

Domestic Violence Knowledge and Attitudes Among Minnesota Dental Hygienists: A pilot study

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ABSTRACT

Purpose The prevalence of intimate partner domestic violence (DV) increased in frequency during the global COVID-19 pandemic. The purpose of this pilot study was to assess dental hygienists' knowledge, attitudes, and readiness to manage patients experiencing DV in the state of Minnesota.

Methods A cross-sectional study design was used on a convenience sample of dental hygienists. The validated Physician Readiness to Manage Intimate Partner Violence Survey (PREMIS) was used to collect the data. Survey items included demographic variables and measured attitudes and knowledge regarding intimate partner DV. Paper surveys were distributed to attendees at the Minnesota Dental Hygienist Association Annual Meeting. ANOVA and linear regression models were used to assess associations between domestic violence knowledge scores and respondent demographics and attitudes.

Results Eighty-eight surveys were distributed; 31 surveys were completed and met the inclusion criteria for data analysis. The overall mean knowledge score was 11.6 from a possible score of 17. No significant differences were found by age, degree type, or years in practice and domestic violence knowledge or attitudes. Most respondents (64.5%) indicated a lack of preparedness to ask appropriate questions regarding DV and only a little more than half knew how to respond to disclosures of DV (51.6%) or were aware of the state's legal requirements for reporting DV (58.0%).

Conclusion Participants demonstrated moderate knowledge of DV and recognized the importance of identifying and providing support for DV victims. However, participants were unsure of current state-mandated guidelines for reporting DV. Future exploration of reporting mandates will better support dental hygienists in their professional obligations identifying victims of DV.

Keywords dental hygienist, domestic violence, intimate partner violence, domestic abuse, mandated reporters NDHRA priority area, **Professional development: education** (evaluation).

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INTRODUCTION

Results of the National Intimate Partner and Sexual Violence Survey from the Centers for Disease Control and Prevention (CDC) indicated that 1 in 4 women and 1 in 10 men have experienced sexual violence, physical violence, and/or stalking by an intimate partner and have reported some form of impact relating to intimate partner violence also known as domestic violence (DV) during their lifetime.^{1,2} The United States (US) Department of Justice defines DV as a pattern of abusive behavior in any relationship that is used by one partner to gain power or control over another intimate partner. Intimate partners are defined as spouses, former spouses, a person in a current or past intimate relationship, the parent of a child in the current or past relationship, or individuals who are cohabiting or have previously cohabitated together.³ Intimate partner violence is defined by the World Health Organization (WHO) as “behavior by an intimate partner or ex-partner that causes physical, sexual or psychological harm.⁴ Examples include, but are not limited to, stalking, rape, physical, emotional and financial abuse.⁴ Eighty percent of women who have experienced some form of DV have reported long or short-term effects related to the trauma experienced from those incidents.⁵

It is important to acknowledge that individuals who are victims of DV often want to leave their situation but find it difficult to do so for a variety of reasons including fear of losing children, financial consequences of leaving, and the fear of what their partner may do if they leave.⁶⁻⁸ The cycle of violence begins in the *Tension Building* phase where the abuser becomes angry and may yell and use harsh or critical language.⁶⁻⁸ During this phase, victims often feel that they are “walking on eggshells.”⁶⁻⁸ The *Tension Building* phase leads to the *Battering Phase* where the abusive partner may make verbal threats, sexually assault, or cause physical harm to the partner that is the victim.⁶⁻⁸ This is followed by the *Honeymoon Phase* where the abusive partner may deny or make excuses for abuse, buy the victim gifts and promise to never perform the abusive act again.⁶⁻⁸ It is during this

phase when victims of DV may find it difficult to leave their situation.⁶⁻⁸ The *Tension Building* phase typically follows the *Honeymoon Phase* and the cycle begins over again.⁶⁻⁸

Intimate partner DV is a public health crisis that affects people of all ages, races, and socioeconomic statuses.^{9,10} However, DV is more prevalent in young adults (18 – 24 years), individuals who consider themselves to be in gender and sexual minorities, and certain racial or ethnic groups.⁹ It is important to emphasize the effect that recent global events have had on the increase in cases of domestic abuse, namely the COVID-19 pandemic beginning in March of 2020.¹¹⁻¹³ To curb the spread of the SARS CoV-2 virus, governments around the world ordered individuals to shelter-in-place effectively trapping victims of DV with their abusers.¹⁴⁻¹⁵ Possible contributory factors to the increased incidence of DV were that abusers and victims were forced to spend more time confined together, shelter-in-place orders have led to a decreased ability for women in DV situations get help, and consequences of shelter-in-place orders have caused financial and employment stress, events that are associated with DV.¹⁴⁻¹⁵⁻

