IN BRIEF

- Assesses knowledge and attitudes of a dental team about domestic violence before and after a brief training intervention.
- Post-training there was improved recognition about the dental team's role in the health-care response to domestic violence.
- Brief training can improve dental staff comfort asking patients about abuse, though whether false confidence in dealing with abused patients results needs to be established.
- We suggest that brief training be complemented with in depth practical training and the development of appropriate processes for dealing with abuse victims.

Changes in the levels of knowledge and attitudes of dental hospital staff about domestic violence following attendance at an awareness raising seminar

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Objectives To assess changes in dental team knowledge and awareness about domestic violence following attendance at a brief training intervention.

Materials and methods Seventy-five dental hospital staff at the University of Manchester Dental Hospital attended a two-hour session delivered by Manchester's City Wide NHS Domestic Violence Project manager. Participants completed identical questionnaires immediately before and after the session. Paired t-tests were conducted to determine changes in responses to individual questions before and after training. Independent sample t-tests were also conducted to compare mean responses by sex.

Results Statistically significant improvements were seen in 50% of attitude questions and 100% of knowledge questions. After training, there was improved recognition that interpersonal violence was a health issue and that the dental profession should be more involved in identification of abuse. There was also improved comfort asking about abuse and respondents were less afraid of offending the patient and less likely to blame the victims for being abused. Statistically significant sex differences at baseline were also seen for several items: females

obtaining more correct answers at baseline than males.

Conclusions Brief domestic violence training interventions can be effective in improving knowledge and attitudes amongst a dental team but could lead to false confidence in staff and should be followed by in-depth practical training and the development of appropriate processes for dealing with abuse victims.

INTRODUCTION

Almost one in four (23%) women experience domestic violence over their lifetimes.¹ Most victims of domestic violence sustain maxillofacial injuries² and it has been estimated that 65-75% of abuse involves trauma to the head, neck and facial structures.³⁻⁵ Dental personnel are therefore in a unique position to aid the recognition, documentation, and reporting of suspicions and/or referral of victims of domestic violence for appropriate assistance in the context of presentation with facial injury.⁶

Healthcare, including dental healthcare, services have a pivotal role to play in the identification, assessment and response to domestic violence, not only because of the impact of domestic violence in health, but crucially because the health services may be the only contact point with professionals who could recognise and intervene in the situation.⁷ Surgical sources of information are also more reliable than police data in relation to violent crime and the contribution which these healthcare workers can make may be substantial.⁸ There can be few healthcare professionals who have not seen patients whom they suspect are being abused at home but have not known what to do about it.⁹ Whilst it is not the job of the healthcare practitioners to give advice to someone experiencing domestic violence on what direct action they should take, it is their job to provide information on how to contact the appropriate local services.

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Table 1 Percentage of respondents correctly* responding to 18 attitude questions on domestic violence pre- and post-attending a brief awareness raising session and matched mean responses ($\pm$ SD) pre- and post-training

