

BMJ Open Is a clinician's personal history of domestic violence associated with their clinical care of patients: a cross-sectional study

Elizabeth McLindon,^{1,2} Cathy Humphreys,³ Kelsey Hegarty^{1,2}

To cite: McLindon E, Humphreys C, Hegarty K. Is a clinician's personal history of domestic violence associated with their clinical care of patients: a cross-sectional study. *BMJ Open* 2019;9:e029276. doi:10.1136/bmjopen-2019-029276

► Prepublication history for this paper is available online. To view these files please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2019-029276>).

Received 19 January 2019

Revised 27 May 2019

Accepted 13 June 2019



© Author(s) (or their employer(s)) 2019. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

¹Department of General Practice, University of Melbourne, Melbourne, Victoria, Australia

²The Royal Women's Hospital, Melbourne, Victoria, Australia

³Department of Social Work, The University of Melbourne, Melbourne, Victoria, Australia

Correspondence to

Ms Elizabeth McLindon; elizabeth.mclindon@unimelb.edu.au

ABSTRACT

Objective To investigate whether domestic violence (DV) impacts on health professionals' clinical care of DV survivor patients.

Design, setting Descriptive, cross-sectional study at an Australian tertiary maternity hospital.

Participants 471 participating female health professionals (45.0% response rate).

Outcome measures Using logistic and linear regression, we examined whether health professionals' exposure to lifetime DV was associated with their clinical care on specific measures of training, attitudes, identification and intervention.

Results DV survivor health professionals report greater preparedness to intervene with survivor patients in a way that is consistent with ideal clinical care. This indicates that personal DV experience is not a barrier, and may be a facilitator, to clinical care of survivor patients.

Conclusions Health professionals are at the front line of identifying and responding to patients who have experienced DV. These findings provide evidence that survivor health professionals may be a strength to the healthcare organisations in which they work since among the participants in this study, they appear to be doing more of the work seen as better clinical care of survivor patients. We discuss the need for greater workplace supports aimed at promoting safety and recovery from violence and strengthening clinical practice with patients.

BACKGROUND

Domestic violence (DV), including intimate partner, family violence and sexual assault, are common traumas for Australian female nurses, doctors and allied health professionals.¹ DV is a global public health issue, defined by WHO as 'any behaviour within an intimate relationship that causes physical, psychological or sexual harm to those in that relationship'.² It can encompass partner violence, child abuse or abuse by any member of a household.² Throughout this paper, we use the term 'DV' to refer to violence by a partner or a family member and 'survivor' when referring to someone (health professional or patient) who has experienced DV.³

Strengths and limitations of this study

- Adjustment for potential confounders in regression rendering it distinct in this under-researched field; the inclusion of health professionals from all clinical backgrounds reflected in hospitals, and the recruitment of primary domestic violence (DV) health professional survivors.
- The single recruitment site that prevents generalisation of the findings, and survey self-report and social desirability, which may have led to the under-reporting of DV.
- While our 45.0% response rate is not ideal, considering the work demands of the nursing and medical participants in this study, and the representational participation of nurses, doctors and allied health professionals, we argue that our response rate is both acceptable and comparable to similar research.

Women who have survived DV have poorer physical and psychological health, requiring more healthcare than non-abused women.⁴ Australian women's lifetime prevalence of physical or sexual violence by an intimate partner is 25%, with 2.1% experiencing violence in the last 12 months.⁵ A recent study of 471 Australian female health professionals found that the prevalence of intimate partner violence was higher than in the general community, and lower than among unwell women attending a general practitioner, with a lifetime prevalence of 33.6%, while the 12-month prevalence was 11.5%.¹ The lifetime prevalence of DV (violence by a partner and/or other family member) was 45.2%.¹

The role of the health system and health professionals is to identify survivor patients and provide a timely, evidence-based response.⁶ There is mixed evidence about whether health professionals' personal experiences of DV have an impact on the clinical care of their survivor patients.⁷⁻¹⁵ An extensive search of the academic literature identified four surveys about survivor health

professionals' clinical care of survivor patients.^{7 8 10 15} Two of these studies found that survivor health professionals performed more DV screening and raised DV with survivor patients more frequently during follow-up visits.^{7 8} However, the other two studies found no association between DV experience and clinical care.^{10 15} There were problems with three of these four studies.^{7 8 10} For example, two did not adjust for potentially confounding factors in their analysis,^{7 8} and the third, now nearly 20 years old, defined their survivor exposure group based on only two non-validated DV questions.¹⁰ The strongest research to date surveyed Swedish health professionals (n=588).¹⁵ After adjusting for professional background, experience and training, it found that care of survivor patients was not associated with personal experience of DV, however, DV training was positively associated with all aspects of care and knowledge.¹⁵ Another four studies about clinical care of survivor patients have been from the perspective of health professionals whose DV exposure was through family, friends or patients.^{9 11 13 14} We argue that the need for a more rigorous study is evident.

