



ELSEVIER

Contents lists available at ScienceDirect

Journal of Hand Therapy

journal homepage: www.jhandtherapy.org

JHT READ FOR CREDIT ARTICLE #622.

Scientific/Clinical Article

Hand therapists' attitudes, environmental supports, and self-efficacy regarding intimate partner violence in their practice



Marudan Sivagurunathan PhD Student^{a,*}, Tara Packham OTReg(Ont), PhD^b,
Lindsay Dimopoulos MSc(PT)^b, Robyn Murray MSc(Kin), MSc(PT)^b, Kim Madden PhD(c)^c,
Joy C. MacDermid PT, PhD^{b,c,d,e,f}

^a Department of Health and Rehabilitation Sciences, Western University, London, Ontario, Canada^b The School of Rehabilitation Sciences, McMaster University, Hamilton, Ontario, Canada^c Department of Clinical Epidemiology and Biostatistics, McMaster University, Hamilton, Ontario, Canada^d Department of Physical Therapy, Western University, London, Ontario, Canada^e Hand and Upper Limb Centre Clinical Research Laboratory, St. Joseph's Health Centre, London, Ontario, Canada^f Division of Orthopaedic Surgery, University of Western Ontario, London, Ontario, Canada

ARTICLE INFO

Article history:

Received 9 June 2017

Received in revised form

16 November 2017

Accepted 30 November 2017

Available online 29 December 2017

Keywords:

Intimate partner violence

Domestic violence

Hand therapy

Hand injuries

Occupational therapy

Physical therapy

ABSTRACT

Study Design: Descriptive, cross-sectional.

Introduction: Intimate partner violence (IPV) may involve physical, psychological, or sexual abuse. Although hand injuries are reported as common sequelae of IPV, there is limited attention to this issue in hand therapy research reports or practice recommendations.

Purpose of the Study: The primary aim is to describe the attitudes and beliefs of hand therapists (HTs) about IPV issues.

Methods: A sample of 189 HT completed a standardized survey investigating perceptions regarding issues pertaining to IPV. Areas addressed included self-efficacy (in dealing with IPV), perceived systemic support, victim blaming, professional role responsibility, and safety. Data were analyzed using descriptive statistics while between-group comparisons evaluating the impact of prior IPV experience and demographic variables of gender, country, certified hand therapy, and occupation on questionnaire scores used Mann-Whitney *U* analysis.

Results: The majority of therapists (66%) had some prior experience with IPV. HTs reported neutral perceptions about self-efficacy ($M = 2.9/5$), client or personal safety ($M = 3/5$), and support systems available when addressing IPV in practice ($M = 3/5$). However, therapists considered intervening as part of their professional role ($M = 3.8/5$) and reported low levels of victim-blaming attitudes ($M = 4.4/5$). Those with firsthand IPV experience reported lower victim blaming ($mdn = 4.9/5$ vs $4.6/5$, $P = .02$). Additionally, females were less likely to blame victims of IPV than males ($mdn = 4.7/5$ vs $4.3/5$, $P = .003$).

Discussion: Although Hand Therapists believe their professional role includes addressing IPV, confidence to deal with IPV, access/awareness of resources and perceived safety were substantive barriers.

conclusion: Continuing research should identify effective tools to educate and assist therapists to identify and support victims of IPV in hand therapy.

© 2017 Hanley & Belfus, an imprint of Elsevier Inc. All rights reserved.

Introduction

Intimate partner violence (IPV) is a global phenomenon with serious health implications and far-reaching consequences.¹ IPV is a

Funding: Dr. Joy MacDermid was funded by a Canadian Institutes of Health Research (CIHR) Chair in Gender, Work and Health, and Dr. James Roth Research Chair in Musculoskeletal Measurement and Knowledge Translation.

* Corresponding author. Health & Rehabilitation Sciences Elborn College, Room 1014, London, Ontario, Canada, N6G 1H1. Tel.: 647-606-6278.

E-mail address: msivagu@uwo.ca (M. Sivagurunathan).

broad categorization of abuse, which "...may include repeated battering and injury, psychological abuse, sexual assault, progressive social isolation, deprivation, and intimidation."² According to an international IPV survey of women aged 15–49 years, 15%–71% experience either physical violence, sexual violence, or both by their intimate partner.³ IPV is recognized as a primary public health issue in Canada and the United States, accounting for 1 in 4 violent crimes reported to the Canadian police in 2011.⁴ IPV is estimated to cost the Canadian health care system \$7.4 billion annually which includes health care utilization as a result of the associated mental

and physical injuries, as well as the frequency with which persons directly impacted by IPV access health-related services.⁵

Studies show a high rate of service utilization by women who have been impacted by IPV.^{6–8} A study by Bhandari et al., (2011) examined prevalence of IPV in a sample of 282 women attending a level-I trauma center in Ontario. The results showed 32% of women attending the clinic had experienced IPV (including emotional, physical, and sexual abuse) within the past 12 months, with 8.5% reporting physical abuse.⁶ Recent studies have shown musculoskeletal injury to be the second most common form of injury resulting from IPV.^{9,10}

