual Violence Survey 2010 Summary Report, approximately 10 million men and women in the United States are subject to physical abuse by an intimate partner each year (1 in 3 women and 1 in 4 men report being subject to some form of physical violence by an intimate partner in their lifetimes).² Data from the National Crime Victimization Survey published in 2014 documented that more than one-fifth of all violent crimes were due to violence committed by family or intimate partners.³ Furthermore, although almost one-half of such episodes inflicted injury, only 34% of people injured by an intimate partner sought medical attention. Research suggests that medical health care professionals who frequently encounter patients experiencing IPV, including emergency department physicians, obstetricians, and primary care physicians, do not routinely screen for such incidents, even when treating an afflicted patient's injuries.⁴⁻⁸ Compared with other risk assessments, namely those for alcohol, tobacco, and drug use, screening for IPV has been found to be the least common and most difficult practice among primary and prenatal care providers because of discomfort, lack of resources, and, among male providers, a perceived sex preference that patients are more comfortable discussing IPV with female providers.^{9,10}

The dental setting has been recognized as an important venue for identifying people who are survivors of IPV,¹¹ given that the most common locations of injury are the face and head.¹²

This article has an accompanying online continuing education activity available at: <http://jada.ada.org/ce/home>.

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Common specific orofacial signs of abuse that can be identified through a dental examination include bruising of the neck and palate, bite marks, tearing of the labial frenum or mucosal lining, lacerations, nonvital or discolored teeth, traumatic tooth or jaw fractures, pathologic process that is not consistent with the self-reported cause, and multiple injuries that are in different healing stages.¹³⁻¹⁵ Potential behavioral indicators of abuse that are relevant to the dental setting include dental neglect, failure to attend appointments for required treatments because of activity restrictions enforced by the perpetrator, unnecessary partner attendance at appointments, patient reluctance to speak in the presence of the partner, and anxious, fearful, or depressed behavior.^{13,14,16}

Research has found that dental professionals have sometimes failed to recognize signs of abuse or failed to report suspected cases out of concern for patient alienation and retaliation lawsuits from family members.^{15,17} The results of a 2009 survey of women residing in violence shelters in north Texas found that more than one-half had seen a dentist when physical signs of their abuse were visible, which consisted of high percentages of lip, facial, and neck injuries (29%, 25%, and 14%, respectively) and broken teeth (15%). Although just more than 13% of these women reported that a dental staff member actually inquired about their injuries, more than two-thirds indicated that they would have appreciated being asked.¹⁸ A national survey of dentists conducted in 1997 through 1998 found that most dentists did not screen returning or new patients (85% and 87%, respectively) for IPV, and almost one-fifth did not screen patients even in the presence of multiple visible injuries.¹⁹ Barriers to such screening included lack of training, concern about patient responses, lack of a referral mechanism, and attitudes that such screening was not of their professional concern.

To better understand how dentists perceive their roles in addressing the IPV epidemic, we conducted a nationally representative survey of dentists and asked

- if they were using a health history form that inquires about family violence or IPV;
- if they had a referral source to which they could refer patients experiencing abuse;
- whether they agreed that screening for IPV should be part of their role as a health care professional;
- if they had any prior training about IPV;
- their perceived clinical knowledge about IPV.

METHODS

The methods of this study were described previously.^{20,21} The institutional review boards of the University of Miami, Columbia University, and University of Chicago approved the study. We conducted a nationally representative survey of US dentists with the use of the American Dental Association (ADA) Survey Center sampling frame. A random sample was drawn, stratified by urbanicity and by practice type, specifically oversampling 80% of the 383 dentists who identified as being a public health dentist. This specific subset of the dental workforce was oversampled because public health and community-based dentists have been identified by the CDC and National Association of Community Health Centers as more amenable to nontraditional screenings than private practitioners.^{22,23} The survey was distributed and monitored for participation by the University of Chicago's National Opinion Research Center, which used multiple forms of contact (for example, prenotification letters, multiple mailings of the instrument, and repeated email and fax and telephone reminders) to achieve a high response rate over the study period (November 2010 through November 2011). All elements of informed consent were described in the cover letter, and survey participation implied consent. Dentists were given the option of completing the survey electronically or on paper and received monetary remuneration in the initial mailing (\$10) and on completion (\$20 for initial responders, and bonus incentives of \$50 to \$100 over time to increase incentive for long-term nonresponders).