METHODS

Aim, design and setting

The objective of this study was to address a gap in the available evidence about whether Australian health professional's personal history of DV is associated with their clinical care of survivor patients. The research question at the outset of this project was: Is personal experience of DV associated with a health professional's attitudes about DV survivor patients and the role of the health workplace; identification of survivor patients; comfort to discuss DV and clinical interventions with survivor patients? We hypothesised that, after adjusting for possible confounding background variables, compared with their non-abused peers, survivor health professionals would: (1) demonstrate more sensitive attitudes about survivors; (2) feel more comfortable discussing DV and sexual assault with their patients; (3) ask more patients about DV; (4) identify more survivors within a 6-month period and (5) provide more DV interventions to survivor patients, including DV referral. While not an initial focus of the study, the effect of training on clinical practice emerged as an interesting finding during the data analysis and was included in the results.

A full description of the study design, setting, participants and recruitment process has been reported previously in a paper about prevalence.¹ In brief, we conducted an anonymous and voluntary cross-sectional survey of all health professionals in one Australian tertiary maternity hospital between 8 August and 31 December 2013. Participants were female health professionals (nurses, doctors and social workers) working with patients. An online survey link and encouragement to participate by the chief executive officer was distributed via email to all part-time/permanent clinical staff—nurse/midwives, doctors and allied health professionals. Staff were

ineligible to participate if they were employed casually or did not work in a clinical capacity (ie, administration staff).

Data collection and measures

Exposure to DV encompassed 12 month and adult lifetime intimate partner violence and/or lifetime violence by a family member. Violence by an intimate partner was measured using the Composite Abuse Scale, a well-validated and widely used self-report measure of physically, sexually and emotionally abusive behaviours perpetrated by an intimate partner.¹⁶ This was measured by: scoring on the 12-month subscales, or two of the lifetime subscales, 'Severe Combined Abuse' or 'Physical and Emotional Abuse', or by scoring >7. Violence by a family member was measured by answering positively to either of two questions about lifetime physical, emotional and sexual abuse by a family member and witnessing parental abuse. Overall, 45.2% (212/471) of the female participants in this sample qualified for inclusion into the DV exposure group.¹

The main predictor variable was exposure to DV. In a follow-up analysis, the predictor variables were DV training and demographics. The outcome variables were: attitudes (measured by Physician Readiness to Manage Intimate Partner Violence Survey,¹⁷ comfort discussing DV, DV inquiry and interventions after identifying a new DV case during a 6-month period (table 1). Adjustment for potential confounding variables was made a priori based on the literature, and included: age (40+ years),^{14 18} professional background (allied health),^{10 14} DV training (1+ days)^{9 10 15} and years of clinical experience (10+ years).^{14 15}

Statistical analysis

Clinical interventions to identify and respond to DV were summarised using frequencies and percentages for categorical data and means and SD for ordinal data. Independent t-tests and X² tests of comparison were used to compare mean scores. Linear regression compared differences in mean scores across exposure for attitude scores, while logistic regression was used for comfort asking about DV and clinical intervention variables. ORs, 95% CIs and p values were used to assess the likely size of the association between each clinical action and DV.

Data were analysed with STATA V.13.1.²⁰

Patient and public involvement

No patients or the public were involved in developing the research question or outcome measures. Health professionals were involved, however, and they were informed by their clinical work with survivor patients. Health professionals contributed to the research questions and overall design of the study. Results of the study will be disseminated to participants via workplace newsletter items and staff public speaking forums at the recruitment site.