	Item ^s	N	% correct pre-training	% correct post-training	Mean pre	$\pm$ SD	Mean post	$\pm$ SD	p
16	I feel comfortable asking patients about domestic abuse (A)	67	11.1	28.4	2.30	$\pm$ 0.95	2.99	$\pm$ 0.86	<0.001
20	I do not believe interpersonal violence is a problem in my practice (D)	66	54.2	67.2	2.38	$\pm$ 0.82	2.09	$\pm$ 0.80	0.01
21	I am comfortable discussing safety issues with patients (A)	65	44.5	51.5	3.09	$\pm$ 0.98	3.40	$\pm$ 0.92	0.28
22	Patients experiencing abuse are deeply ashamed (A)	69	60.2	72.4	3.68	$\pm$ 0.83	3.71	$\pm$ 0.93	0.82
23	It is not my responsibility to screen patients for abuse (D)	66	44.4	75.8	2.68	$\pm$ 0.91	2.13	$\pm$ 0.80	<0.001
34	*My profession should be more involved in identifying domestic abuse cases (Y)	68	50.0	92.8	1.88	$\pm$ 0.95	1.12	$\pm$ 0.44	0.00
35	A woman should expect to be re-abused if she decides not to take appropriate action after being offered help/advice (N)	69	63.0	62.3	2.30	$\pm$ 1.78	2.33	$\pm$ 1.80	0.87
36	Domestic abuse should be a private matter between partners (N)	68	84.7	97.1	1.35	$\pm$ 0.84	1.12	$\pm$ 0.68	0.06
37	All healthcare establishments should display posters/leaflets about domestic abuse (Y)	69	86.3	98.6	4.65	$\pm$ 0.97	4.94	$\pm$ 0.48	0.03
38	*I will only ask a woman about domestic abuse if I strongly suspect she has experience of domestic abuse (N)	69	16.4	24.6	4.04	$\pm$ 1.51	3.70	$\pm$ 1.71	0.15
39	I would personally feel confident that I could correctly identify a woman with experience of domestic abuse (Y)	69	17.8	15.9	2.36	$\pm$ 1.51	2.62	$\pm$ 1.38	0.19
40	It is my responsibility to ask a woman if she is experiencing domestic abuse, given appropriate indication (Y)	66	45.1	72.1	3.39	$\pm$ 1.65	4.27	$\pm$ 1.25	<0.001
42	Recognising domestic abuse will not make any difference to the long-term health of a women with experience of domestic abuse (N)	67	72.2	80.9	1.75	$\pm$ 1.34	1.58	$\pm$ 1.35	0.45
43	Abused women should leave their partners (N)	66	56.9	19.7	3.85	$\pm$ 1.41	3.61	$\pm$ 1.57	0.20
44	If I was to ask every woman (relevant to my practice) if she has been abused, I will offend a lot of my patients (N)	66	12.5	41.8	1.70	$\pm$ 0.89	2.12	$\pm$ 0.75	0.01
45	Abused women should leave their partners, whatever the circumstances (N)	67	23.9	39.7	2.21	$\pm$ 0.86	1.96	$\pm$ 0.78	0.01
46	Improving detection of domestic abuse is a valid use of health resources (Y)	67	77.5	95.6	1.34	$\pm$ 0.71	1.07	$\pm$ 0.36	0.01
47	*Providing additional facilities to help, advise and support women who experience domestic abuse is not a valid use of health resources (N)	64	78.3	76.1	2.02	$\pm$ 0.63	1.91	$\pm$ 0.50	0.20

Correct responses are in brackets. \$ A = strongly agree or agree; D = strongly disagree or disagree; Y = yes; N = no. * Significant gender difference at baseline. Percentages take account of missing data.

Table 2 Percentage of respondents correctly* responding to six knowledge questions on domestic violence pre- and post-attending a brief awareness raising session and matched mean responses ($\pm$ SD) pre- and post-training

	Item [§]	N	% correct pre-training	% correct post-training	Mean pre $\pm$ SD	Mean post $\pm$ SD	p
1	The majority of abused individuals do not mind being asked by a health care professional about possible abuse (A)	68	5.4	63.2	2.28 $\pm$ 0.83	2.57 $\pm$ 0.97	<0.001
2	*Domestic abuse usually stops during pregnancy (D)	69	91.8	97.1	1.81 $\pm$ 0.67	1.55 $\pm$ 0.72	0.01
3	Domestic abuse may be associated with just about any physical complaint I see in my practice/clinic (A)	65	30.4	63.3	3.00 $\pm$ 1.03	3.54 $\pm$ 1.09	<0.001
10	*The majority of domestic abuse is perpetrated against women and their children (A)	67	50.0	88.2	3.06 $\pm$ 1.13	4.13 $\pm$ 1.07	<0.001
17	I would know what to do if a woman disclosed domestic abuse to me (A)	63	17.1	45.4	2.51 $\pm$ 0.97	3.27 $\pm$ 0.88	<0.001
41	Domestic abuse is a part of normal life (N)	69	82.2	79.7	1.58 $\pm$ 1.29	1.70 $\pm$ 1.45	<0.001

Correct responses are in brackets. § A = strongly agree or agree; D = strongly disagree or disagree; Y = yes; N = no. * Significant gender difference at baseline. Percentages take account of missing data.

However, detection levels in the British healthcare system appear low.⁹⁻¹¹ Several barriers to change have been recognised, including a lack of knowledge and awareness about domestic violence amongst health professionals and a lack of training in the skills needed to identify, approach and manage the experience of violence.¹⁰ The aim of this study was therefore to assess the levels of knowledge and awareness about domestic violence amongst a dental healthcare professional population and to determine if these levels could be changed following attendance at a brief domestic violence awareness raising seminar.

METHODS

Study design

A before and after questionnaire-based survey of dental hospital staff attending a two-hour domestic violence awareness raising session entitled 'A *smack in the mouth.*' Attendees were not aware, previously, that domestic violence was the session's subject: it was part of the University Dental Hospital's quarterly mandatory education session.* On arrival, each participant was handed two randomly numbered envelopes – identifiable by the research team as matched pairs. Before the seminar began, participants were requested to complete a questionnaire and place it in one of the envelopes for collection by the research team. The second questionnaire was handed out on seminar completion.

