

Inappropriate Patient Sexual Behavior in the Dental Practice Setting: Experiences of dental hygienists

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Abstract

Purpose: Workplace violence (WPV) and inappropriate patient sexual behavior (IPSB) have become increasingly prevalent in the United States. Previous research has shown health care professionals are at a 16-times higher risk of experiencing WPV and IPSB than other occupations, however, there is a lack of research in the field of dental hygiene. The purpose of the study was to examine the experiences of dental hygienists with IPSB in the workplace.

Methods: A cross-sectional survey research design was used with a purposive sample of clinical dental hygienists recruited through social media sites (n=471). The validated survey was comprised of demographic and IPSB-related questions, with one open-ended question to expand on experiences with IPSB. Descriptive statistics, Pearson's correlation, t-tests and multiple regression analysis were used to analyze the data.

Results: The survey completion rate was 49% (n=232). Career occurrence of IPSB was 85.8% and occurrence within the last 12-month period was 63.5% among the respondents. Participants who experienced all three categories of IPSB severity had the lowest median number of years in clinical practice (Md.=5.0) as compared to those who reported two categories (Md.=7) and those with only one category (Md.=10), $p=0.01$. Themes from the open-ended questions included types of patient perpetrating IPSB; type of IPSB behavior; and approaches to management of the IPSB.

Conclusion: The high prevalence of IPSB events among dental hygienists in this study warrants increased practitioner education, improved workplace policy and support for management of IPSB.

Keywords: dental hygienists, workplace violence, inappropriate sexual behavior, sexual harassment, professional-patient relations
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Introduction

According to the National Institute for Occupational Safety and Health (NIOSH), 71% of workplace violence (WPV) reported in the US has occurred in health care and social assistance settings.¹ In a 2018 study of WPV in health care settings, Rosenthal et al. found that over one third (34.4%) of physicians, nurses, physician assistants, nurse practitioners and nurse assistants reported being victims of WPV within the last 12 months.² Workplace violence can be perpetrated in multiple ways. The Centers for Disease Control and Prevention (CDC) has categorized WPV into four categories, Type 1: criminal intent, occurring when the attacker has no association to the business or staff; Type 2: occurring between a customer and client, between two

workers, or in a personal relationship; Type 3: committed by one employee towards another employee; and Type 4: ill-treatment occurring in a personal relationship that a staff member brings to the workplace.¹ Type 2 violence is the most prevalent form of WPV occurring in the health care setting, and is often carried out by patients directed towards health care professionals.¹

Previous research on WPV in health care found US physical therapists and nurses were at 16-times higher risk of being exposed to non-life threatening acts of violence as compared to other non-health care occupations.³⁻⁵ These non-threatening acts of violence can be sexual in nature and have been identified as inappropriate patient sexual behavior

(IPSB), i.e., any acts of explicit verbal, physical or sexual acts that are objectionable in a professional work environment.⁶ Inappropriate patient sexual behavior may include glaring, sensual remarks, premeditated fondling, exposure, and sexual assault.³ In addition, research shows that health care professionals were more likely to have IPSB perpetrated by individuals with cognitive impairments.³ Although the occurrence of IPSB has been found to be rising in health care settings, under reporting of this behavior has made it difficult to measure the actual prevalence of the ISP directed towards health professionals.^{2,3, 6-8, 10,13, 15-18}

In addition to a lack of knowledge regarding prevalence of IPSB, research has revealed there is an absence of policies or guidelines available to health care workers regarding the prevention and management of IPSB and this has contributed to the lack of reporting this type of WPV.⁶ A heightened awareness of workplace violence in healthcare settings may provide an opportunity to implement policy change and reveal the need for education among clinicians regarding IPSB.^{3,6-9}

Although research on IPSB has been limited in the health care professions, the fields of physical therapy and nursing have conducted research in this area.^{2,3,6,10} This research has revealed IPSB may lead to significant repercussions related to functioning in the workplace, and identified the need for more education of IPSB to improve policies, and support for health care providers who have experienced IPSB.^{3, 7,11-13} In addition, the studies highlighted the need for collaboration among managers, staff, and patients to prevent WPV and IPSB events, and revealed the importance of providing strategies to protect health care workers' safety.^{6,7} Although previous research has provided evidence of IPSB occurring among health professionals in the field of physical therapy and nursing, the occurrence of IPSB in the dental setting, and with dental hygienists, has not been explored.³ The purpose of this study was to gain an understanding of the experiences of dental hygienists in the US regarding IPSB and explore their responses to IPSB in clinical practice settings.