Despite the high rates of service utilization by those affected by IPV, previous literature suggests that health care professionals vastly underestimate the prevalence of IPV in their practice.^{11–13} Although orthopedic surgeons and chiropractors believed that less than 1% of their female clients are victims of IPV,¹² the prevalence in primary care settings has been reported to be as high as 29% and up to 41% in emergency departments.^{11,12} Furthermore, while many clinicians believe that knowledge regarding IPV is relevant to their practice, very few health professionals routinely screen for IPV.^{7,14} Common barriers to screening include (1) fear that questioning regarding IPV would offend the patient, (2) lack of time, (3) lack of knowledge of how to respond to a positive screen or lack of community resources, (4) inadequate training or education regarding screening, (5) uncertainty about roles and responsibilities, and (6) personal discomfort in performing a screen.^{13,15–17} Considering the immediate and long-term psychological,^{18–20} and physical^{21,22} health consequences, screening for and identification of IPV is essential for receiving appropriate services.

While previous research has examined attitudes and beliefs in regard to IPV among orthopedic surgeons,^{11,23} medical students/surgical residents,^{13,17,24} and chiropractors,¹² there is a paucity of research regarding the attitudes and beliefs of hand therapists (HTs) regarding IPV and their readiness to address this sensitive issue. As client rapport is built over regular contact during the hand rehabilitation process, physical therapists (PTs) and occupational therapists (OTs) practicing in this area are perhaps uniquely positioned to screen for IPV and offer appropriate referrals and assistance. Musculoskeletal injuries are the second most common trauma resulting from IPV, with 39.3% of persons presenting with a finger fracture or dislocation.⁹ This emphasizes the importance of this issue for hand therapy practice.

Since HTs are predominantly female and usually spend more time with their clients in comparison to surgeons, who are more commonly male,²³ there is the potential disclosure may happen in the context of a therapy interaction that would not take place during surgical consultations. Understanding therapists' current level of confidence in dealing with IPV issues and perceived barriers to screening is required to define the need for educational interventions and resources to support screening and management of IPV within hand therapy clinical interactions.

The primary aim of this study is to describe the attitudes and beliefs of HT regarding IPV: specifically, to assess perceptions of (1) self-efficacy about managing IPV within the context of their practice, (2) access to services for persons experiencing IPV, (3) victim-blaming attitudes/beliefs, (4) professional role resistance, and (5) client and provider safety. The secondary objective is to determine whether gender, country of practice (Canada or United States), hand therapy certification status, professional training (PT or OT), and experience with IPV (first hand vs second hand/no experience) predicts HTs' attitudes and beliefs about IPV.

Methods

Recruitment

Researchers contacted both the Canadian and American Societies of Hand Therapists to inquire regarding interest in study

participation. Specifically, the purpose of the study was outlined, and the societies were asked if mass e-mails advertising the survey could be sent to their member base. Both societies agreed to participate, and 1 mass e-mail was sent to the members of each representative society explaining the project, which provided a link to the online questionnaire hosted on a LimeSurvey platform. Participants were informed that participation in the study was voluntary and all answers were confidential and anonymous. A subsequent reminder e-mail was sent approximately 2 weeks following the initial invitation. The questionnaire was active between February 2015 and April 2015. Ethics approval for the study was obtained from the research ethics board at the McMaster University in Hamilton, Ontario.

Measures

The researchers utilized a 27-item questionnaire that was modified from the 2 surveys previously published by Maiuro et al., (2000) and Connor et al., (2011). While minor modifications in wording were made to focus on the target population of HTs, the essential constructs of all items were retained. The health care provider survey initially published by Maiuro et al., (2000) was a 39-item survey intended to measure primary care providers' attitudes, beliefs, and self-reported behaviors related to the identification and management of IPV. Item-domain Cronbach alpha for the survey was reported as between 0.73 and 0.91 with an overall alpha of 0.88.²⁵ The IPV tool developed by Connor et al., (2011) was intended to measure readiness of health care students to deal with IPV: it demonstrated Cronbach's alpha scores greater than 0.7.²⁴ The final modified version of our survey included the following 7 domains: (1) perceived self-efficacy about managing IPV within the context of their practice, (2) access to services for persons after IPV, (3) victim-blaming attitudes/beliefs, (4) professional role resistance, (5) client and provider safety, (6) frequency of IPV inquiry, and (7) perceived preparedness. Self-efficacy, systemic support, victim blaming, professional role responsibility, and safety were rated on a 5-point Likert-type scale ranging from 1 = strongly disagree to 5 = strongly agree. In some cases, items were reverse coded so that higher numbers reflected a positive attitude and less negative behaviors.