Participants

Seventy-five dental hospital staff at the University of Manchester Dental Hospital attended the session, including 18

dentistry, NHS and University staff, 20 dental nurses, six trainee dental nurses, 10 clinical assistants/support workers, four hygienists/therapists, three non-dental nurses, three dental lecturers and three of the administrative team – eight staff did not list their role.

The seminar

The seminar was 1.5 hours duration and delivered by Manchester's City Wide NHS Domestic Violence Project manager (CR). The session covered definitions of sexual and domestic violence, prevalence and incidence, research findings, impact of violence and abuse in general and on health and in relation to dentistry, consequences for women and children, behaviours, myths and stereotypes, help-seeking, provision of support, health agencies and domestic violence, barriers to health intervention, potential indicators of abuse, the role of healthcare staff with particular reference to dental staff, and support available to healthcare staff.

The questionnaire

The questionnaires were designed to test attitudes, awareness and knowledge about domestic violence and were adapted from questionnaires used previously by the authors and previously published.^{10,12,13} Section 1 determined the professional role, sex and age of the respondent and whether they had attended previous training sessions about domestic violence. If so respondents were asked to provide details – what the training involved, how long ago it was and its duration.

Section 2 consisted of 46 questions designed to evaluate the comfort with addressing and understanding abuse. The items were measured using either yes/no/don't know responses, or Likert scaling: never to always or strongly disagree to strongly agree. There were 18 attitude variables, six knowledge

*Due to the sensitive nature of the topic, attendees were given the option to not participate and a trained counsellor was available, if required.

Table 3 Percentage of respondents correctly^a responding to questions on domestic violence pre- and post-attending a brief awareness raising session and matched mean responses ($\pm$ SD) pre- and post-training

Blame victim items ^s		N	% correct pre-training	% correct post-training	Mean pre	$\pm$ SD	Mean post	$\pm$ SD	p
4	*A 'victim' must be getting something out of the relationship, or else s/he would leave (D)	69	78.1	92.8	2.00	$\pm$ 0.80	1.59	$\pm$ 0.75	<0.001
5	People are only victims if they choose to be (D)	68	87.5	92.8	1.93	$\pm$ 0.94	1.56	$\pm$ 0.76	<0.001
6	*When it comes to domestic abuse victimisation, it usually takes 'two to tango' (D)	68	84.7	89.9	1.88	$\pm$ 0.91	1.59	$\pm$ 0.80	<0.001
7	*I have patients whose personalities cause them to be abused (D)	68	59.7	85.5	2.22	$\pm$ 0.99	1.72	$\pm$ 0.81	<0.001
8	*Women who choose to step out of traditional roles are a major cause of domestic abuse (D)	69	78.1	79.7	1.87	$\pm$ 0.97	1.81	$\pm$ 1.00	0.62
9	*The 'victim's' passive-dependent personality often leads to abuse (D)	69	50.7	75.4	2.52	$\pm$ 1.05	2.07	$\pm$ 0.99	<0.001
11	The 'victim' has often done something to bring about abuse in the relationship (D)	67	90.1	87.0	1.73	$\pm$ 0.69	1.70	$\pm$ 0.80	0.74
Perceived self-efficacy items^s									
12	I don't have the time to ask about domestic abuse in my practice/clinic (D)	67	52.8	58.2	2.58	$\pm$ 1.00	2.49	$\pm$ 1.04	0.52
13	There are strategies I can use to help 'victims' of domestic abuse change their situation (A)	69	30.1	79.7	3.12	$\pm$ 0.77	3.83	$\pm$ 0.69	<0.001
14	I feel confident that I can make appropriate referral for abused patients (A)	68	26.1	42.6	2.85	$\pm$ 0.87	3.28	$\pm$ 0.86	<0.001
15	I have ready access to information detailing management of domestic abuse (A)	69	9.6	46.3	2.33	$\pm$ 0.90	3.26	$\pm$ 0.90	<0.001
System support items^s									
18	I have ready access to medical social workers or community advocates to assist in the management of domestic abuse (A)	69	15.1	38.3	2.49	$\pm$ 0.91	3.12	$\pm$ 0.86	<0.001
19	I feel that medical social work personnel can assist in the management of domestic abuse (A)	66	58.3	83.6	3.53	$\pm$ 0.88	3.84	$\pm$ 0.66	0.01
Professional role resistance/fear of offending patient items^s									
25	I am afraid of offending the patient if I ask about abuse (D)	66	22.2	49.3	3.40	$\pm$ 0.94	2.85	$\pm$ 1.08	<0.001
26	Asking patients about abuse is an invasion of their privacy (D)	68	34.2	63.2	2.91	$\pm$ 0.93	2.41	$\pm$ 0.95	<0.001
27	It is demeaning to patients to question them about abuse (Ne)	65	16.2	54.4	2.95	$\pm$ 0.84	2.26	$\pm$ 0.96	<0.001
28	If I question non-abused patients about abuse, they will get very angry (Ne)	67	15.9	62.3	3.12	$\pm$ 0.83	2.32	$\pm$ 0.91	<0.001
29	It is not my place to interfere with how a couple chooses to resolve conflicts (Ne)	59	39.1	50.8	2.92	$\pm$ 1.06	2.42	$\pm$ 0.97	<0.001
30	*I think that investigating the underlying cause of a patient's injury is not part of medical care (Ne)	60	57.1	89.6	2.22	$\pm$ 1.06	1.50	$\pm$ 0.72	<0.001
31	*If patients do not reveal abuse to me, then they feel it is none of my business (Ne)	65	25.4	50.0	3.05	$\pm$ 1.10	2.35	$\pm$ 1.01	<0.001