In the US, it has been reported that shelter-in-place orders related to the COVID-19 pandemic led to a 7.5% increase in calls for service at abuse hotlines and websites during March, April, and May of 2020.¹³ The most significant increase was noted the first five weeks of shelter-in-place when DV calls increased by 9.7%.¹³ Boserup et al. identified a statistically significant increase in calls from households that had no history of DV calls, suggesting that the COVID-19 pandemic led to new cases of DV.¹¹ Police reports from Portland, Oregon identified a 22% increase in arrests related to DV during the early weeks of shelter-in-place, while reports from San Antonio, Texas showed 18% more DV calls in March 2020 as compared to March 2019.¹¹ There seemed to be a national trend in an increased need for police to respond to DV calls across the US. While shelter-in-place has been lifted and measures related to curbing the spread of COVID-19 are

ongoing, it is still important for dental hygienists to be knowledgeable about the potential prevalence of DV victims in their patient population. As oral health care providers, dental hygienists should know how to identify possible signs of DV in their patients and be comfortable in referring patients to the appropriate entities for safety and support. The purpose of this pilot study was to assess dental hygienists' knowledge, attitudes, and provide preliminary insight on dental hygienists' readiness to manage patients impacted by DV in the state of Minnesota.

METHODS

The University of Minnesota Institutional Review Board (IRB) determined this pilot study exempt (STUDY00014172). A descriptive cross-sectional paper survey design was used on a convenience sample of members of the Minnesota Dental Hygienists' Association (MDHA) (n=220). Attendees at the October 2021 MDHA Annual Session were invited to participate (n=88). Dental hygiene students in attendance were excluded from participation. Due to the descriptive nature of the pilot study, a power analysis for statistical tests was not required.

Survey instrument

The pilot study had three specific aims: 1) assess dental hygienists' knowledge to identify victims of DV, 2) assess dental hygienists' attitudes to manage victims of DV, and 3) identify dental hygienists' preparedness to manage victims of DV. The Physician Readiness to Manage Intimate partner violence Survey (PREMIS) was modified for use.¹⁶ The 36-item instrument included seven demographic questions, five knowledge items including one question assessing perceived facts regarding DV, 11 true/false items to assess attitudes, 11 5-point Likert scale items to assess readiness to manage DV and one item regarding current interest to learn more on how to identify, refer, and provide resources for domestic violence victims. A total knowledge score of 17 was possible and calculated by assigning point values to the five knowledge questions. Participants earned points based on how many of the correct responses

they selected to assess some knowledge in that area. The 11 true/false items examined attitudes regarding DV and responses were summarized for the sample and were used to assess the correlation between knowledge and attitudes. The remaining questions pertained to participants' interest in learning more regarding how to identify, refer, and provide resources for victims of DV.

The following terms were defined in the survey: 1) domestic violence victims (DVV) persons who have suffered assault, repeated violence, or any other cruel treatment at the hands of an intimate partner; 2) Domestic violence (DV) may be manifested in any aspect of a person's life including physical or sexual abuse or both, such as beating, slapping, forced sexual relations, sexual comments; emotional or mental abuse such as social isolation, accusations, constant criticism of appearance, property offenses such as breaking and throwing objects, and also financial restriction.

The paper survey was disseminated in person at the MDHA two-day Annual Session. The student investigator had a research booth with a poster to gain the interest of participants. Interested attendees who approached the research booth were provided an information sheet that served as an informed consent form (ICF) and a paper survey. No personal identifying information was obtained from the participants. Inclusion criteria were age 18 and older, MDHA member licensed dental hygienist, and English literacy.

Data analysis

Descriptive statistics were used to summarize item responses related to participant demographics, domestic violence knowledge, and attitudes toward domestic violence. ANOVA and linear regression were used to assess the association between the item responses and the participants' DV knowledge score. In the case of a significant omnibus ANOVA test, pairwise t-tests using a Tukey correction were implemented. All statistical analyses were conducted at the 0.05 significance level using a statistical software program (R version 4.1.0).¹⁷

RESULTS

Out of the 88 attendees at the MDHA annual conference, 35 participants completed the survey; four were excluded because they did not meet the inclusion criteria. The final sample consisted of 31 participants for a 35.2% response rate. Participants ranged in age from 21 to 68 years and most (73.3%) practiced primarily in a general dentistry setting. The majority (67.7%) of the study participants worked 31 hours a week or more and 48.4% earned a bachelor's degree and 38.7% earned an associate degree in dental hygiene. Most participants responded that the amount of time spent on learning about signs regarding DV was very little (29%) to some (45.2%), and the amount of time spent on learning about resources for victims of DV ranged from very little (41.9%) to some (32.3%). Participant demographics are shown in Table I.