The survey instrument consisted of 38 questions that queried dentists about their attitudes, practices, and willingness to conduct specific kinds of medical preventive screenings, including IPV. Additional information was collected about dentists' demographic, practice, and patient characteristics and about knowledge and education in the specified areas of preventive health care. For the present analysis, the 2 main outcomes of interest were

- whether dentists agreed that screening for family violence or IPV should be part of the dental professional role, using a 4-point Likert scale ranging from "strongly disagree" to "strongly agree" that was later dichotomized for analysis to "agree" or "disagree";

ABBREVIATION KEY

- ADA:** American Dental Association.
- CDC:** Centers for Disease Control and Prevention.
- HIV:** Human immunodeficiency virus.
- IPV:** intimate partner violence.

Table 1. Dentists' attitudes about their role in intimate partner violence screening and their query about intimate partner violence in their health history forms, by dentists' characteristics (weighted proportions).

CHARACTERISTIC	NO. OF DENTISTS	OVERALL, %	AGREES SCREENING FOR IPV* SHOULD BE PART OF DENTIST'S ROLE		PATIENT HISTORY FORM INCLUDES QUESTION ABOUT IPV	
			%	P value	%	P value
Sample Stratum				.227		.353
Ryan White Eligible Metropolitan Area [†]	1,168	41.8	44.5		8.2	
Non-RW metropolitan area	212	46.6	44.6		6.6	
Non-RW micropolitan area	112	7.5	34.7		3.0	
Rural	116	3.9	35.6		8.1	
Public health	194	0.3	49.6		9.6	
Age (Quartiles)				.010		.611
25-43 y	420	24.4	50.7		9.0	
44-52 y	440	22.6	49.1		6.8	
53-59 y	442	25.6	38.5		5.4	
60-99 y	476	27.4	37.1		7.0	
Sex				.020		.052
Female	439	21.7	51.5		10.5	
Male	1,347	78.3	41.3		6.0	
Race				.205		.670
White	1,298	78.6	41.6		7.3	
African American	93	3.5	52.0		5.8	
Asian	252	13.7	50.7		5.2	
Other	122	4.2	38.9		6.8	
Primary Practice Setting				.013		.314
Private solo practice	1,063	65.4	40.2		6.2	
Private group practice	465	30.0	47.6		8.6	
Public health	194	0.3	49.6		9.6	
Other (government settings, hospital/medical group/health care clinics, safety-net provider/nonprofit)	80	4.3	62.8		9.8	
Treats Medicaid Patients				.983		.200
No	136	71.6	43.6		7.7	
Yes	528	28.4	43.7		5.5	
Year Graduated				.003		.187
Before 1970	128	7.3	28.5		2.5	
1970-1979	444	25.0	36.3		6.9	
1980-1989	581	33.6	44.5		5.7	
1990-1999	335	17.5	50.0		7.9	
2000 and later	279	16.6	53.8		11.1	
Amount of Training in IPV				.000		.000
None	906	53.2	26.7		4.5	
< 1 h	332	18.6	51.6		4.3	
1-4 h	350	17.4	63.3		8.3	
5-8 h	111	6.9	80.7		17.3	
> 8 h	83	3.8	81.8		28.1	

(continued)

Table 1. Continued

CHARACTERISTIC	NO. OF DENTISTS	OVERALL, %	AGREES SCREENING FOR IPV* SHOULD BE PART OF DENTIST'S ROLE		PATIENT HISTORY FORM INCLUDES QUESTION ABOUT IPV	
			%	P value	%	P value
Self-Rated Clinical Knowledge of IPV				.000		.000
None/limited	794	45.1	25.0		3.6	
Moderate	661	37.5	51.7		5.6	
Good	284	15.0	70.9		17.9	
Excellent	48	2.4	93.6		29.4	
Knows IPV Referral Place				.000		.016
No	1,015	55.1	35.0		5.1	
Yes	766	44.9	54.0		9.6	
Patient History Form Includes Question About IPV				.000		
No	1,641	92.9	41.1			
Yes	142	7.1	73.4			
Agrees Screening for IPV Should Be Part of Dentist's Role						.000
No	991	56.5			3.4	
Yes	781	43.5			12.2	