Methods

This cross-sectional research design survey study was deemed exempt by the MCPHS Institutional Review Board in accordance to revised Common Rule at 45 CFR 46.104 d (2) (ii) and assigned the study with protocol # IRB092719S. A purposive sample of dental hygienists was recruited through social media websites. Inclusion criteria included registered dental hygienists who held an active dental hygiene license in the US and had provided clinical care for at least 12 months. A power analysis (G*Power) for the most conservative

planned statistical test (chi-square test of independence, two-tailed, $df=7$) using a medium effect size $w=.3$, $\alpha=.05$, and 80% power, suggested a minimum sample size of $n=122$ for the study. Adjusting for expected attrition of 30% the final recommended sample size was $n=229$.

Survey Instrument

The instrument was a validated survey used previously in a study conducted with physical therapists investigating their experiences with IPSB.³ Permission was received from the authors to use and modify the instrument for dental hygiene participants. The only modifications made to the survey was the replacement of the term physical therapist (PT) with the term dental hygienist (DT). The original survey was validated using test-retest reliability with a total of 92.8% questions having Cohen's kappa values greater than 0 ($k>0$ indicating similarity in rater scores).³ The test and re-test outcomes resulted in the final version of the PT survey being comprised of 71 questions.

The survey was comprised of demographic questions (6 items), as well as 65 questions related to IPSB risk and experiences, and used both dichotomous and multiple-choice responses. A pilot test was conducted with three volunteer participants to ensure there were no issues with clarity of the questions or with completing the survey in the web-based platform (Qualtrics; Provo, UT). Changes to the survey were made based on the feedback received from the pilot study participants. Opportunities to complete the survey multiple times was prevented by use of an option available within the survey administration platform which recognizes previous participants and prevents multiple responses being included in the survey results. In addition, a forced response design was used in the survey.

An invitation to participate was posted on 10 Facebook (FB) dental hygiene group pages, with permission secured from the FB website administrators. Participants who chose to join the study were provided a link directing them to the electronic survey. Informed consent was secured prior to participants beginning the survey. The survey link was re-posted in the second and third week of data collection. The target sample population was achieved by the end of the third week.

Data analysis

Cumulative frequencies were used for categorical variables for the descriptive portion of this study. Appropriate measures of central tendency (mean, median) and variance (standard deviation, Inner Quartile Range) were calculated for continuous and ordinal variables. Distributions for all variables were analyzed for statistical assumptions including normalcy

and co-linearity. Variables were assessed for transformation to address issues of non-normal distributions or a non-parametric alternative. Outliers were identified and considered for removal (1.5*IQR). Surveys found to have less than 80% complete responses were not included in the data analysis.

Correlation was used for continuous variables (Pearson or Spearman); while chi-square tests of independence, and multiple regression (linear, logistic, ordinal, multinomial) were used for categorical variables. Logistic regression was used specifically to analyze the demographic data. To test differences in means between categorical variables a t-test or ANOVA was employed, and the non-parametric equivalent (Mann-Whitney U, Kruskal-Wallis) was used in the cases where the distribution did not meet assumptions for the Normal model. Adjustments to family wise error (e.g. Bonferroni) were made for multiple statistical tests whenever appropriate. The acceptable alpha level was set at .05.

The qualitative analysis of the open-ended comments was conducted independently by two investigators. Common words, phrases, patterns were identified to identify emerging themes. One investigator conducted analysis manually and one used a qualitative data management software. Examples of the comments were selected to illustrate each major theme.

Results

A total of 471 participants began the survey, with 232 finishing it, for a 49% completion rate (n=232). Demographic data for the participants revealed the majority of participants were female (96.1%, n=223) and the median number of years in clinical practice was 7 with the majority (91.8%, n=213) continuously treating patients over the past 12 months. Over one half of the participants (55.2%, n=128) held an associate degree and over three quarters of the participants provided clinical care in the private practice setting (78%, n=121). Sample demographic information is shown in Table I.