The mean DV knowledge score 11.7 (SD 3.10) out of a possible score of 17, for an average score of 68.8%. Nearly all respondents (93.5%) correctly reported the strongest factor for becoming a victim of partner violence was the "use of violence as a means to controlling their partners." Correct responses to the DV "warning signs" were chronic unexplained pain (61.3%), anxiety (74.2%), substance abuse (58.1%), frequent injuries (77.4%), and depression (74.2%). Correct responses for reasons victims may not leave DV relationships were fear of retribution (90.3%), financial dependence (93.5%), religious beliefs (77.4%), children's needs (87.1%), love for one's partner (77.4%), and isolation (83.9%). Correct responses varied among respondents for the items addressing the most appropriate ways to ask about DV. Knowledge questions, response frequency, and correct responses are shown in Table II.

Table III provides participants' attitudinal responses. Almost all (96.7%) responded "false" to the question inquiring whether there were more important problems than DV. Most participants reported affirmative attitudes regarding DV victim identification, that DV was a medical problem, that victims were not the cause of the abuse, and that physical violence is not normal in any family. Most (80.6%) reported that their

Table I. Participant demographics (n=31)

| | Mean (SD) |
|--|-------------|
| Age (years) | 42.9 (12.3) |
| Years practicing dental hygiene | 18.9 (13.0) |
| Category | n (%) |
| Practice setting | |
| General practice | 22 (73.3) |
| Periodontal | – |
| Orthodontic | – |
| Pediatric | – |
| Community clinic | 1 (3.3) |
| Mobile clinic | – |
| Educator | 7 (23.3) |
| Hours Worked Per Week | |
| 0-10 Hours a Week | 2 (6.5) |
| 11-20 Hours a Week | 4 (12.9) |
| 21-30 Hours a Week | 4 (12.9) |
| 31-40 Hours a Week | 16 (51.6) |
| More Than 40 Hours a Week | 5 (16.1) |
| Degree earned | |
| Certificate | 1 (3.2) |
| Associate degree | 12 (38.7) |
| Bachelor's degree | 15 (48.4) |
| Other | 3 (9.7) |
| Time spent learning about signs of DV during dental hygiene education | |
| None | 6 (19.4) |
| Very little | 9 (29.0) |
| Some | 14 (45.2) |
| A fair amount | 1 (3.2) |
| Quite a bit | 1 (3.2) |
| Time spent learning about resources for DV during dental hygiene education | |
| None | 8 (25.8) |
| Very little | 13 (41.9) |
| Some | 10 (32.3) |
| A fair amount | – |
| Quite a bit | – |

Table II. Knowledge regarding domestic violence* (n=31)