*IPV: Intimate partner violence; †A Ryan White Eligible Metropolitan area is a region most severely affected by the HIV/AIDS epidemic (and thus deemed eligible for Ryan White funding for HIV/AIDS resources). To qualify for EMA eligibility, the area must have at least 2,000 reported AIDS cases in the past 5 years and have a population of at least 50,000.

- whether dentists included questions about IPV on their patient health history forms, assessed by binary response (yes/no).

Statistical analysis

All analyses were completed using Stata, Version 12 (StatCorp). Weighted percentages for frequencies and 2-way tables were calculated with the `svy:tabulate` command, accounting for weighting and stratification and producing Pearson χ^2 statistics corrected for the survey design. Multivariable analyses were performed unweighted, incorporating variables used for stratification and weighting as covariates. Risk ratios were estimated by using a Poisson regression model with a robust error variance. Bivariate analyses informed model specification and final models. Dependent variables were dentists' responses to the 2 survey items, corresponding to the specified outcomes of interest. Both models initially included the full list of variables, including the other dependent variable as a covariate, and then were both reduced to a parsimonious model that only included significant ($P \leq .05$) covariates (other than stratum, age, sex, and race/ethnicity, which were retained in both models regardless of significance). For the covariate assessing prior training in IPV, the categories "5 to 8 hours" and "greater than 8 hours" were collapsed into a single category "5 or more hours" in the final model, because of low response frequencies in these individual categories.

RESULTS

A total of 2,876 dentists were contacted, of whom 328 were subsequently deemed ineligible to participate. The final response rate was 70.7% (equating to 1,802 dentists) (Table 1). More than three-quarters of the sample were men (78.3%), and most self-reported being white (78.6%). Most worked in private practice settings (65.4% solo, 30.0% group) and did not accept Medicaid patients in their practice (71.6%). The median age of the final sample was 53 years. Demographic characteristics from our analyzed sample are comparable with ADA data²⁴ on the US dental workforce (80% men, 86.2% white race/ethnicity, 92% professionally active in private practice, and 31% aged

45 to 54 years [the highest percentage of any other age bracket]), supporting the representative nature of our survey population of the national dentist workforce.

Slightly more than one-half of dentists overall (53.2%) reported no prior training in IPV. Less than 4% reported the highest amount of training, which was more than 8 hours. When asked to rate their clinical knowledge of IPV, almost one-half of the dentists (45.1%) stated “none/limited,” and more than one-third (37.5%) stated “moderate.” Only 15% rated their knowledge as “good,” and only 2.4% claimed to have “excellent” knowledge. Dentists almost universally (92.9%) did not include a question on their patient history form about IPV. Most dentists also did not know of a referral place for patients experiencing IPV (55.1%) and did not believe that screening for IPV should be part of their role as a dentist (56.5%).

Characteristics associated with dentists’ agreement that screening for IPV should be part of their professional role and whether their patient health history form queries about IPV are described in [Table 1](#). Female dentists were more likely to believe that IPV screening should be part of their role as a dentist than were their male colleagues (51.5% versus 41.3%, respectively) ($P = .020$). Younger dentists were more likely than their older colleagues to agree with the compatibility of such screening with their professional roles as dentists; although approximately one-half of dentists in the younger age quartiles were in agreement, less than 40% in the older quartiles agreed ($P = .010$). A similar trend was also noted according to year of graduation; dentists who had graduated more recently, and thus are presumably younger, indicated greater agreement with IPV screening as part of their professional roles as dentists than dentists who graduated longer ago ($P = .003$). None of these variables were substantially associated with dentists’ inclusion of IPV questions on their health history forms.