Table 1 Variables included in analysis*

	Description
Independent variables	
Exposure to DV†	30 CAS items measured 12 month and lifetime intimate partner violence and 2 family violence questions.
DV training‡§	6 items measured graduate and postgraduate DV training history (<8 hours/≥8 hours).¶
Demographics**	3 items measured: age (<40 years/>40 years), professional background (medical/nursing/allied health) and years of clinical experience (<20 years/>20 years).
Dependent variables	
Attitudes††	12 PREMIS items comprised two subscales; 'Victim understanding' (attitudes about survivors) and 'Workplace issues' (attitudes about the role of the workplace). Scoring via a 7-point Likert-type scale, with some items reverse scored due to intentional negative wording.
Comfort discussing DV§	4 items scored on a 5-point Likert-type scale measured comfort to discuss DV and sexual assault with patients ('comfortable'/'uncomfortable'). 4 items scored on a 6-point Likert-type scale measured: 'Did not avoid issue of DV', 'Did not find DV upsetting to talk about', 'Very aware of the issue' and 'Tried to go the extra mile with patients' ('agree'/'disagree'). Some items reverse scored due to intentional negative wording.
DV inquiry§	1 item scored on a 5-point Likert-type scale measured frequency of asking all patients about DV ('never'/'ever') during the previous 6 months.
Interventions after identifying a new DV case§	5 items measured identification of 1+ new patient survivor/s ('0 new cases'/'1+ new cases') in the previous 6 months. 10 items scored on a 5-point Likert-type scale measured: risk assessment, safety planning, case file documentation, use of clinical guideline, access of DV information to give to patients, clinical discussion at team meeting and with manager and DV referrals ('never'/'1–3+ times') during the previous 6 months.
Variables used for adjustment§	
Age	>40 years
Professional background	Allied health: social workers were the most common allied health professionals at this hospital and it was anticipated that they would likely have been in receipt of greater undergraduate and professional DV training.
DV training	>8 hours
Years of clinical experience	>10 years

*All items/measures were made into binary variables unless otherwise noted.

†Exposure to DV measured via CAS.¹⁶

‡Training also analysed as an outcome (dependent) variable.

§Bespoke item developed for the survey based on an extensive review of the literature.

¶Participants with no DV training were included in '<8 hours'.

**Demographic measures based on recruitment site specific data and Australian Institute of Health and Welfare.¹⁹

††Attitudes measured via PREMIS.¹⁷

CAS, Composite Abuse Scale; DV, domestic violence; PREMIS, Physician Readiness to Manage Intimate Partner Violence Survey.

RESULTS

Participant characteristics

The survey was sent to 1047 female health professional staff and 471 participated: 366 completed the survey electronically, while 105 returned a paper version, giving a response rate of 45.0%. Most participants were nurse/midwives, aged 30–60 years, had 10 or more years of experience, and were demographically representative of their non-participating peers (table 2). Survivor health professional participants (45.2%, 212/469) were significantly more likely to be aged 30–39 years and have an allied

health background compared to participants who were not survivors.¹

Training and preparedness

Survivor health professionals were more likely to have received one or more days of DV training (adj OR 1.9, 95% CI 1.2 to 3.2) and to report more sensitive attitudes about DV survivors (adj. coef. 0.2, 95% CI 0.1 to 0.4) compared with their colleagues who had not experienced DV. Survivor health professionals were no more likely than others to find it upsetting to talk about DV with their patients (adj OR 0.8, 95% CI 0.5 to 1.1)

Table 2 Personal characteristics of participating health professionals

Characteristic	Total participants* (n=471) n (%)	No history of violence (n=257) n (%)	Lifetime domestic violence (n=212) n (%)	P value
Age (years)				
<30	81 (17.2)	52 (20.2)	29 (13.7)	0.063
30–39	123 (26.2)	57 (22.2)	66 (31.1)	0.029
40–49	100 (21.3)	54 (21.0)	46 (21.7)	0.857
50–59	133 (28.3)	70 (27.2)	62 (29.2)	0.630
≥60	33 (7.0)	24 (9.3)	9 (4.2)	0.036
Health professional background				
Nursing/midwifery	317 (67.5)	181 (70.7)	134 (63.2)	0.086
Medical	69 (14.7)	38 (14.8)	31 (14.6)	0.946
Allied health	61 (13.0)	21 (8.2)	40 (18.9)	0.001
Other†	23 (4.9)	16 (6.3)	7 (3.3)	0.148
Years of clinical experience				
<5	70 (15.0)	39 (15.4)	31 (14.6)	0.826
5–9	67 (14.3)	35 (13.8)	32 (15.1)	0.687
10–19	119 (25.4)	62 (24.4)	57 (26.9)	0.542
20–29	99 (21.2)	53 (20.9)	45 (21.2)	0.924
≥30	113 (24.2)	65 (25.6)	47 (22.2)	0.390
Participants who supervise other staff	226 (48.2)	122 (47.8)	102 (48.1)	0.954
Adult intimate relationship (ever)‡	431 (92.9)	222 (88.1)	209 (98.6)	<0.01

*Denominators vary due to missing responses. Maximum missing data n=3 (0.6%).