After the survey, a section was added where participants were encouraged to comment on their experiences with IPV in practice; however, formal qualitative analysis of these data is beyond the scope of the present study. Additional variables collected included demographic information (eg, gender, age, and marital status), professional background (OT or PT), years in professional practice, practice setting, location, and whether the participant was a certified hand therapists (CHTs). Participants were also asked about their experience with IPV.

Statistical analysis

Statistical analyses were conducted using SPSS statistical package, version 24.0 (SPSS Inc., Chicago, IL). At the first stage, data quality was checked by examining the data for out of range values and recoding the items that were reverse coded.

Normality was assessed using the Shapiro-Wilk test. Results showed the social support ($W(181) = 0.98, P = .003$), blame victim ($W(182) = 0.72, P = .00$), and professional role ($W(183) = 0.96, P = .00$) subscales were not normally distributed. Self-efficacy ($W(178) = 0.99, P = .51$), and safety ($W(158) = 0.99, P = .45$) scale scores were normally distributed. For answering the primary research question, descriptive analysis was performed. Transformations were attempted for the 3 (of 5) subscales that were not normally distributed. However, data remained skewed despite transformations. As such, Mann-Whitney U analysis was used to

examine if there were differences in therapists' attitudes and beliefs regarding persons experiencing IPV, safety, self-efficacy, professional roles, and available support systems based on comparison groups defined by gender, country of practice, certified or noncertified hand therapists, occupation (PT or OT), and experience with IPV (first hand vs second hand/no experience).

Results

Response rate and missing data

The combined membership of Canadian and American Societies of Hand Therapy provided a potential sampling frame of 3256 e-mails; although since some people are members of both organizations, there would be fewer potential individual participants. Initially, a total of $n = 232$ participants responded to the survey (estimated response rate: 7.1% of e-mails resulted in respondents). After removal of those responses ($n = 45$) with incomplete data (partial or full demographic responses with no other data: thought to represent persons abandoning the survey), this resulted in a final sample size of $n = 189$ (response rate: 5.8% of the e-mails sent). For the group comparisons using Mann-Whitney U tests, data sets were removed for participants missing more than 1 item per scale; the resulting sample size is therefore reported with each analysis. The response rate of 189 participants should provide a 7% margin of error at the 95% confidence level.

Participants

Participants included 189 HTs from Canada and the United States (M age = 49 years, range = 24–73 years). The sample consisted primarily of female, married OTs practicing in the United States. The mean number of years in practice and certified hand therapy were 23.7 years (standard deviation [SD] = 10.4) and 17.6 years ($SD = 10$), respectively. Of the sample population, 119 participants had some familiarity with IPV (66.1%), which included previous experiences with clients (41.7%), family and/or friends (17.8%), or firsthand encounters (6.7%). For a complete list of demographic data, see [Table 1](#).

Descriptive analysis

On average, therapists demonstrated high levels of variability in their responses regarding their confidence (ie, self-efficacy) in addressing the issues regarding IPV with their clients ($M = 3$, $SD = 0.8$), systemic support available in their workplaces ($M = 3$, $SD = 1$), as well as the safety of themselves or their clients when addressing these issues ($M = 3$, $SD = 0.7$) (see [Table 2](#)). The moderate mean scores reflected diversity in opinions. While 41% thought they had strategies to adequately deal with batterers, 33% disagreed (see [Table 3](#)). Similarly, 44% of the therapists were confident they make appropriate referrals for victims of IPV, whereas 35% were unsure of this (see [Table 3](#)). In terms of available systemic support, 38% of the therapists reported that they had access to mental health referrals, whereas 41% perceived inadequate mental health referral options that were present in their environment (See [Table 4](#)). While 38% of the therapists were reluctant to ask potential batterers about their abusive behavior out of concern for their personal safety, a similar number (41%) felt this was not a concern (see [Table 5](#)). Most participants either “somewhat disagreed” or “strongly disagreed” with statements blaming the victim of IPV ($M = 4.4$, $SD = 0.83$). Participants also “somewhat disagreed” with statements suggesting that addressing IPV was not part of their role as health professionals ($M = 3.8$, $SD = 0.83$).

Table 1
Participant demographics

Characteristics	Descriptive
Mean age (range)	49 (24–73)
Gender (%)	
Male	20 (10.8)
Female	165 (89.2)
Degree (%)	
PhD	21 (11.5)
MSc	72 (39.3)
BSc	90 (49.2)
Profession (%)	
PT	24 (13)
OT	160 (86.5)
Mean years of practice (SD)	23.7 (10.4)
Mean years of HT (SD)	17.6 (10)
Relationship status (%)	
Single	20 (10.8)
Common law	5 (2.7)
Married	140 (75.3)
Separated	1 (0.5)
Divorced	18 (9.7)
Widowed	2 (1.1)
Practice setting (%)	
Urban	82 (43.6)
Small town	21 (11.2)
Suburban	71 (37.8)
Rural	12 (6.4)
Other	2 (1.1)
Previous experience with IPV (%)	
Client	75 (41.7)
Family member or friend	32 (17.8)
First hand	12 (6.7)
None	61 (33.9)
Country of practice (%)	
Canada	28 (14.8)
United States	161 (85.2)
Hand therapy certification status (%)	
Certified hand therapist	152 (81.3)
Non certified	35 (18.7)

IPV = intimate partner violence; PT = physical therapist; OT = occupational therapist; SD = standard deviation.