Prior training in and self-reported clinical knowledge about IPV were both associated with the outcomes; both agreement with screening and use of health history screening increased with progressive amounts of prior training and level of self-reported clinical knowledge. Although more than 80% of dentists with 5 or more hours of prior training agreed with the compatibility of IPV screening with their profession, only approximately one-quarter of dentists with no training and one-half of dentists with less than 1 hour of training were in agreement ($P = .001$). The percentage of dentists with 5 to 8 hours and more than 8 hours of prior training who queried about IPV in their health history forms (17.3% and 28.1%, respectively) was markedly greater than dentists with less than 1 hour of training or no training (4.3% and 4.5%, respectively). Agreement with the idea that IPV screening is an appropriate part of dentists’ role also ranged from almost 94% in dentists with “excellent” clinical knowledge, almost 71% when “good,” 51.7% when “moderate,” and only 25% when “none/limited” ($P < .000$). Similarly, IPV screening by means of health history forms was almost 30% for dentists with “excellent” clinical knowledge and almost 18% for “good” knowledge, yet less than 6% and 4% for dentists with “moderate” and “none/limited” knowledge, respectively ($P = .001$).

Whether dentists had an IPV referral resource was associated with their acceptance of IPV screening and use of a health history form that asked about IPV. Among dentists who did know of a referral mechanism, somewhat more than one-half (54.0%) believed that IPV screening should be part of their professional roles as dentists. This was considerably greater than dentists who did not know of a place to refer these patients (35.0%). Dentists with a known referral for IPV were considerably more likely to query about IPV in their history forms (9.6%) than dentists who did not have a referral source (5.1%) ($P = .016$). Finally, dentists’ agreement that IPV screening should be part of the dentist’s role and inclusion of IPV questions on their history forms were positively associated. More than 73% of dentists who queried about IPV on their health history forms were agreeable to screening compared with 41.1% of dentists who did not query, and 12.2% of dentists who agreed that screening was compatible with their role included questions about IPV on their forms compared with the 3.4% who did not agree with the compatibility of such screening.

Multivariable analysis found that male dentists compared with female dentists were less likely to agree with IPV screening as part of their role (incidence rate ratio [IRR,] 0.89; 95% confidence interval [CI], 0.80 to 0.99), although they were not considerably less likely to include IPV-related questions on their history forms ([Table 2](#)). Compared with their white colleagues, black dentists (IRR, 1.30; 95% CI, 1.08 to 1.56) and Asian dentists (IRR, 1.19; 95% CI, 1.03 to 1.37) were more likely to have agreeable attitudes about IPV screening as part of their roles as dentists. Dentists reporting having more training in IPV were more likely to agree with such screening as part of the dentist’s role than dentists without such prior training (IRR range, 1.43 to 1.58 as numbers of hours of training progressively increased). Similarly, dentists reporting better clinical knowledge about

Table 2. Correlates of dentists' agreement with intimate partner violence screening and their query about intimate partner violence in their health history forms (adjusted).

CHARACTERISTIC	AGREES THAT SCREENING FOR IPV* SHOULD BE PART OF THE DENTIST'S ROLE		PATIENT HISTORY FORM INCLUDES QUESTIONS ABOUT IPV	
	IRR [†]	95% CI	IRR	95% CI
Sample Stratum				
Ryan White Eligible Metropolitan Area [‡]	1.05	0.90 to 1.22	0.91	0.57 to 1.46
Non-RW metropolitan area	1.08	0.88 to 1.31	0.64	0.31 to 1.29
Non-RW micropolitan area	0.91	0.69 to 1.20	0.53	0.19 to 1.53
Rural	0.85	0.65 to 1.12	0.90	0.41 to 1.97
Public Health	1.0		1.0	
Age (Y)	1.0	0.99 to 1.00	1.00	0.99 to 1.02
Sex				
Female	1.0		1.0	
Male	0.89	0.80 to 0.99	0.80	0.56 to 1.16
Race				
White	1.0		1.0	
African American	1.30	1.08 to 1.56	1.24	0.66 to 2.34
Asian	1.19	1.03 to 1.37	1.01	0.62 to 1.64
Other	1.12	0.94 to 1.33	1.40	0.84 to 2.35
Amount of Training in IPV				
None	1		§	§
< 1 h	1.43	1.22 to 1.68	§	§
1-4 h	1.58	1.36 to 1.84	§	§
≥ 5 h	1.58	1.34 to 1.87	§	§
Self-Rated Clinical Knowledge of IPV				
None/Limited	1.0		1.0	
Moderate	1.67	1.43 to 1.96	1.64	1.04 to 2.57
Good	1.95	1.63 to 2.32	3.10	1.93 to 4.97
Excellent	2.15	1.73 to 2.67	2.68	1.23 to 5.84
Knows IPV Referral Place				
No	1.0		§	§
Yes	1.19	1.07 to 1.32	§	§
Patient History Form Includes Question About IPV				
No	1.0		—	—
Yes	1.25	1.10 to 1.41	—	—
Agrees Screening for IPV Should Be Part of Dentist's Role				
No	—	—	1.0	
Yes	—	—	2.13	1.44 to 3.16