†Health professionals working in a clinical role not already specified, that is, imaging, pharmacy.

‡33 participants were omitted from relationship questions because they had never been in a relationship.

(table 3). Irrespective of whether a health professional had experienced DV, having undertaken at least 1 day of DV training was positively associated with good clinical care, including identifying survivor patients (adj OR 9.6, 95% CI 5.0 to 18.8), risk assessment (adj OR 4.6, 95% CI 2.2 to 9.5), safety planning (adj OR 4.3, 95% CI 2.1 to 8.9) and referral (adj OR 2.1, 95% CI 1.0 to 4.1). This finding occurred even after adjustment for possible confounders (table 4). Univariate analysis suggested a positive association between hours of DV training and asking patients about the issue. The analysis also suggested that allied health professional participants (ie, social workers) were more likely to have had 1+ days of DV training and to have safety planned and referred survivor patients than the other professional groups (table 4).

Identifying survivor patients

In the unadjusted analysis, being a survivor health professional was associated with asking patients about DV during the previous 6 months and motivation 'to go the extra mile' with them. However, in the adjusted analysis a between-group difference did not remain, although the significance level for asking patients about DV was approaching 0.05 (adj OR 1.5, 95% CI 1.0 to 2.3, p=0.07) (table 3).

Clinical care

Of the 193 participants who identified a survivor patient in the last 6 months, the unadjusted results indicated that survivor health professionals were more likely than others to have provided DV information to patients, conducted risk assessments, safety plans and made referrals to services (table 3). However, in the adjusted analysis, the only association that remained was accessing DV information for patients (adj OR 2.0, 95% CI 1.0 to 4.0).

DISCUSSION

These findings provide evidence that survivor health professionals may be doing more of the work seen as better clinical care of survivor patients than those without personal experience. Being a survivor health professional was significantly associated with uptake of DV training, more sensitive attitudes about survivors and a higher likelihood of having accessed DV information to give to survivor patients, which supports the hypothesis that survivor health professionals would demonstrate more sensitive attitudes about survivors compared with their non-abused peers. There was only partial support for the hypothesis that survivor health professionals would recall

Table 3 Health professional's personal exposure to DV and their clinical practice

	Lifetime abuse by partner/family member				P values
	All participants (n=471)*	No abuse (n=257)	Abuse (n=212)		
	n (%)			OR (95% CI)	
Training (1+ days)	94 (20.1)	36 (14.1)	58 (27.4)	2.3 (1.4 to 3.6)	0.007
Preparedness for practice	Mean (SD)			Coef (95% CI)	
Attitudes about survivors	5.1 (1.0)	4.9 (1.0)	5.3 (0.9)	0.3 (0.2 to 0.5)	0.009
Attitudes about the role of health services	4.4 (1.1)	4.3 (1.0)	4.4 (1.2)	0.1 (-0.1 to 0.3)	0.550
	n (%)			OR (95% CI)	
Recent clinical practice†	(n=422)	(n=226)	(n=194)		
Comfort discussing DV	194 (46.0)	94 (41.6)	99 (51.0)	1.5 (1.0 to 2.2)	0.578
Comfort discussing sexual assault	165 (39.0)	77 (34.1)	87 (44.8)	1.6 (1.1 to 2.3)	0.455
Did not avoid issue of DV	254 (61.9)	93 (42.5)	62 (32.8)	1.5 (1.0 to 2.3)	0.232
Did not find upsetting to talk about	229 (55.8)	127 (56.0)	102 (54.0)	0.8 (0.6 to 1.2)	.186
Very aware of the issue	220 (54.3)	107 (50.0)	111 (59.0)	1.4 (1.0 to 2.1)	0.399
Tried to go the extra mile with patients	181 (44.5)	84 (38.7)	95 (50.3)	1.6 (1.1 to 2.4)	0.205
DV inquiry					
Inquiry of 1+ patient/s	260 (61.6)	124 (54.9)	134 (69.1)	1.8 (1.2 to 2.7)	0.074
Identified 1+ new cases	193 (45.7)	91 (40.1)	101 (52.3)	1.6 (1.1 to 2.4)	0.263
Intervention/s with survivor patient/s§	(n=193)	(n=91)	(n=101)		
Risk assessment	102 (53.7)	41 (46.1)	60 (60.0)	1.8 (1.0 to 3.1)	0.501
Safety planning	80 (41.7)	28 (31.1)	52 (51.5)	2.3 (1.3 to 4.2)	0.208
Case file documentation	139 (72.4)	63 (70.0)	75 (74.3)	1.2 (0.6 to 2.3)	0.786
Utilised DV clinical practice guideline	76 (40.0)	37 (41.1)	38 (38.4)	0.9 (0.5 to 1.6)	0.363
Accessed DV information	60 (31.4)	22 (24.4)	37 (37.0)	1.8 (1.0 to 3.4)	0.040
Discussed DV at a team meeting	125 (66.1)	56 (62.2)	68 (69.4)	1.4 (0.7 to 2.5)	.542
Discussed a DV case with manager	146 (76.4)	66 (74.2)	79 (78.2)	1.2 (0.6 to 2.4)	0.751
DV referrals					
Internal hospital service	166 (86.0)	78 (85.7)	87 (86.1)	1.0 (0.5 to 2.3)	0.960
Community DV service	78 (40.6)	30 (33.3)	48 (47.5)	1.8 (1.0 to 3.3)	0.387