Analysis of group differences

Mann-Whitney U analysis was performed to examine differences in attitudes and beliefs regarding persons experiencing IPV, safety, self-efficacy, professional roles, and available support systems of HTs based on gender (male or female), country of practice (Canada or United States), certified or noncertified hand therapists, occupation (PT or OT), and experience with IPV (first hand vs second hand/no experience). Victim blaming was the only domain with significant differences. Results suggest that men agreed significantly more ($mdn = 4.3/5$) with items blaming the person experiencing IPV than women ($mdn = 4.7/5$), $U = 1067$, $P = .03$. Results also demonstrated that therapists with firsthand experience were significantly less likely ($mdn = 4.9/5$) to blame victims of IPV than those without firsthand experience ($mdn = 4.6/5$), $U = 579$, $P = .02$. No significant between-group findings were found for country of practice, certified hand therapists (vs noncertified), or occupation (see [Table 6](#)).

Discussion

Our study found 66.1% of participants reported prior involvement with IPV as therapists (41.7%), with family and/or friends (17.8%), or first hand (6.7%). Firsthand exposure to IPV is lower than the reported prevalence of IPV amongst the general public in both Canada²⁶ and the United States.²⁷ This may be due to the education level of the sample participants (see [Table 1](#)) as higher education

Table 2
Scales

Scale	Response rate (%)	Mean (SD)
Self-efficacy	178 (94.2)	2.9 (0.8)
System support	181 (95.8)	3.0 (1.1)
Blame victim	182 (96.3)	4.4 (0.8)
Professional role resistance	183 (96.8)	3.8 (0.8)
Victim/provider safety	158 (83.6)	3.0 (0.7)

Some items in the self-efficacy and victim/provider safety scale as well as the entire scale of blame victim and professional role resistance were reverse coded such that higher mean scores represented a more positive attitude.

appears to lower risk of experiencing IPV.^{28–30} However, we cannot discount the possibility there was some reluctance to disclose personal experience with IPV because the survey came through their professional association, despite assurances of anonymity. Additionally, 41.7% of therapists had prior involvement with persons experiencing IPV in their clinic: this is similar to previous research by Della Rocca et al, 2013, which found 51% of orthopedic surgeons identified treating a victim of IPV.

The findings of this study demonstrate neutral mean ratings on therapists' perceptions and beliefs regarding how to address issues surrounding IPV in practice. This is evident as attitudinal scales yielded neutral mean perceptions of self-efficacy, safety, and systemic support available to address these issues. This may suggest HTs are generally unsure of their safety and ability to identify and handle clients presenting with history of IPV in a manner that ensures the safety of the client and their personal safety. However, it is important to note that the individual item responses were highly variable, which could be attributed to the variability in services and programs available amongst the different clinics in which these therapists work. In contrast to previous studies of male-dominated surgical samples,^{11,23} individual subscales in the current study show participants had higher rates of concern for their personal safety as well as the safety of their clients. For example, the study by Bhandari et al, (2008) found 30% of participants were reluctant to

Table 3
Perceived self-efficacy

Subscale	Number (%) of respondents
I do not have the time to ask about IPV in my practice	
Strongly agree/agree	19 (10.9)
Neutral	32 (18.3)
Disagree/strongly disagree	124 (70.9)
There are strategies I can use to encourage batterers to seek help	
Strongly agree/agree	74 (40.9)
Neutral	48 (26.5)
Disagree/strongly disagree	59 (32.6)
There are strategies I can use to help victims of IPV change their situation	
Strongly agree/agree	73 (40.1)
Neutral	53 (29.1)
Disagree/strongly disagree	56 (30.8)
I feel confident that I can make appropriate referrals for batterers	
Strongly agree/agree	45 (24.6)
Neutral	40 (21.9)
Disagree/strongly disagree	98 (53.6)
I feel confident that I can make the appropriate referrals for abused patients	
Strongly agree/agree	81 (44.3)
Neutral	38 (20.8)
Disagree/strongly disagree	64 (35.0)
I have ready access to information detailing management of IPV	
Strongly agree/agree	44 (24.2)
Neutral	30 (16.5)
Disagree/strongly disagree	108 (59.3)
There are ways I can ask batterers about their behavior that will minimize risk to the potential victim	
Strongly agree/agree	35 (19.7)
Neutral	31 (17.4)
Disagree/strongly disagree	112 (62.9)

IPV = intimate partner violence.