*IPV: Intimate partner violence; †IRR: Incidence rate ratio; ‡A Ryan White Eligible Metropolitan area is a region most severely affected by the HIV/AIDS epidemic (and thus deemed eligible for Ryan White funding for HIV/AIDS resources). To qualify for EMA eligibility, the area must have at least 2,000 reported AIDS cases in the past 5 years and have a population of at least 50,000; §Variable not included in the final parsimonious model.

IPV compared with dentists with “none/limited” knowledge were more likely to agree with IPV screening as part of their role (IRR range, 1.67 to 2.15 as knowledge progressively increased) and more likely to query about IPV through their health history forms (IRR range, 1.64 to 3.10). Knowing of a place to refer patients experiencing IPV was associated with dentists being 1.19 times

(95% CI, 1.07 to 1.32) more likely to believe IPV screening should be part of their roles. Finally, dentists who used a health history form that inquired about IPV were more likely to believe such screening was part of their roles as dentists (IRR, 1.25; 95% CI, 1.10 to 1.41), and dentists who agreed with IPV screening as part of their roles as dentists were more likely to include IPV-related questions on their patient health history forms (IRR, 2.13; 95% CI, 1.44 to 3.16).

DISCUSSION

The results of our nationally representative survey of dentists, strengthened by our high response rate, present an updated picture on the status of dentists' attitudes and practices toward IPV screening. In general, a low percentage of dentists queried their patients about IPV on health history form. Despite research indicating that dentists are willing to provide chairside medical preventive screening,²⁵ less than one-half (43%) of our sample agreed that screening for IPV should be part of the dentists' role, and only a small percentage of this group (12.2%) included questions about IPV on their health history forms. This level of acceptance of IPV screening as part of the dentists' professional role is lower than has been reported about dentists' acceptance of substance misuse screening²⁰ (53.9%) and tobacco screening²⁶ (77.9%) and similar to that for human immunodeficiency virus (HIV)²¹ (40%). Because HIV and IPV are both sensitive and life-threatening issues and because it can be uncomfortable to broach stigmatized conditions, dentists' support of rapid HIV testing and IPV screening may likely be lower than that for less-stigmatized conditions that are easier to discuss, such as hypertension, cardiovascular disease, and diabetes.^{25,27-34} These results suggest that barriers exist because of dentists' attitudes and practices specific to IPV which need to be overcome for dentists to play an active role in screening and referring patients who are experiencing IPV.

Given the literature documenting the high burden of IPV among ethnic minorities, especially the African American and Asian American communities, it is perhaps unsurprising that dentists of these races are more receptive to screening their patients for violence as part of their professional role.^{2,3,35} Because these dentists are likely more exposed and attuned to this public health issue that disproportionately affects their communities, they may be more willing to play a role in its identification. Minority women in particular are less likely to report abuse because of such factors as fear of family alienation, distrust of law enforcement, fear of deportation, shelter and intervention services that are not culturally competent, and religious convictions.³⁵ Therefore, dentists from minority communities can potentially play an instrumental role in identifying and querying about signs of violence with patients who are often incapable of speaking out on their own accord. However, it is important that the entire dental community be mindful that IPV is a widespread public health issue that knows no racial or ethnic boundaries, and that dentists' roles in screening should not be limited to 1 particular subgroup.