Continued

Table 3 Continued

	Lifetime abuse by partner/family member		Adjusted†	P values
	No abuse (n=257)	Abuse (n=212)		
All participants (n=471)*				

*Denominators vary due to missing values, maximum missing values n=19 (4.0%).
†Adjusted for age (40+ years), profession (social work), years of clinical experience (10+ years), training (1+ days).
‡During the last 6 months. 48 participants were excluded from the remaining analyses because they had not been in clinical practice.
§277 participants were excluded from analyses (229 participants who had not identified a new DV case and 48 participants not in clinical practice).
DV, domestic violence.

providing more DV interventions to survivor patients since the only significant association was having accessed more DV information for patients. However, the hypotheses that survivor health professionals would feel more comfortable discussing DV with their patients, ask more patients about DV, and identify more survivors within a 6-month period, were not supported after adjusting for age, years of experience and training. It is notable that survivor health professionals asked more patients about DV at a level approaching significance.

Strengths and limitations

Strengths of this study include adjustment for potential confounders in regression,^{7 8 11 13 14} the inclusion of health professionals from all clinical backgrounds reflected in hospitals^{7 8 10–14} and the recruitment of primary DV survivors.^{9 11 13 14} Limitations of this study include self-report and social desirability, which may have led to under-reporting of abuse, and the single recruitment site that prevents generalisability of findings.^{21 22} It is possible that DV survivors were more motivated to participate in the project than the other people,²¹ and we acknowledge the possibility that non-respondents may have differed from respondents in a way that affected our conclusions. Considerable attempts were made to address selection bias by active recruitment and strong encouragement to participate; a 45.0% response rate was achieved. Despite the sample limitations, considering the work demands of our participants and the representational participation of nurses, doctors and allied health professionals, we argue that our response rate is acceptable and comparable to similar research.^{7 8}

The study in the context of other studies

The finding of an association between a health professional's history of DV and aspects of clinical care of survivor patients echoes other research.^{7 14} A possible interaction between DV training, personal experience and clinical care has been suggested previously.⁹ However, the finding in this study of a relationship between a health professional's history of DV and their participation in training is critical and new. This finding was surprising; we did not posit a hypothesis about survivors accessing more hours of professional training. We suggest that survivor health professionals may be more likely to attend training because they understand the issue, resultant impact on health and the need for timely responses, and/or they are seeking information or validation about their own experience.

The association between being a survivor health professional, holding more sensitive attitudes about survivors and providing DV information to patients is consistent with one previous study.¹⁴ This small study examined nurses' thoughts, feelings and proposed actions in response to identifying survivor patients, finding an association between being a survivor nurse and having more sensitive, empathetic responses to survivor patients.¹⁴ Our study extends these findings since that analysis did not