Responses regarding IPSB training and clinical practice environments revealed that a majority of participants worked in private (closed) treatment rooms (69.8%, n=162) and that most participants (77.6%, n=180) did not work with patients identified as cognitively impaired. Most of the participants had not received training on IPSB (69.3%, n=161) nor had employers who had developed an office protocol on the management of IPSB events (71.6%, n=166). Of the respondents who had received training (n=42), in-service sessions were the most common source of training (33.3%, n=14). Descriptions of IPSB training sessions and practice settings are shown in Table II.

Responses to the items related to the incidence of IPSBs revealed that a majority of participants (85.8%, n=199) had experienced an IPSB event at some point during their career, with (69.2%, n=146) participants reporting that an event had occurred within the last 12 months. A common form of IPSB reported was of a patient staring at the participant's body parts in a manner which made the clinician uncomfortable (career: 82.3%, n=191; past 12 months: 60.8%, n=141). Other types of IPSB events experienced by the participants included: patients requesting a date, patients making overtly sexual remarks/jokes, patients purposively touching or grabbing, and patients making sexually suggestive gestures. Participants also reported patients had made physical overtures including masturbating during their session, (6.5%, n=15), exposing their genitals (7.3%, n=170, and being watched or harassed outside of their workplace (14.2%, n=33) at some point in their career. In general, fewer IPSB events had occurred over the past 12 months for the participants (63.5%, n=146), as compared to the span of their careers (85.8%, n=199). The majority of the patients demonstrating IPSBs were male (90%, n=298). While none of the participants reported that they had been forced to submit to sexual activity, 12.1% (n=28) said they had been propositioned. Participant experiences with IPSB over the span of their career and over the past 12 months are shown in Table III and Table IV.

The most commonly used methods of dealing with IPSB were distracting the patient (85.2%, n=196) or ignoring/pretending that the behavior did not happen (75.9%, n=173). More than half of participants (53.9%, n=125) said redirecting the patient made the situation better. Fewer than half (45%, n=103) of the participants documented the patient behavior in their chart, and only 16.5% (n=17) stated that documentation helped with the situation. Most (69.6%, n=158) reported the IPSB situation to the practice setting administration and 21.5% (n=50) indicated reporting the incident made the situation better. Only 2% (n=3) participants stated that they had contacted law enforcement to report an IPSB incident.

Relationships between experience, type of method used to address IPSB, and success of the method were evaluated. The reported IPSBs were categorized into levels of severity; mild (staring at body parts, sexually flattering or suggestive remarks, asked on a date, gave a romantic sexual gift), moderate (overtly sexual remark or joke, propositioned for sexual activity, sexually suggestive gestures), and severe (exposed his or her genitals or breasts, masturbated, touched or grabbed in private area, harassed inside or outside of workplace, threatened to force sexual activity, forced sexual activity) experience.

Table I. Demographics (n=232)

Characteristics	Participants n (%)	95% Lower CL	95% Upper CL
Sex			
Male	9 (3.9%)	1.9	7.0
Female	223 (96.1%)	93.0	98.1
Trans	0 (0.0%)	–	–
Other	0 (0.0%)	–	–
Years in clinical practice as a dental hygienist			
0-10 years	144 (62.1%)	55.7	68.1
11-20 years	49 (21.1%)	16.2	26.7
21-30 years	29 (21.1%)	8.7	17.2
31-40 years	7 (3.0%)	1.4	5.8
<40 years	3 (1.3%)	0.4	3.4
Months actively seeing patients in the last 12 months			
0-2 months	2 (0.9%)	0.2	2.7
3-6 months	5 (2.2%)	0.8	4.7
7-9 months	11 (4.8%)	2.6	8.1
10-12 months	213 (92.2%)	88.2	95.1
Highest earned degree in dental hygiene			
Associate degree (ASDH)	128 (55.2%)	48.7	61.5
Baccalaureate degree (BSDH)	93 (40.1%)	33.9	46.5
Master's degree (MSDH)	11 (4.7%)	2.5	8.1
Doctorate degree (PhD)	0 (0.0%)	–	–
Practice Setting			
Private dental office	181 (78.0%)	72.4	83.0
Corporate dental office	27 (11.6%)	8.0	16.2
Dental Hygiene School	5 (2.2%)	0.8	4.7
Federally Qualified Health Center (FQHCs)	11 (4.7%)	2.5	8.1
Mobile dental clinic	0 (0.0%)	–	–
Patient's home/home care	0 (0.0%)	–	–
School system (preschool/primary/secondary)	0 (0.0%)	–	–
Community health center	4 (1.7%)	0.6	4.0
Hospital emergency departments	0 (0.0%)	–	–
Other	4 (1.7%)	0.6	4.0
Full time vs. Part time status			
Full time	161 (69.7%)	63.6	75.4
Part time	71 (30.3%)	24.6	36.4
Retired	0 (0.0%)	–	–
Unemployed or not seeking work	0 (0.0%)	–	–
Gender of patients involved in IPSB			
Majority male	211 (94.2%)	88.4	95.4
Nearly equal parts	13 (4.9%)	2.6	5.4
Majority female	8 (2.7%)	1.1	5.4