Sex differences were also noted regarding attitudes about dentists' roles in IPV screening as dental professionals. This is similar to research that found that female physicians were more educated about and comfortable identifying those who experience violence and had more favorable attitudes about educational programs and government involvement in IPV issues.^{36,37} Although men can also experience IPV, it is far more common among women.^{2,38} Yet, investigators have found mixed outcomes regarding the issue of whether women, including survivors of IPV and military veterans, have a sex preference for their physicians and counselors during IPV screening and counseling.^{37,39,40} Understanding how sex roles shape both patient and practitioner attitudes and stereotypes toward IPV is important in the progress toward the development of more targeted education prevention efforts, especially if these differing attitudes are related to lived experiences, personal acquaintances with IPV survivors, or sex-related social contexts.⁴¹⁻⁴³ Therefore, it is important that male dentists play an equivalent role in IPV advocacy as health care professionals who are well positioned to identify and refer cases of IPV.

Our study finding that more than one-half (53%) of participants did not have any prior education in IPV is a slight improvement over the 57% who reported no IPV education in the aforementioned 1997 to 1998 national survey of dentists.¹⁹ Findings from both studies indicated that increased hours of IPV education were associated with a more positive attitude or greater likelihood that practitioners would screen for IPV. Specifically, in our survey, prior training and self-reported clinical knowledge in IPV were 2 of the most influential factors affecting dentists' practices and attitudes toward IPV screening with their dental patients. However, even though having more IPV training and clinical knowledge was associated with greater acceptance of IPV screening as part of

the dental professional role, this did not necessarily translate into actual clinical practice; although the frequencies of querying about IPV through patient health histories among dentists with the highest levels of training and clinical knowledge were higher relative to dentists with less knowledge and training, these absolute percentages were nonetheless overall low. For instance, dentists who reported more than 8 hours of IPV training and dentists with excellent clinical knowledge of IPV were highly agreeable to IPV screening being a part of their professional role (81.8% and 93.6%, respectively), yet far fewer included a question about IPV on their health history forms (28.1% and 29.4%, respectively). Because having IPV-related knowledge and a favorable attitude was not necessarily sufficient to empower dentists to perform screening, other barriers may be present, including the belief that patients would not be willing to discuss IPV, a fear of offending patients, low perceived self-efficacy to broach the subject of IPV, or the stigma associated with IPV.^{19,44-47} Research has found that realistic approaches to IPV screenings that are simple, targeted, and easily integrated into clinical routine practice are effective strategies for intervening without imposing considerable barriers on health care practitioners.⁴⁸⁻⁵² Through brief, focused interventions, including the AVDR approach—Ask patients about abuse; Validate that battering is wrong; Document signs, symptoms, and disclosures; and Refer survivors to IPV specialists—physicians are able to play a defined, albeit limited, role in identifying patients experiencing IPV and referring them accordingly, with minimal time, resources, and professional disruptions to their normal practices.⁵⁰ These interactive educational approaches specifically were tested with both practicing dentists and dental students and documented changes in dental professionals' attitudes of empowerment and willingness to screen for and treat survivors of IPV.^{53,54} Furthermore, oral health treatment programs established in IPV shelters not only have helped train dentists to treat survivors of IPV but also have found a positive impact on these shelters' residents who receive dental treatment, with regard to their oral health—related quality of life, usage of dental services, and the interpersonal patient—doctor relationship.^{16,55} Much can be learned from those dentists who are querying their patients about IPV, especially about how their attitudes and backgrounds have shaped their clinical decisions to advocate and screen for IPV and how their experiences can help empower other dentists to screen.