Table 4
Perceived system support

Sub scale	Number (%) of respondents
I have ready access to medical social workers or community advocates to assist in the management of IPV	
Strongly agree/agree	72 (39.3)
Neutral	30 (16.4)
Disagree/strongly disagree	81 (44.3)
I feel that medical social work personnel can help manage IPV patients	
Strongly agree/agree	119 (65.7)
Neutral	34 (18.8)
Disagree/strongly disagree	28 (15.5)
I have ready access to mental health services should our patients need referrals	
Strongly agree/agree	69 (37.5)
Neutral	40 (21.7)
Disagree/strongly disagree	75 (40.8)
I feel that the mental health services at my clinic or agency can meet the needs to IPV victims in cases where they are needed	
Strongly agree/agree	47 (30.1)
Neutral	31 (19.9)
Disagree/strongly disagree	78 (50.0)

IPV = intimate partner violence.

question batterers out of concern for personal safety and 42% felt there were ways to ask batterers about IPV without risk to victims, compared to our study results of 38% and 16% respectively. We attribute this difference in findings between the studies to the perceived superiority in physical status and power differentials between predominantly male surgeons and many of their clients, presumed to be less prevalent in therapist-client interactions where therapists are predominantly female. Another contrast with previous findings is that HT did not report a lack of time to screen for IPV as a barrier (71% of respondents: see Table 3) compared to 8.8% surgical residents and medical students,¹³ and 63% of orthopedic surgeons.²³ This supports our assertion the hand rehabilitation environment may be well suited to screen for IPV.

The results also indicate a low frequency of victim-blaming attitude among HTs. When examining individual subscales, participants from the present study showed higher disagreement with person/victim-blaming statements than those in previous studies (see Table 7).^{11,12,23} We posit this may reflect the high number of female respondents in our study (89.2%) compared to previous studies with predominantly male samples,^{11,12,23} rather than a difference in attitudes between the professional groups. When examining professional role resistance, participants in the current study rejected statements that dealing with IPV was not consistent with their professional role as HTs. However, the participants in the current study were less likely to disagree with role resistance statements than participants from previous studies (see Table 8).^{11,23}

The secondary purpose of the current investigation was to examine differences in perceptions based on demographic factors. This study supports previous literature suggesting men were more likely to agree with statements suggesting victim blame than women.^{8,12} Our study indicates it would be important to target male therapists with educational strategies aimed at reducing victim blaming attitudes amongst therapists. Results also show that individuals with firsthand experience of IPV are less likely to engage in blaming attitudes and behaviors, therefore it may be beneficial to involve therapists with firsthand experience with IPV to champion knowledge translation efforts.

Relevance to hand therapy practice

Considering the frequency of finger fractures/dislocations after IPV,⁹ it is likely these persons will be referred for hand therapy: HT

Table 5
Victim/provider safety

Sub scale	Number (%) of respondents
I am reluctant to ask batterers about their abusive behavior out of concern for my personal safety	
Strongly agree/agree	64 (37.9)
Neutral	36 (21.3)
Disagree/strongly disagree	69 (40.8)
There is not enough security at my work place to safely permit discussion of IPV with batterers	
Strongly agree/agree	77 (44.3)
Neutral	40 (23.0)
Disagree/strongly disagree	57 (32.8)
I am afraid of offending patients if I ask about their abusive behavior	
Strongly agree/agree	61 (34.9)
Neutral	43 (24.6)
Disagree/strongly disagree	71 (40.6)
When challenged, batterers frequently direct their anger toward health care providers	
Strongly agree/agree	35 (22.3)
Neutral	73 (46.5)
Disagree/strongly disagree	49 (31.2)
I feel there are ways of asking about battering behavior without placing myself at risk	
Strongly agree/agree	82 (48.0)
Neutral	51 (29.8)
Disagree/strongly disagree	38 (22.2)
I feel I can effectively discuss issues of battering and abuse with a battering patient	
Strongly agree/agree	23 (13.1)
Neutral	46 (26.1)
Disagree/strongly disagree	107 (60.8)
I feel I can discuss issues of battering and abuse with a battering patient without further endangering the victim	
Strongly agree/agree	28 (16.3)
Neutral	53 (30.8)
Disagree/strongly disagree	91 (52.9)
I feel it is best to avoid dealing with the batterer out of fear and concern for the victim's safety	
Strongly agree/agree	36 (20.9)
Neutral	51 (29.7)
Disagree/strongly disagree	85 (49.4)
There is no way to ask batterers about their behaviors without putting the victims in more danger	
Strongly agree/agree	34 (20.1)
Neutral	45 (26.6)
Disagree/strongly disagree	90 (53.3)
I am afraid if I talk to the batterer, I will increase risk for the victim	
Strongly agree/agree	83 (48.3)
Neutral	52 (30.2)
Disagree/strongly disagree	37 (21.5)

IPV = intimate partner violence.