A fourth variable was created to sum the mild, moderate, and severe variables, to give a total number of severity categories a participant had experienced. Results showed the number of severity categories experienced was related to whether several different methods were used to address IPSB, and the perceived success of the methods. Results also showed those experiencing one severity category were the least likely to use distraction to address IPSB (67%, n=31) while those experiencing two categories were the most likely (90%, n=135), $\chi^2(2) = 14.6$, $p=0.001$, $\phi=0.25$). Those experiencing two categories were also most likely to use laughing or joking (42%, n=63), $\chi^2(2) = 6.6$, $p=0.04$, $\phi=0.17$ as a distraction method. Participants experiencing three or more categories were most likely to use a chaperone (31%, n=11), $\chi^2(2) = 6.9$, $p=0.03$, $\phi=0.20$ and report the behavior within the facility (91%, n=32), $\chi^2(2) = 9.3$, $p=0.009$, $\phi=0.20$).

The relationship with number of categories experienced, and the perceived effectiveness of each method (distraction, laugh or joke about situation, using a chaperone, and reporting the behavior), was tested using chi-square tests of independence. A total of 62% (n=89) participants experiencing two severity categories reported the use of distraction made the situation better, while similarly those who experienced three categories reported it made the situation better (13, 38%) or did not have an effect (13, 38%), $\chi^2(2)=16.1$, $p=0.01$, $\phi=0.27$). Fifty percent of participants (n=126) experiencing three severity categories were more likely to state ignoring the situation had no effect and 13% reported it

Table II. IPSB training and practice setting descriptions (n=232)

IPSB TRAINING and Practice Environment	Participants n (%)	95% Lower CL	95% Upper CL
Received training on IPSB			
Yes	42 (18.1%)	13.6	23.4
No	161 (69.3%)	63.3	75.1
Unsure	29 (8.7%)	8.7	17.2
Location of IPSB training			
In-service training	14 (33.3%)	31.8	34.8
Entry-level RDH education	9 (21.4%)	19.9	22.9
Continuing education seminar	6 (14.3%)	12.8	15.8
Home study or online module	7 (16.7%)	15.2	18.2
Other	6 (14.3%)	12.8	15.8
Office Protocol for IPSB events			
Yes	27 (11.6%)	8.0	16.2
No	166 (71.6%)	65.5	77.1
Unsure	39 (16.8%)	12.4	22.0
Patient sex			
Mostly Women	8 (3.4%)	1.6	6.4
Mostly Men	10 (4.3%)	2.2	7.5
Equal numbers	214 (92.2%)	88.3	95.2
Routinely worked with patients who were cognitively impaired			
Yes	16 (6.9%)	4.2	10.7
Yes, from some events	36 (15.5%)	11.3	20.7
No	180 (77.6%)	71.8	82.5
Worked in the clinic alone			
0%-25%	211 (91.0%)	87.7	94.8
26%-50%	8 (3.4%)	1.4	5.9
51%-75%	3 (1.3%)	0.2	2.8
76%-100%	10 (4.3%)	2.3	7.6
Treated in private treatment rooms			
0%-25%	53 (22.8%)	17.9	28.7
26%-50%	8 (3.5%)	1.7	6.4
51%-75%	9 (3.9%)	1.9	7.0
76%-100%	162 (69.8%)	63.6	75.4

made the situation worse (n=4), $\chi^2(2) = 17.3, p=0.008, \phi=0.28$). Similarly, 33% (n=27) said laughing or joking had no effect ($\chi^2(2) = 14.5, p=0.03, \phi=0.27$) as well as reporting the situation within the facility (9, 33%; $\chi^2(2) = 14.5, p=0.04, \phi=0.26$).