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Table 3 (continued) Percentage of respondents correctly[#] responding to questions on domestic violence pre- and post-attending a brief awareness raising session and matched mean responses ($\pm$ SD) pre- and post-training

Provider safety items [§]								
32	*There is not enough security at my workplace to safely permit discussion of abuse with patients (Ne)	59	30.2	33.3	3.08 $\pm$ 1.15	2.63 $\pm$ 0.98	0.01	
24	I don't ask patients whom I suspect have been abused as I am concerned they will stop coming back to me (D)	63	35.7	62.5	2.82 $\pm$ 0.94	2.42 $\pm$ 0.86	0.01	

Correct responses are in brackets. § A = strongly agree or agree; D = strongly disagree or disagree; Ne = never/seldom. * Significant gender difference at baseline. Percentages take account of missing data.

variables, seven 'blame victim' items, four self-efficacy items, two system support items, seven professional resistance/fear of offending the patient items and two provider safety items (see tables for these items).

Analysis

Responses were coded and entered onto an SPSS database. Values 1-5 were assigned to responses where 1 was negative (strongly disagree, never, no) and 5 positive (strongly agree, always, yes). Each participant's pre- and post- questionnaires were matched and paired t-tests conducted to determine changes in mean responses to individual questions before and after training. Those without both pre- and post- questionnaires were excluded. Independent sample t-tests were also conducted to compare mean responses by sex. There were not sufficient numbers to analyse responses by professional role or to take into account those who had received previous training in domestic violence ($n = 8/73$).

RESULTS

Respondents

Of the 148 questionnaires returned, 146 could be matched (73 matched pairs). Sixty-four percent ($n = 46$) of participants were female, 36% male ($n = 26$). Mean age range was 30-39 ($n = 17$, 24%), modal age range was 20-29 ($n = 26$, 36%). Eight (11%) indicated they had received prior training in domestic violence: two had attended a short (1-2 hr) seminar, two a half day course and one a day's course.

Attitudes

A statistically significant improvement was seen in 50% of the attitude questions (see Table 1). After training, there was improved recognition that interpersonal violence was a problem in their practice and that their profession should be more involved in identification of abuse (items 20, 34, 40). There was also improvement in recognising that healthcare has a role to play (items 37, 46) and that it was their responsibility to ask women about abuse (items 23, 40). There was also an improvement in comfort asking about abuse (item 16) and a reduction in the number considering that patients would be offended by being asked about abuse (item 45).

Significant sex differences were seen for three attitude questions (items 34, 38, 47) at baseline (pre-training) but not post-training: females gave more correct answers than males.

Knowledge

There was a statistically significant improvement for all knowledge questions and significant sex differences at baseline for

two of the items: more females than males answered correctly. (see Table 2).

Blame victim items

Respondents were less likely to blame the victims for being abused and improvements in 5/7 of these questions were statistically significant (Table 3, items 4-9). There was a statistically significant sex difference at baseline for five questions – more females answered correctly at baseline – but not post-training.

Perceived self-efficacy and system support items

Statistically significant improvements were seen in 3/4 perceived self-efficacy questions and in 2/2 system support items (Table 3 items 12-15, 18, 19).