| Question | n (%) | Question | n (%) | Question | n (%) |
|---|-----------|---|-----------|--|-----------|
| What is the strongest factor for becoming a victim of intimate partner violence? | | Warning signs that patient is abused: Depression | | Most appropriate way to ask about DV: "Has your partner ever hurt or threatened you?" | |
| Ages (>30 years old) | - | True | 23 (74.2) | True | 20 (64.5) |
| Partner Abuses Alcohol/Drugs | 7 (22.6) | False | 8 (25.8) | False | 11 (35.5) |
| Gender – Female | 9 (29.0) | Reasons a DV patient may not leave relationship: Fear of retribution | | Most appropriate way to ask about DV: "Have you ever been afraid of your partner?" | |
| Family History of Abuse | 8 (25.8) | True | 28 (90.3) | True | 10 (32.3) |
| Don't Know | 7 (22.6) | False | 3 (9.7) | False | 21 (67.7) |
| Which one is generally true about people committing acts of abuse? | | Reasons a DV patient may not leave relationship: Financial dependence | | Most appropriate way to ask about DV: "Has your partner every hit or hurt you?" | |
| They have trouble controlling their anger | 1 (3.2) | True | 29 (93.5) | True | 13 (41.9) |
| They use violence as a means of controlling their partners | 29 (93.5) | False | 2 (6.5) | False | 18 (58.1) |
| They are violent because they drink or use drugs | 1 (3.2) | Reasons a DV patient may not leave relationship: Religious beliefs | | There are common, non-injury presentations of abused patients | |
| They pick fights with anyone | - | True | 24 (77.4) | True | 17 (54.8) |
| | | False | 7 (22.6%) | False | 14 (45.2) |
| Warning signs that patient is abused: Chronic unexplained pain | | Reasons a DV patient may not leave relationship: Children's needs | | There are behavioral patterns in couples that may indicate domestic violence | |
| True | 19 (61.3) | True | 27 (87.1) | True | 11 (35.5) |
| False | 12 (38.7) | False | 4 (12.9) | False | 20 (64.5) |
| Warning signs that patient is abused: Anxiety | | Reasons a DV patient may not leave relationship: Love for one's partner | | Specific areas of the body are most often targeted in domestic violence cases | |
| True | 23 (74.2) | True | 24 (77.4) | True | 15 (48.4) |
| False | 8 (25.8) | False | 7 (22.6) | False | 16 (51.6) |
| Warning signs that patient is abused: Substance abuse | | Reasons a DV patient may not leave relationship: Isolation | | There are common injury patterns associated with domestic violence | |
| True | 18 (58.1) | True | 26 (83.9) | True | 14 (45.2) |
| False | 13 (41.9) | False | 5 (16.1) | False | 17 (54.8) |
| Warning signs that patient is abused: Frequent injuries | | Most appropriate way to ask about DV: "Are you a victim of domestic violence?" | | Injuries in different stages of recovery may indicate abuse | |
| True | 24 (77.4) | True | 19 (61.3) | True | 14 (45.2) |
| False | 7 (22.6) | False | 12 (38.7) | False | 17 (54.8) |

*Correct responses are highlighted

Table III. Assessment of attitudes regarding domestic violence (n=31)

| Questions | n (5) |
|---|------------|
| My patients have no problem with domestic abuse | |
| True | 3 (9.7) |
| False | 28 (90.3) |
| There is no way to identify violence | |
| True | - |
| False | 30 (100.0) |
| Abuse is not a medical problem | |
| True | 2 (6.5) |
| False | 29 (93.5) |
| I would insult my patient if I were to ask her about abuse | |
| True | 3 (9.7) |
| False | 28 (90.3) |
| I would upset my patients trust if I were to ask her about violence | |
| True | 6 (19.4) |
| False | 25 (80.6) |
| It is not my business whether the woman has been abused | |
| True | - |
| False | 31 (100.0) |
| My health care skills and training prepared me to cope with medical problems and not with cases of abuse | |
| True | 6 (19.4) |
| False | 25 (80.6) |
| Upper-class women are not abused | |
| True | - |
| False | 31 (100.0) |
| Sometimes women are the cause of their abuse | |
| True | 1 (3.2) |
| False | 30 (96.8) |
| There are more important problems than abuse | |
| True | 1 (3.3) |
| False | 29 (96.7) |
| Some physical violence is normal in any family | |
| True | - |
| False | 31 (100.0) |

health care skills and training prepared them for cases of DV. There was no statistically significant association between knowledge and years of practice or degree obtained (p -value>0.05). Responses for attitudes related to DV were associated with participants' overall knowledge scores. There was a statistically significant association between knowledge scores and attitude questions relating to the importance of DV (p -value=0.024).

Participants were also asked about their readiness to act and refer victims of DV. Table IV itemizes the responses obtained regarding various aspects of identification, information gathering, and referral for victims of DV. Most participants were not aware of the legal requirements in Minnesota regarding reporting suspected cases of DV. Overall participants felt either neutral or comfortable regarding discussing DV with patients.

DISCUSSION

There is a gap in the literature regarding dental hygienists' knowledge, attitudes, and preparedness to support victims of DV. The rise in DV cases since the COVID-19 pandemic has brought increased attention to the role of all health care providers, including dental hygienists, in this public health and safety issue. In general, participants in this pilot study demonstrated a moderate knowledge of DV and the participants' attitudes demonstrated recognition of the importance of being prepared to identify and support patients who were victims of DV.