Non-parametric methods were used to examine the relationship between demographic variables and IPSB experiences. Three Mann-Whitney U median rank tests with mild, moderate, and severe variables as the independent categories, and number of years in the field as the dependent variable. Results revealed

those who did not experience a mild event in the last 12 months had a higher median number of years in practice (Md.=10) compared to those who had experienced at least one mild event (Md.=5), $p=0.007$. All other Mann-Whitney U comparisons were non-significant with $p>0.05$. The Kruskal-Wallis test was used with the sum of severity categories as the independent variable and number of years in practice as the dependent variable and compared to participants who had experienced at least one IPSB event. Participants who had experienced all three severity categories had the lowest median number of years in practice (Md.=5.0) as compared to two categories (Md.=7) and one category (Md.=10), $p=0.01$.

To examine the relationship between categorical demographic variables and IPSB variables, chi-square tests of independence were calculated. Participants who had attended a workshop or training on IPSB were more likely to state they had experienced a moderate event in the last 12 months (65%, n=103) compared to those had not attended additional education (79%, n=61), $\chi^2(2) = 4.0, p=0.04, \phi=0.17$. Training was not related to any other severity categories or the sum of severity categories. In addition, no other categorical demographic variables were related to individual severity categories or the sum of categories ($p>0.05$).

Open-ended responses provided additional data on the specific IPSB events participants had experienced. The three major themes in the open-ended comments included: the type of patient who perpetrated the IPSB, type of IPSB behavior experienced by the provider, and approaches to management of the IPSB. The type of patient exhibiting IPSB included older men, developmentally or intellectually disabled, and patients with cognitive impairment (e.g. traumatic brain injury, dementia). Examples of this theme included:

“Most patients with inappropriate sexual behaviors were men over 60.”

“Patient had developmental disability, with chaperone patient did not make any more gestures towards his genitals.”

“Most of patients I see are Alzheimer and dementia, so behavior is often in the moment and transitory.”

The type of behaviors experienced by participants included staring, touching, stalking, verbal, remarks/joking, and masturbation/erection. Examples of this theme included:

“I had a lesbian patient who would stare at my breasts when I spoke with her.” “I have had a few older men touch my hips and thighs.”

“An elderly woman with dementia pinched my butt.”

“Patient was a male who refused to make an appointment until he was added on my Facebook page and could contact me directly- stalking type behavior.”

“Most of what I encountered had to do with inappropriate sexual jokes or mentions.” “I have had a young man get an erection.”

Many participants had uncertainty on how to manage the IPSB and ignored or avoided treating the patient. Many reported the lack of support received from the dentist/supervisor, although some participants reported that the patient who had displayed IPSB was dismissed. One participant reported taking out a restraining order. Samples of the responses included:

“At times I just pretend to not hear it or change the subject quick.”

“I always told the office manager and doctor and assistant about his behavior, and it was mostly laughed off as in ‘that’s just how he is’.”

The lack of support reported by one participant was a result of the offender being a relative of the dentist:

“It was the doctor’s father in-law and the doctor told me to keep it quiet.” Significant action taken by the dental hygienist, or the employer was also reported by participants:

Table III. Career IPSB experiences (n=232)