Professional role and provider safety items

Post-training, participants were less afraid of offending the patient by asking about abuse, fewer considered asking about abuse an invasion of patients' privacy, demeaning to them or likely to incite anger. More also considered it was within their role to question patients about abuse and to investigate the underlying causes of injury. Statistically significant improvements were seen in all items (Table 3 items 24-32) and females gave significantly more correct answers at baseline than males for three items (30-32).

DISCUSSION

Following a brief training intervention, the attitudes of the dental team about domestic violence and the role of healthcare in identifying and providing support for women experiencing domestic violence was improved and there were significant improvements in responses to half the questions. Dental team attitude to '*whose responsibility it is to ask about abuse*' improved and, post-training, more acknowledged that '*interpersonal violence is a healthcare problem*' and the '*responsibility of all healthcare providers to ask*'. However, whilst the dental team considers it within their role to ask about abuse and that '*healthcare has a responsibility to ask about abuse*', the majority considered such intervention would have no effect on the long-term health of the woman (Table 1). Although there is little research measuring women-centred outcomes of healthcare intervention,¹⁴ qualitative research evidence indicates the potential benefits of healthcare intervention, through referral to support services.

Support services may help women come to terms with their situation, develop coping strategies and maybe help them

leave an abusive relationship.^{9,15} Abused women may leave and return to the abuser many times before making the final decision to break¹⁶ and it is important that healthcare providers try to understand the numerous reasons why women return to their abusers. For example, although the woman may want the violence to end, she may not want the relationship to end.¹⁵ In our study, the dangers associated with leaving and reasons for women not leaving were included within the training session and, post-training, an increased number of respondents disagreed that women should simply leave their partners because of abuse and there were also significant improvements in the blame victim items.

Advocacy services can reduce the amount of violence experienced by women attendees over time¹⁷ and this will likely reduce the health consequences over time, which manifest as poor health status, poor quality of life, and high use of health services.¹⁸⁻²⁰ On average, 35 incidents will occur before a woman seeks help²¹ and intervention by healthcare may also affect long term health consequences by reducing the number of incidents that occur before a woman seeks help. Such misconceptions would need addressing in further training sessions and it might be worthwhile, in developing training packages, to highlight the effects on long-term health.

Knowledge about domestic violence and its relevance to dental practice was also significantly improved, especially the change in perception that abused individuals mind being asked about possible abuse – before training only 5% correctly thought that patients don't mind being asked, compared with 63% post-training (Table 2). Resistance to asking about abuse, because it is not within the remit of healthcare providers and/or for fear of offending the woman were also reduced. It is a common misconception that women – or other victims of abuse – will be offended by a health practitioners concern and questioning about abuse. Questioning is essential and unless asked directly, very few women voluntarily disclose violence.²² However, women are very willing to be asked about their experiences by health professionals,²³ and have often cited not being asked as a reason for non-disclosure of domestic violence.^{16,24} In one US study, only six out of 476 consecutive women seen by a family practice clinic reported having ever been asked about domestic violence by their GP.²⁵

Perceived self-efficacy was improved for 75% of items following brief training and the percentages of respondents that considered there were strategies they could now use to help victims rose from 30 to 80%, though finding the time to do this was perceived as a problem. Of concern though was that following only brief training, 28% of respondents felt comfortable asking about abuse, compared with only 11% pre-training. Such brief awareness training cannot, and was not intended to, enable participants to become proficient at dealing with domestic violence and we must offer caution because an increase in awareness and knowledge might lead to false confidence – in fact, there was a significant change in the number feeling comfortable about asking patients about abuse and in those feeling confident that they could make the appropriate referral following training, though confidence levels at being able to correctly identify a woman with experience of abuse were lower. Dental health professionals can respond by providing information on specialist services – usually provided outside the health service – that women may access if they wish

and asking about experience of domestic violence can be seen as a routine part of history taking, just as health professionals regularly and repeatedly ask patients about their smoking behaviour, alcohol use, weight, and exercise.²⁶

In summary, these findings show that a brief domestic violence training intervention can be effective in terms of improving attitudes, knowledge and role understanding. However, it must be emphasised that such brief training could possibly lead to false confidence in staff that may be damaging to the woman and brief training should probably be followed by in-depth practical training and the development of appropriate processes for dealing with abuse victims.

NOTE

It is beyond the scope of this paper to detail the circumstances under which it is appropriate to ask about abuse and how this issue should be addressed in practice: for such information we direct readers to the Department of Health's Resource Manual.⁹

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