may therefore be ideally positioned to screen for IPV. It has been reported orthopedic surgeons may spend only a few minutes with each patient and often have residents accompanying them to appointments,^{15,23} making conditions less than ideal to screen for such a sensitive issue. Conversely, HTs frequently allot more time per patient interaction and see their clients at regular intervals over a longer period after the initial acute management. This might allow therapists to build more rapport with clients, employing active listening techniques to facilitate an open and trusting relationship between the client and therapist.³¹

OTs and PTs are also increasingly becoming the first point of contact for persons requiring rehabilitation, which further stresses the importance of assessing their attitudes and beliefs. However, our results showed a significant barrier to screening for IPV with this population of health professionals may be the perceptions regarding self-efficacy, lack of support systems, and safety concerns. Safety concerns must be addressed for HTs to feel safe probing into such a sensitive issue with victims and batterers of IPV, as this impacts the therapists' ability to fulfill the essential

Table 6
Mann-Whitney

Groups	Count	Mean rank	Mann-Whitney U	Asymptotic Significance (2 tailed)
Self-efficacy				
Gender	175		1266.5	0.7
Male	17	92.5		
Female	158	87.5		
Country of practice	178		1860.5	0.3
United States	150	91.1		
Canada	28	81		
CHT	176		1815	0.06
Yes	144	92		
No	32	73.2		
Occupation	173		1552.5	0.4
PT	23	94.5		
OT	150	85.9		
IPV experience	169		814	0.4
First hand	12	74.3		
Second hand/ none	157	85.8		
System support				
Gender	177		1303	0.5
Male	18	96.1		
Female	159	88.2		
Country of practice	181		1677	0.1
United States	154	88.4		
Canada	27	105.9		
CHT	179		2251	0.7
Yes	147	89.3		
No	32	93.2		
Occupation	176		1614.5	0.5
PT	23	82.2		
OT	153	89.5		
IPV experience	172		838	0.5
First hand	12	76.3		
Second hand/ none	160	87.3		
Blame victim				
Gender	178		1067	0.03*
Male	19	66.2		
Female	159	92.3		
Country of practice	182		1998.5	0.7
United States	155	90.9		
Canada	27	95		
CHT	180		2272	0.6
Yes	147	89.5		
No	33	95.2		
Occupation	178		1613.5	0.5
PT	23	82.2		
OT	155	90.6		
IPV experience	173		579	0.02*
First hand	12	119.3		
Second hand/ none	161	84.6		
Professional role resistance				
Gender	179		1428	0.5
Male	20	98.1		
Female	159	89		
Country of practice	183		1663	0.08
United States	156	94.8		
Canada	27	75.6		
CHT	181		2017.5	0.2
Yes	146	94		
No	35	80		
Occupation	178		1465	0.2
PT	23	75.7		
OT	155	91.6		
IPV experience	174		820.5	0.4
First hand	12	100.1		
Second hand/ none	162	86.6		
Victim/provider safety				
Gender	154		886	0.1
Male	17	93.9		
Female	137	75.5		
Country of practice	158		1350	0.7
United States	137	80.2		
Canada	21	75.3		
CHT	157		1760.5	0.7

(continued on next page)

Table 6 (continued)

Groups	Count	Mean rank	Mann-Whitney U	Asymptotic Significance (2 tailed)
Yes	128	78.3		
No	29	82.3		
Occupation	155		1039	0.4
PT	17	85.9		
OT	138	77		
IPV experience	150		691	0.9
First hand	10	76.4		
Second hand/ none	140	75.4		

IPV = intimate partner violence; PT = physical therapist; OT = occupational therapist.

* $P < .05$.

competencies of communication and advocacy for patient safety and care. Similarly, HTs in this study reported having neutral confidence in their ability to address IPV in their clinics. This indicates a gap in preparedness that might be a knowledge exchange target for curricular, educational, peer-support or networking interventions. Potential solutions include online modules or in-person seminars to increase awareness of IPV and address appropriate and safe ways to discuss sensitive topics. Changes in entry-level curriculum for PT and OT trainees may also be important since this should be considered an entry-level competency, not specific to HT practice. However, HTs may be a professional group seeing higher rates of IPV due to the nature of the presenting injuries, so they may need to pay attention to preparing to deal with this issue in their practice. Since our findings indicate that many HTs believe it is their role to screen for IPV, educational resources on dealing with IPV may be accepted. However, further research is necessary as previous studies note that while more than 74% of orthopedic surgeons believe that knowledge of IPV is relevant to their practice, only 49% of would welcome education and training regarding assessment and treatment of IPV²³ and only 16% supported mandatory screening for IPV in their practice.¹¹