Behavior		Participants n (%)	95% Lower CL	95% Upper CL
Patient stared at you or your body parts in a way that made you uncomfortable	YES	191(82.7%)	77.4	87.1
	NO	41 (17.3%)	12.9	22.6
Patient made a sexually flattering or suggestive remark about you	YES	199 (85.8%)	80.8	89.8
	NO	33 (14.2%)	10.2	19.2
Patient asked you for a date	YES	123 (53.0%)	46.6	59.4
	NO	109 (47.0%)	40.6	53.4
Patient gave you a sexual or romantic gift	YES	21 (9.1%)	5.9	13.4
	NO	211 (90.9%)	86.8	94.1
Patient made an overtly sexual remark or joke, asked you questions about or commented on your sex life, or shared a sexual fantasy about you	YES	168 (72.4%)	66.4	77.9
	NO	64 (27.6%)	22.1	33.6
Patient propositioned you for sexual activity	YES	28 (12.1%)	8.4	16.8
	NO	204 (87.9%)	83.2	91.6
Patient made sexually suggestive gestures	YES	95 (41.3%)	35.1	47.7
	NO	137 (58.7%)	52.3	64.9
Patient deliberately exposed his or her genitals or breasts to you	YES	17 (7.3%)	4.5	11.2
	NO	215 (92.7%)	88.8	95.5
Patient masturbated during a dental hygiene session	YES	15 (6.5%)	3.8	10.2
	NO	217 (93.5%)	89.8	96.2
Patient purposefully touched or grabbed you in a private area (thighs, genitals, breasts) and/or in a clearly sexual manner	YES	56 (24.1%)	19.0	29.9
	NO	176 (75.9%)	70.1	81.0
Patient repeatedly followed, watched, or harassed you inside or outside the workplace	YES	33 (14.3%)	10.3	19.3
	NO	199 (85.7%)	80.7	89.7
Patient threatened to force you or attempt to force you to submit to sexual activity	YES	2 (0.9%)	0.2	2.7
	NO	230 (99.1%)	97.3	99.8
Patient forced or coerced to submit to sexual activity	YES	0 (0.0%)	–	–
	NO	232 (100.0%)	–	–

Table IV. IPSB experiences over the past 12 months (n=232)

Behavior		Participants n (%)	95% Lower CL	95% Upper CL
Patient stared at you or your body parts in a way that made you uncomfortable	YES	141 (61.3%)	54.9	67.4
	NO	91 (38.7%)	32.6	45.1
Patient made a sexually flattering or suggestive remark about you	YES	146 (63.5%)	57.1	69.5
	NO	86 (36.5%)	30.5	42.9
Patient asked you for a date	YES	61 (26.5%)	21.1	32.5
	NO	171 (73.5%)	67.5	78.9
Patient gave you a sexual or romantic gift	YES	6 (2.6%)	1.1	5.3
	NO	226 (97.4%)	94.7	98.9
Patient made an overtly sexual remark or joke, asked you questions about or commented on your sex life, or shared a sexual fantasy about you	YES	113 (48.9%)	42.5	55.3
	NO	119 (51.1%)	44.7	57.5
Patient propositioned you for sexual activity	YES	11 (4.7%)	2.5	8.1
	NO	221 (95.3%)	91.9	97.5
Patient made sexually suggestive gestures	YES	46 (20.0%)	15.2	25.5
	NO	186 (80.0%)	74.5	84.8
Patient deliberately exposed his or her genitals or breasts to you	YES	2 (0.9%)	0.2	2.8
	NO	230 (99.1%)	97.2	99.8
Patient masturbated during a dental hygiene session	YES	3 (1.3%)	0.4	3.4
	NO	229 (96.7%)	96.6	99.6
Patient purposefully touched or grabbed you in a private area (thighs, genitals, breasts) and/or in a clearly sexual manner	YES	19 (8.3%)	5.2	12.3
	NO	213 (91.7%)	87.7	94.8
Patient repeatedly followed, watched, or harassed you inside or outside the workplace	YES	17 (7.4%)	4.6	11.4
	NO	215 (92.6%)	88.4	95.4
Patient threatened to force you or attempt to force you to submit to sexual activity	YES	1 (0.4%)	0.0	2.0
	NO	231 (99.6%)	98.0	100.0
Patient forced or coerced to submit to sexual activity	YES	0 (0.0%)	–	–
	NO	232 (100.0%)	–	–

“If I am grabbed I immediately let my doctor know and he handles it with dismissal.”

“Once I got a restraining order against a patient for inappropriate behavior and stalking.”