Table 4 The effect of training on clinical practice

	All participants (n=471)*	Length of training		Adjusted†	P values
		<1 day (n=375)	1+ day (n=94)		
Demographics					
Age					
<40 years	204 (43.4)	169 (45.2)	33 (35.1)	0.7 (0.4 to 1.0)	0.090
>40+ years	266 (56.6)	205 (54.8)	61 (64.9)	1.5 (0.9 to 2.4)	0.090
Professional background					
Nursing/midwifery	317 (67.5)	268 (71.7)	48 (51.1)	0.4 (0.3 to 0.6)	0.000
Medical	69 (14.7)	55 (14.7)	13 (13.8)	0.9 (0.5 to 1.8)	0.816
Allied health	61 (13.0)	31 (8.3)	30 (31.9)	5.2 (2.9 to 9.1)	0.000
Years of clinical experience					
<20 years	256 (54.7)	207 (55.6)	47 (50.0)	0.8 (0.5 to 1.2)	0.028
>20+ years	212 (45.3)	165 (44.3)	47 (50.0)	1.2 (0.8 to 2.0)	0.028
Supervision of other staff	226 (48.2)	175 (46.9)	49 (52.1)	1.2 (0.8 to 1.9)	0.038
Preparedness for practice					
Mean (SD)					
Attitudes about survivors	5.1 (1.0)	4.9 (1.0)	5.8 (0.7)	0.9 (0.6 to 1.1)	0.000
Attitudes about the role of health services	4.4 (1.1)	4.2 (1.0)	5.0 (1.2)	0.8 (0.6 to 1.1)	0.000
n (%)					
OR (95% CI)					
Recent clinical practice‡					
(n=422)					
Comfort discussing DV	194 (45.9)	125 (37.1)	68 (80.9)	7.2 (4.0 to 13.0)	0.000
Comfort discussing sexual assault	165 (39.0)	104 (30.9)	61 (72.6)	5.9 (3.5 to 10.1)	0.000
Did not avoid issue of DV	254 (61.9)	190 (58.5)	63 (75.9)	2.3 (1.3 to 3.9)	0.008
Did not find upsetting to talk about	229 (55.8)	173 (53.2)	54 (65.1)	1.6 (1.0 to 2.7)	0.095
Very aware of the issue	220 (54.3)	149 (46.4)	70 (85.4)	6.7 (3.5 to 12.9)	0.000
Tried to go the extra mile with patients	181 (44.5)	118 (36.5)	62 (75.6)	5.4 (3.1 to 9.3)	0.000
DV inquiry					
Inquiry of 1+ patient/s	260 (61.6)	178 (53.0)	81 (96.4)	24.0 (7.4 to 77.4)	0.000
Identified 1+ new cases	193 (45.7)	121 (35.9)	71 (85.5)	10.6 (5.5 to 20.2)	0.000
(n=193)					
Intervention/s with survivor patients§	102 (53.7)	47 (39.5)	54 (77.1)	5.2 (2.6 to 10.1)	0.000
Risk assessment	80 (41.7)	31 (25.8)	48 (67.6)	6.0 (3.1 to 11.4)	0.000
Safety planning				4.3 (2.1 to 8.9)	0.000

Continued

Table 4 Continued

	All participants (n=471)*	Length of training		Unadjusted	Adjusted†	P values
		<1 day (n=375)	1+ day (n=94)			
Case file documentation	139 (72.4)	76 (63.3)	62 (87.3)	4.0 (1.8 to 8.8)	3.4 (1.5 to 7.8)	0.004
Utilised DV clinical practice guideline	76 (40.0)	32 (26.9)	43 (61.4)	4.3 (2.3 to 8.1)	4.2 (2.1 to 8.3)	0.000
Accessed DV information	60 (31.4)	32 (26.7)	27 (38.6)	1.7 (0.9 to 3.2)	1.7 (0.9 to 3.4)	0.120
Discussed DV at a team meeting	125 (66.1)	69 (59.0)	55 (77.5)	2.4 (1.2 to 4.7)	2.4 (1.1 to 5.0)	0.019
Discussed a DV case with manager	146 (76.4)	82 (68.9)	63 (88.7)	3.5 (1.5 to 8.2)	3.3 (1.4 to 8.1)	0.007
DV referrals						
Internal hospital service	166 (86.0)	97 (80.2)	68 (95.8)	5.6 (1.6 to 19.4)	6.4 (1.7 to 23.6)	0.005
Community DV service	78 (40.6)	35 (29.2)	42 (59.1)	3.5 (1.9 to 6.5)	2.1 (1.0 to 4.1)	0.042

*Denominators vary due to missing value. Maximum missing data n=3 (1.5%), unless otherwise specified.

†Adjusted for age (40 years and older), profession (social work) and years of clinical experience (10 or more years).

‡During the last 6 months, 48 participants were excluded from the remaining analyses because they had not been in clinical practice.