The first aim of this pilot study was to assess the knowledge of Minnesota dental hygienists in the identification of victims of DV. Although the specific counties in the state were not collected in the demographic information, the MDHA annual conference draws members from across the state providing a cross section of the profession. Participants reported learning "some" signs of DV and "very little" about DV resources during their dental hygiene education. Knowledge of DV may have been attained through personal or professional experiences with their patient populations or through continuing education courses. Despite the limited dental hygiene curricula reported in this study,

Table IV. Readiness regarding cases of suspected domestic violence (n=31)

| Question | n (%) | Question | n (%) | Question | n (%) |
|--|-----------|--|-----------|--|-----------|
| How prepared do you feel to do the following: | | Make appropriate referrals for victims of DV | | From a different cultural/ethnic background | |
| Ask appropriate questions about DV | | Strongly Disagree | - | Strongly Disagree | - |
| Strongly Disagree | 1 (3.2) | Disagree | 8 (25.8) | Disagree | 10 (32.3) |
| Disagree | 5 (16.1) | Neutral | 6 (19.4) | Neutral | 8 (25.8) |
| Neutral | 14 (45.2) | Agree | 14 (45.2) | Agree | 10 (32.3) |
| Agree | 10 (32.3) | Strongly Agree | 3 (9.7) | Strongly Agree | 3 (9.7) |
| Strongly Agree | 1 (3.2) | I am aware of legal requirements in my state regarding reporting of suspected cases of DV | | Dental hygienists have a responsibility to ask patients about DV | |
| Appropriately respond to disclosures of violence | | Strongly Disagree | 1 (3.2) | Strongly Disagree | - |
| Strongly Disagree | 1 (3.2) | Disagree | 12 (38.7) | Disagree | 3 (9.7) |
| Disagree | 5 (16.1) | Neutral | 5 (16.1) | Neutral | 2 (6.5) |
| Neutral | 10 (32.3) | Agree | 6 (19.4) | Agree | 19 (61.3) |
| Agree | 12 (38.7) | Strongly Agree | 7 (22.6) | Strongly Agree | 7 (22.6) |
| Strongly Agree | 3 (9.7) | I feel comfortable discussing DV with my patients | | Dental hygienists do not have the time to assist patients in addressing DV | |
| Identify DV indicators based on patient history and head/neck examination | | Strongly Disagree | 3 (9.7) | Strongly Disagree | 10 (32.3) |
| Strongly Disagree | 1 (3.2) | Disagree | 4 (12.9) | Disagree | 10 (32.3) |
| Disagree | 6 (19.4) | Neutral | 10 (32.3) | Neutral | 3 (9.7) |
| Neutral | 5 (16.1) | Agree | 12 (38.7) | Agree | 7 (22.6) |
| Agree | 14 (45.2) | Strongly Agree | 2 (6.5) | Strongly Agree | 1 (3.2) |
| Strongly Agree | 5 (16.1) | I do not have the necessary skills to discuss DV with a victim who is: | | Dental hygienists do not have the knowledge to assist patients in addressing DV | |
| Document DV history and clinical examination findings in patient's record | | Female | | Strongly Disagree | 5 (16.1) |
| Strongly Disagree | - | Strongly Disagree | 2 (6.5) | Disagree | 9 (29.0) |
| Disagree | 4 (12.9) | Disagree | 11 (35.5) | Neutral | 9 (29.0) |
| Neutral | 10 (32.3) | Neutral | 7 (22.6) | Agree | 6 (19.4) |
| Agree | 11 (35.5) | Agree | 10 (32.3) | Strongly Agree | 2 (6.5) |
| Strongly Agree | 6 (19.4) | Strongly Agree | 1 (3.2) | Dental hygienists do not have the knowledge to assist patients in addressing DV | |
| | | Male | | Strongly Disagree | 5 (16.1) |
| | | Strongly Disagree | 1 (3.6) | Disagree | 9 (29.0) |
| | | Disagree | 7 (25.0) | Neutral | 9 (29.0) |
| | | Neutral | 5 (17.9) | Agree | 6 (19.4) |
| | | Agree | 13 (46.4) | Strongly Agree | 2 (6.5) |
| | | Strongly Agree | 2 (7.1) | | |

participants' knowledge scores were generally high. However, given the current trends and rise in DV it is more likely dental hygienists may provide care to a DV patient and it is questionable whether the knowledge scores are adequate to prepare the respondent to form an action plan to manage or refer a DV patient.

One interesting knowledge outcome was the participants' inability to select what was the most appropriate way to inquire about DV. This low correct response of, "Has your partner ever hit or hurt you?" may be attributed to the sensitive nature of the topic and discomfort in inquiring about DV. This may be a topic in dental hygiene curricula and professional development courses should be addressed to better prepare dental hygienists to ask patients regarding suspected DV.