Table 7
Victim-blaming attitudes

Sub scale	Number (%) of respondents
A victim must be getting something out of the abusive relationship or else he/ she would leave	
Strongly agree/agree	16 (8.7)
Neutral	22 (12.0)
Disagree/strongly disagree	146 (79.3)
People are only victims if they choose to be	
Strongly agree/agree	10 (5.4)
Neutral	17 (9.2)
Disagree/strongly disagree	158 (85.4)
When it comes to domestic violence victimization, it usually "takes 2 to tango"	
Strongly agree/agree	14 (7.6)
Neutral	12 (6.5)
Disagree/strongly disagree	158 (85.9)
I have patients whose personalities cause them to be abused	
Strongly agree/agree	15 (8.5)
Neutral	17 (9.6)
Disagree/strongly disagree	145 (81.9)
Women who choose to step out of traditional roles are a major cause of IPV	
Strongly agree/agree	9 (4.9)
Neutral	7 (3.8)
Disagree/strongly disagree	169 (91.4)
The victim's passive-dependent personality often leads to abuse	
Strongly agree/agree	23 (12.2)
Neutral	31 (16.9)
Disagree/strongly disagree	129 (70.5)
The victim has often done something to bring about violence in the relationship	
Strongly agree/agree	11 (5.9)
Neutral	8 (4.3)
Disagree/strongly disagree	166 (89.7)

IPV = intimate partner violence.

Table 8

Professional role resistance/fear of offending the patient

Subscale	Number (%) of respondents
I am afraid of offending the patient if I ask about IPV	
Strongly agree/agree	42 (23.1)
Neutral	52 (28.6)
Disagree/strongly disagree	88 (48.4)
Asking patients about IPV is an invasion of their privacy	
Strongly agree/agree	21 (11.5)
Neutral	44 (24.0)
Disagree/strongly disagree	118 (64.5)
It is demeaning to patients to question them about abuse	
Strongly agree/agree	19 (10.3)
Neutral	33 (17.9)
Disagree/strongly disagree	132 (71.7)
It is not my place to interfere with how a couple chooses to resolve conflicts	
Strongly agree/agree	21 (11.5)
Neutral	36 (19.7)
Disagree/strongly disagree	126 (68.9)
I think that investigating the underlying cause of a patient's injury is not part of medical care	
Strongly agree/agree	17 (9.1)
Neutral	19 (10.2)
Disagree/strongly disagree	151 (80.7)
If patients do not reveal abuse to me, then they feel it is none of my business	
Strongly agree/agree	41 (22.2)
Neutral	45 (24.3)
Disagree/strongly disagree	99 (53.5)

IPV = intimate partner violence.

Finally, with the multitude of physical and psychological symptoms that can result from IPV, it is clear these clients must receive proper screening, and be advocated for when possible, and with client consent. Our results indicate a large proportion of HTs feel that there is inadequate systemic support and resources available to deal with IPV. Considering the high prevalence of IPV victims attending hand therapy clinics, therapists must make it their priority to familiarize themselves with the appropriate resources for clients to provide optimal, patient-centered care and promote patient safety. Furthermore, the institutions in which HTs work share some responsibility in preparing their staff to deal with IPV, including facilitating access to appropriate internal or external health or community agencies. From an implementation science perspective, a coordinated site-specific strategy is needed to address important contextual issues and foster linkages with local resources.³²

Strengths and limitations

The present study has several strengths. Information about HTs', PTs', or OTs' attitudes and perceptions of about IPV is absent from the literature. Second, the study used a tailored version of a survey instrument with evidence supporting its' reliability and validity.

A significant limitation of this study was the low response rate. While we were unable to ascertain how many therapists actually received the survey, the final sample size is smaller than other studies that have sampled this same population.³³⁻³⁵ Given our response rate could be as low as 6%, our data suggest therapists who have previously answered surveys on clinical topics were more reluctant to answer this survey. This supports our position about the need for more awareness and practice support to address IPV. However, given our sampling, we cannot be confident that our estimates reflect the attitudes and beliefs of all HT. Finally, the survey did not include questions regarding the therapists' estimates of the prevalence of IPV in their practices and did not allow for in-depth qualitative exploration of the experience of HTs in dealing with IPV, which would be important when planning future practice supports.

Future directions

This study suggests HTs have uncertainty regarding safety when addressing IPV issues and in appropriate actions for assisting persons experiencing IPV. Results indicate that while there is a disagreement about available systemic support, HTs did not display resistance to assuming this professional role and strongly disagreed with victim-blaming statements. Our study supports the need for educational interventions to increase awareness of IPV and training in appropriate methods for approaching clients and facilitating access to needed services. Furthermore, hand rehabilitation units may need to develop organizational procedures and referral connections to support front line therapists who are a point of first contact for clients. Research on effective and preferred methods for delivering education to HTs, such as online modules or in-person sessions would also be beneficial. Furthermore, there is a multitude of literature outlining barriers to screening for IPV from the patients' perspectives and other personal factors.^{36,37} These must be considered when developing educational and screening tools for therapists to ensure patient-centered approaches to care and efficacy of potential future interventions.

Conclusion

IPV is a prevalent problem that may be disclosed or elucidated following a hand injury. This study indicates a gap in HTs' preparedness to deal with this disclosure.