§277 participants were excluded from analyses (229 participants who had not identified a new DV case and 48 participants not in clinical practice).
DV, domestic violence.

adjust for potential confounders and the exposure group included health professional participants with secondary exposure to DV through friends/family. We postulate that survivor health professionals may hold more sensitive attitudes about survivors and fewer misconceptions about DV because of empathy stemming from a shared trauma experience. Additionally, they may be more likely to access DV information for their patients because they believe that DV awareness is an important intervention in itself.

Implications

Given the association between being a survivor health professional and attendance at DV training, this should be regarded when developing and delivering DV training for health professionals.⁷ Such training could incorporate reflection, safety information, emotional health psycho-education, referral, workplace support and promoting a safe and supportive healthcare workplace.^{15 23} More broadly, these findings provide evidence that survivor health professionals are an asset to the organisations in which they work since among the participants in this study, they appear to be doing more of the work seen as better clinical care of survivor patients. This finding rebukes the misconception that women who have experienced DV are enduringly vulnerable, a distortion which can encourage women to remain silent, especially at work, for fear of how they might be regarded if they speak up.²⁴ This study presents an opportunity for health services to explore how the lived experience of DV for both their patient and staff survivors could inform and improve their service. A past critique of health and other 'mainstream' DV response services has been that they have not meaningfully consulted survivors.²⁵ Listening to the experiences and needs of survivor health professionals may enhance the support those health professionals feel from their employer, strengthening their personal and professional capacity as they care for patients. There is evidence that accessing support for DV can result in meaningful change in survivors' lives, including in their employment.¹⁸ We argue the need for greater workplace supports aimed at promoting safety and recovery from violence and strengthening clinical practice with patients. This requires organisational leadership, evidence-based response guidelines and resourced individuals to whom a disclosure can be made and who can provide varied levels of support (resource information, clinical debriefing, longer term emotional support).¹ Trauma-informed care may provide a useful framework to guide the response of hospitals towards better supporting staff and patient DV survivors.²⁶ A trauma-informed system is one in which all components have been organised with the understanding that trauma is a centralising influence in survivor's lives, and organisational, operational and clinical practice should prioritise safety, control and the recovery trajectory.²⁷ More research is required to better understand the impact of DV workplace supports for DV on health professional women's well-being and clinical care. This

study sheds light on the survivor experience, especially for women at work.

CONCLUSION

This research demonstrates that health professionals with a lived experience of DV attend more training aimed at improving clinical care of survivor patients, self-report more sensitive attitudes about survivors and access more DV information for patients after disclosure. This suggests that DV is not a barrier, and may be a facilitator, to clinical care of survivor patients. Healthcare workplaces should take account of this in their response to survivor health professionals, the development of DV training offered to staff, clinical care policies with patients and workplace supports.

Acknowledgements We thank the health professionals who participated in our study, and the Sidney Myer Fund for EM's PhD Stipend, and the Zouki group of Companies for their donation towards coffee vouchers.

Contributors This manuscript is part of the doctoral work of EM. EM, KH and CH participated in the design of the study. EM was primarily responsible for all aspects of the work, including data collection and analysis, with KH contributing significantly to the data analysis. EM, KH and CH were all responsible for interpretation of the findings. EM wrote the manuscript, with important contributions during many reviews by KH and CH. All authors read and approved the final manuscript.

Funding The authors declare that no funding was directly received for this study. The only financial support for this project was a stipend for the doctoral work of the lead author, EM. The stipend scholarship titled, The Sidney Myer Health Scholarship, was generously provided by the Sidney Myer Fund. In addition, financial support was provided by the Zouki group of Companies through coffee vouchers they sold to the project at a reduced cost.

Disclaimer Neither the Sidney Myer Fund nor the Zouki group of Companies was involved in any aspect of designing the study, data collection, analysis or writing the manuscript. The authors have neither received financial support from any other organisation for the submitted work, nor have relationships or activities influenced the work.

Competing interests None declared.

Patient consent for publication Not required.

Ethics approval Ethics approval was provided by both the recruiting hospital and a University Human Research and Ethics Committee (Ethics ID: 1339986, dated 10 May 2013).