Participants reported favorable attitudes to the importance of DV, identification of victims, knowledge of DV, causative factors of DV, communication with DV victims, and viewing DV as a medical condition. Based on these results, it appears that the participants did not stigmatize victims of DV. Participants perceived that victims of DV may stay in a toxic relationship for religious beliefs, children, love of one's partner, or isolation. These findings may indicate participants had an awareness of the complexity and barriers for a victim of DV to leave a relationship. Personal experience with DV may have influenced these positive attitudes. Given the mental and emotional trauma associated with DVs, the role of patient-provider trust and rapport may be a key aspect for management and referral.¹⁹

As the cases of DV have increased since the COVID-19 pandemic, dental hygienists' attitudes towards DV may change the trajectory for the victims of DV. Findings in from this study suggested an awareness of the reasons a person might stay in a DV relationship coupled with the impact of the COVID-19 pandemic may have increased isolation of victims of DV and the challenges to seek help. The intent of the Commission on Dental Accreditation (CODA) standard 2-8a is to prepare students for effective communication and community health programs.²⁰ This standard has positioned dental hygienists to be effective communicators can serve

to prepare them to serve as an ally for DV disclosure. It is important to note that in the state of Minnesota, mandatory reporting is not required by a dental professional for domestic abuse.

Findings from this study indicated that participants were moderately prepared to manage patients who were victims of DV. Participants responded with neutral responses to most of the survey items on preparedness. One area where participants were most confident was regarding their ability to identify DV indicators based on the patient history and the head/neck examination indicating a high level of experience and understanding of normal versus abnormal clinical findings. Responses were evenly divided regarding communication preparedness. Associations between knowledge, attitudes and preparedness needs to be further examined to understand whether preparedness can be increased with knowledge and how attitude supports preparedness.

Only a small proportion of participants indicated that they were aware of any state-mandated reporting of DV in Minnesota. This lack of knowledge would support further professional development and curricular content to provide this essential information particularly since the numbers of DV cases have increased nationally. Unfortunately, there is limited information available regarding mandated reporting requirements for DV on a state-by-state basis, making it difficult to compare the rules set forth by the Minnesota Board of Dentistry. Most state dental boards, including Minnesota, have clear mandated reporting guidelines for reporting cases of child and elder abuse. However, these mandates do not encompass all age groups or individuals that would benefit from mandated DV reporting. Since there is no mandated reporting in Minnesota and limited information for other states, it is recommended that oral health care professionals have knowledge of local shelters, hotline phone numbers and websites, such as the National Domestic Violence Hotline,²¹ for patients who may be victims of DV.

While the DV knowledge, attitudes, and preparedness of a wide range of health care providers including

primary care practitioners, nurses, pharmacists, psychiatrists, and paramedics have been reported in the literature,²²⁻²⁷ no studies were found on dental hygienists. When the PREMIS instrument was used on other health care professions, provider DV knowledge and the identification of victims of DV was shown to be moderate or high.²²⁻²⁷ The gap in the literature regarding dental hygienists' DV knowledge, attitudes and preparedness limits the ability to make comparisons to other health care providers. There also is no literature assessing DV content in dental hygiene education programs or as a requirement in professional development courses.

Limitations of this pilot study include a low response rate, self-reporting, and responding to a sensitive topic. Additionally, participants could self-select participation based on an interest in DV or past experiences resulting in responder bias. The results cannot be generalized to all practicing dental hygienists' knowledge and attitudes of DV, and regional differences can be a concern with any generalizations to the profession. Findings from this pilot study demonstrated a statistically significant association ($p=0.024$) between DV knowledge scores and attitudes towards the importance of DV as a medical condition. These findings could be used to support professional development courses. Future research on the DV knowledge, attitudes, and preparedness of dental hygienists from a national sample is needed. Relationships between DV knowledge, attitudes, and preparedness need to be further assessed to identify gaps in educational program curricula and ongoing professional courses to ensure graduates and practicing clinicians are prepared to support this patient population.

CONCLUSION

Minnesota dental hygienists had a moderate knowledge regarding DV, positive attitudes towards the importance of DV, and felt moderately prepared to support and refer victims of DV. Considering the limited literature regarding dental hygienists' DV knowledge and attitudes, this pilot study provides preliminary information and support for further research. The

recent increase in DV cases during the COVID-19 pandemic and the lack of clear expectations for mandated reporting by oral health care providers for this population, underscore the need for more education and training in this area.

DISCLOSURE

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