Our survey only asked dentists if they have a question about IPV on their patient health history forms as a means of screening patients for IPV. There are other common methods to screen for IPV, such as through oral query or a computer-based questionnaire, which dentists may be otherwise using.⁵⁶ However, perceptions and speculations about dental patients' willingness to disclose remain a persistent barrier to dentists' screening for medical conditions.^{21,29,31,57} Because investigators have found that patients are willing to disclose their experiences with IPV to their health care providers,^{52,58-61} it is important for dentists to understand the tremendous opportunity they may have through the acts of “compassionate asking”⁶²—irrespective of the manner used—and to provide a unique opportunity for patients to comfortably, compassionately, and safely communicate their IPV experience.^{56,63}

Our study finding about the importance of awareness of referral sources can be compared with the results of the aforementioned national survey of dentists,¹⁹ which found that 41% of participants reported they did not have a list of referral agencies. It is concerning that, in our study conducted 15 years later, an even greater percentage of participants (55%) did not have a list of referrals for IPV survivors. Lack of awareness of a referral source for patients has frequently been cited as a barrier toward dentists' acceptance of medical screenings,^{25,26,64,65} and in this case it was also an influential factor in dentists' attitudes about their professional role to screen for IPV. Uncertainty about where to refer IPV survivors for services has been a noted barrier and source of low self-efficacy to IPV screening among a variety of health care practitioners.⁶⁶ Other investigators have underscored the importance and effectiveness of establishing referral pathways through close partnerships between health care providers and IPV services to facilitate the linkage to supportive resources and to improve practitioners' perceptions of competence and effectiveness.^{7,67-70} Without a referral source, educational trainings and interventions, especially those that include referring patients as a pivotal step, will likely be limited in their effectiveness; it is therefore critical to bridge the gap between the dental community and the agencies and shelters that support survivors of IPV to foster and facilitate a more efficient mechanism of referral and collaboration.

IPV is a complex social problem that cannot always be identified through traditional screening mechanisms.⁷¹ Many patient barriers to screening in health care settings have been noted, including loss of privacy, emotional distress, discomfort about the topic, and concerns about reprimanding abuse

if the abuse is reported.³⁸ As such, dentists are not alone among health care providers and others in their reluctance to screen for IPV, because the demands of playing an active role in IPV screening can be complicated, sensitive, and overwhelming for practitioners.^{10,49} Only in the past several years did the US Preventive Screening Task Force start to recommend that clinicians screen women of childbearing age for IPV and to provide referrals for intervention services accordingly.⁷² Before 2012, the US Preventive Screening Task Force had determined that there was not sufficient evidence to support such screening.³⁸ Now, health care systems are being called on by agencies such as the CDC to enhance their response to this public health problem by assessing signs and symptoms of violence, acquiring more knowledge and skills related to IPV, providing sensitive and culturally competent care to people experiencing IPV, and strengthening their ability to help these people navigate the health care system and seek needed services and resources.² As primary care practitioners who develop longstanding relationships with their patients and treat these patients with regular frequencies, dentists can play a pivotal role in identifying and advocating for survivors of IPV, who often do not have a voice for themselves, especially because so many signs of IPV are localized to the head and neck.

CONCLUSIONS

Our study identifies the barriers to dentists doing their part. As has been the case with other medical preventive screenings in dentistry such as rapid HIV testing²¹ and substance misuse screening,²⁰ dental practitioners have been slow in their uptake of IPV screening in response to many barriers at the practical level. These barriers include lack of a referral source and dentists' reluctance to view IPV screening as being within the scope of their practice. Thus, many hurdles must be overcome to induce greater involvement of the dental profession in addressing IPV as a relevant public health problem. We urge expansion of educational offerings that promote IPV dental education both within the dental school curricula and through continuing education programs, along with collaborations between the dental community and IPV agencies to facilitate referrals.⁵⁵ Dentists must also endorse an overall change in their attitudes about the appropriate scope of dental practice and their professional responsibility to include screenings in general patient care, and, specifically, to screen patients for IPV. The critical need for dentistry to address boldly this epidemic should not be delayed. ■

SUPPLEMENTAL DATA

Supplemental data related to this article can be found at <https://doi.org/10.1016/j.adaj.2017.09.003>.

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Disclosure. None of the authors reported any disclosures.

This study was funded by grant R01 DE019615 from the National Institute of Dental and Craniofacial Research.

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