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement At present, the data and materials (survey) are not publicly available but can be obtained from the authors upon request. The Composite Abuse Scale and Physician Readiness to Manage Intimate Partner Violence Survey are publicly available.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

REFERENCES

1. McLindon E, Humphreys C, Hegarty K. "It happens to clinicians too": an Australian prevalence study of intimate partner and family

- violence against health professionals. *BMC Womens Health* 2018;18:113.
2. Krug EG, Mercy JA, Dahlberg LL, et al. In: Krug E, Dahlberg L, Mercy J, eds. *World report on violence and health*. Geneva, Switzerland: World Health Organization, 2002:1083–8.
3. Elliott DE, Bjelajac P, Fallot RD, et al. Trauma-informed or trauma-denied: Principles and implementation of trauma-informed services for women. *J Community Psychol* 2005;33:461–77.
4. Campbell JC. Health consequences of intimate partner violence. *Lancet* 2002;359:1331–6.
5. Australian Bureau of Statistics. *Personal Safety Survey, Australia, 2012*. Canberra: Australian Bureau of Statistics, 2012.
6. Garcia-Moreno C, Hegarty K, d'Oliveira AF, et al. The health-systems response to violence against women. *Lancet* 2015;385:1567–79.
7. Candib LM, Savageau JA, Weinreb L, et al. Inquiring into our past: when the doctor is a survivor of abuse. *Fam Med* 2012;44:416–24.
8. Christofides NJ, Silo Z. How nurses' experiences of domestic violence influence service provision: study conducted in North-west province, South Africa. *Nurs Health Sci* 2005;7:9–14.
9. Gutmanis I, Beynon C, Tutty L, et al. Factors influencing identification of and response to intimate partner violence: a survey of physicians and nurses. *BMC Public Health* 2007;7:12.
10. Rodriguez MA, Bauer HM, McLoughlin E, et al. Screening and intervention for intimate partner abuse: practices and attitudes of primary care physicians. *JAMA* 1999;282:468–74.
11. Early MR, Williams RA. Emergency nurses' experience with violence: does it affect nursing care of battered women? *J Emerg Nurs* 2002;28:199–204.
12. Mezey G, Bacchus L, Haworth A, et al. Midwives' perceptions and experiences of routine enquiry for domestic violence. *BJOG* 2003;110:744–52.
13. Moore ML, Zaccaro D, Parsons LH. Attitudes and practices of registered nurses toward women who have experienced abuse/domestic violence. *J Obstet Gynecol Neonatal Nurs* 1998;27:175–82.
14. Dickson F, Tutty LM. The role of public health nurses in responding to abused women. *Public Health Nurs* 1996;13:263–8.
15. Stenson K, Heimer G. Prevalence of experiences of partner violence among female health staff: relevance to awareness and action when meeting abused women patients. *Womens Health Issues* 2008;18:141–9.
16. Hegarty K, Sheehan M, Schonfeld C. A multidimensional definition of partner abuse: Development and preliminary validation of the composite abuse scale. *J Fam Violence* 1999;14:399–415.
17. Short LM, Alpert E, Harris JM, et al. A tool for measuring physician readiness to manage intimate partner violence. *Am J Prev Med* 2006;30:173–80.
18. Bracken MI, Messing JT, Campbell JC, et al. Intimate partner violence and abuse among female nurses and nursing personnel: prevalence and risk factors. *Issues Ment Health Nurs* 2010;31:137–48.
19. Australian Institute of Health and Welfare. *Nursing and midwifery workforce 2012*. Canberra: Australian Institute of Health and Welfare, 2013.
20. StataCorp LP. *Stata Statistical Software: Release 13 [program]*. College Station, TX, 2013.
21. Edwards P, Roberts I, Clarke M, et al. Increasing response rates to postal questionnaires: systematic review. *BMJ* 2002;324:1183–5.
22. Bell H, Kulkarni S, Dalton L. Organizational prevention of vicarious trauma. *Families in Society: The Journal of Contemporary Social Services* 2003;84:463–70.
23. State of Victoria. *Royal commission into family violence: summary and recommendations*. Victoria, 2014–16.
24. McFerran L. *Australian Domestic and Family Violence Clearinghouse*. New South Wales: National Domestic Violence and the Workplace Survey, 2011.
25. Hague G, Mullender A. Who listens? The voices of domestic violence survivors in service provision in the United Kingdom. *Violence Against Women* 2006;12:568–87.
26. Harris M, Fallot RD. Trauma-informed inpatient services. *New Dir Ment Health Serv* 2001;89:33–46.
27. Quadara A. *Implementing trauma-informed systems of care in health settings: The WITH study*. State of knowledge paper. NSW, Australia: Australia's National Research Organisation for Women's Safety Limited (ANROWS), 2015.