Discussion

There is a gap in the literature regarding the incidence of IPSB in dental hygiene and dentistry. Clinical dental hygienists in this study reported a high prevalence of IPSB, consistent with the results among physical therapists previously reported in 2017 by Boissonault et al.³ In this study, the occurrence of IPSB events throughout the participant’s career was 85.8% with 63.5% reporting occurrences over the past 12 months, similar to the physical therapists’ career exposure of 84%, and 47% over a 12- month period.³

Results from this study also confirmed previous research conducted by Baig et al. and Nowrouzi-Kia et al. which reported that health care providers had not received previous training regarding IPSB and management strategies.^{11,15} Over two-thirds of the participants in this study indicated they had not received any training regarding management of IPSBs. The responses of the dental hygienist participants in this study reflected their uncertainty regarding successful management of patients’ IPSB. When asked regarding actions taken to manage the IPSB incident, the participants responses indicated they were “unsure” if some of their actions has been successful which was reflected in the analysis of their perceived success strategies which ranged from simple distraction and ignoring the behavior to using a chaperone and transferring care to another provider.

Similarly, Shafran-Tikva et al. conducted research in a hospital setting and found 90% of respondents had never

participated in a WPV workshop, or were not aware of a protocol for violence in their workplace.¹² Other studies have highlighted the incidence of WPV and IPSB among health care workers with repercussions related to work functioning, including negative emotional and physical effects.^{7-9,11} Research, conducted in the nursing profession revealed the need for health professionals to feel protected, and safe while working.¹⁷ These findings were reflected in this study by the open-ended responses from the participants in this study, “bosses don’t always back you up for fear of losing business, or money, this compromises our comfort and/or safety for fear of job loss.”

This study established gender as a factor in perpetration of IPSB, similar to the findings of Boissonnault et al.³ In the study of physical therapists, women reported significantly higher rates of IPSB compared to men in 8 of the 13 categories of IPSB.³ However, since dental hygiene is a female-dominated profession and the majority of the participants were women (96%, n=223), this may explain the significance of gender as a factor for the prevalence of IPSB among DHs in this study.

Results from this study also revealed that the years of experience was a factor associated with the occurrence of IPSB; dental hygienists with 10 years or less were more likely to experience IPSB events (62.1%, n=144) as compared to their more experienced peers over the age of 40 years (1.3%, n=3). This finding was in parallel to the research outcomes of Cambier et al. which found that IPSB was more likely to occur among less experienced physical therapists (75.2%), than those with more years of practice (60.5%).⁶

Most events of IPSB, identified in previous studies, particularly those identified in hospital settings by Pompei et al., occurred in patient exam rooms (72.4%).¹⁶ These settings were similar to what was identified in this study which found that IPSB occurrences with dental hygienists were most likely to occur in private dental treatment rooms (69.7%, n=161). A study by Shafran-Tikva et al. also revealed a lack of management support to employees who experienced IPSB.¹² This lack of support was also reflected in some of the open-ended comments in this study. For example, a participant stated, “After reporting to the doctor and front office they laughed. I made it clear I did not find any of it humorous, and that I felt threatened, and that it was unacceptable behavior. It became an office joke anyway.” Perhaps with a greater focus on workplace sexual harassment in general, there will be more interest on the part of employers to protect their employees from IPSBs in the future.

This is the first study to assess the occurrences of IPSB among dental hygienists in clinical practice settings in the

US. However, these outcomes may not be directly comparable to previous research in this area since most of the WPV studies conducted in the health professions were not specific to the issue of IPSB.^{2,3, 6-9, 11-19} Other limitations of this study include researcher bias, recall bias, the self-reporting nature of the survey instrument, and the use of a purposive, non-probability sampling technique. Future research should investigate the effectiveness of workplace policies and training for dental hygienists and their role in managing IPSB in clinical practice settings.

Conclusion

The high prevalence of IPSB events among dental hygienists in this study warrants increased practitioner education and improved workplace policies for management of IPSB. Individuals who have experienced IPSB occurrences in the workplace may need additional support. Emphasis needs to be placed on strategies to protect health care workers safety. The prevalence of IPSB events reported by dental hygienists, along with its management challenges, has identified the need for providers to develop skills in the use of effective intervention strategies for IPSB in the dental practice setting.

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