Acknowledgments

The authors would like to extend thanks to the American and Canadian Societies of Hand Therapists for their involvement in participant recruitment and to Dr. Mohit Bhandari and Sheri MacDonald for contributing their expertise in this area.

Reference

- World Health Organization, Understanding and addressing violence against women, Geneva: World Health Organization, 2012, Available at: http://whqlibdoc.who.int/publications/2010/9789241564007_eng.pdf.
- McCloskey LA, Williams CM, Lichter E, Gerber M, Ganz ML, Sege R. Abused women disclose partner interference with health care: An unrecognized form of battering. *J Gen Intern Med.* 2007;22(8):1067–1072.
- Garcia-Moreno C, Jansen HA, Ellsberg M, Heise L, Watts CH. Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. *Lancet.* 2006;368(9543):1260–1269.
- Sinha M. Family violence in Canada: A statistical Profile, 2011. *Canadian Centre for Justice Statistics.* 2013;(85):1–92. Available at: <https://www.publicsafety.gc.ca/lbr/archives/jrst11805-eng.pdf>.
- Zhang T, Hoddenbagh J, McDonald S, Scrim K. *An Estimation of the Economic Impact of Spousal Violence in Canada.* 2012. Available at: http://www.justice.gc.ca/eng/rp-pr/cj-jp/fv-vf/rr12_7/rr12_7.pdf.
- Bhandari M, Sprague S, Dosanjh S, et al. The prevalence of intimate partner violence across orthopaedic fracture clinics in Ontario. *J Bone Joint Surg Am.* 2011;93(2):132–141.
- Petrisor BA, Drew B, Rajaratnam K, et al. Prevalence of abuse and intimate partner violence surgical evaluation (PRAISE) in orthopaedic fracture clinics: A multinational prevalence study. *Lancet.* 2013;382(9895):866–876.
- Sprague S, Goslings JC, Hogentoren C, et al. Prevalence of intimate partner violence across medical and surgical health care settings. *Violence Against Women.* 2014;20(1):118–136.
- Bhandari M, Dosanjh S, Tornetta P, Matthews D. Musculoskeletal manifestations of physical abuse after intimate partner violence. *J Trauma Inj Infect Crit Care.* 2006;61(6):1473–1479.
- Sprague S, Madden K, Dosanjh S, et al. Intimate partner violence and musculoskeletal injury: bridging the knowledge gap in orthopaedic fracture clinics. *BMC Musculoskelet Disord.* 2013;14(1):23.
- Bhandari M, Sprague S, Tornetta P, et al. (Mis)perceptions about intimate partner violence in women presenting for orthopaedic care: A survey of Canadian orthopaedic surgeons. *J Bone Joint Surg Am.* 2008;90(7):1590–1597.
- Shearer HM, Bhandari M. Ontario chiropractors' knowledge, attitudes, and beliefs about intimate partner violence among their patients: A cross-sectional survey. *J Manipulative Physiol Ther.* 2008;31(6):424–433.
- Sprague S, Kaloty R, Madden K, Dosanjh S, Matthews DJ, Bhandari M. Perceptions of intimate partner violence: a cross sectional survey of surgical residents and medical students. *J Inj Violence Res.* 2013;5(1):1–10.
- Rasouljan M, Shirazi M, Nojomi M. Primary health care physicians' approach toward domestic violence in Tehran, Iran. *Med J Islam Repub Iran.* 2014;28:148.
- Sprague S, Swinton M, Madden K, et al. Barriers to and facilitators for screening women for intimate partner violence in surgical fracture clinics: a qualitative descriptive approach. *BMC Musculoskelet Disord.* 2013;14(1):122.
- Sprague S, Madden K, Simunovic N, et al. Barriers to screening for intimate partner violence. *Womens Health.* 2012;52(6):587–605.
- Conn LG, Young A, Rotstein OD, Schemitsch E. I've never asked one question. Understanding the barriers among orthopedic surgery residents to screening female patients for intimate partner violence. *Can J Surg.* 2014;57(6):371–378.
- Khadra C, Wehbe N, Lachance Fiola J, Skaff W, Nehmé M. Symptoms of post-traumatic stress disorder among battered women in Lebanon. *J Interpers Violence.* 2015;30(2):295–313.
- Meekeers D, Pallin SC, Hutchinson P. Intimate partner violence and mental health in Bolivia. *BMC Womens Health.* 2013;13(1):28.
- Peltzer K, Pengpid S, McFarlane J, Banyini M. Mental health consequences of intimate partner violence in Vhembe district, South Africa. *Gen Hosp Psychiatry.* 2013;35(5):545–550.
- Ruiz-Pérez I, Plazaola-Castaño J, Del Río-Lozano M. Physical health consequences of intimate partner violence in Spanish women. *Eur J Public Health.* 2007;17(5):437–443.
- Plichta SB. Intimate partner violence and physical health consequences. *J Interpers Violence.* 2004;19(11):1296–1323.
- Della Rocca GJ, Sprague S, Dosanjh S, Schemitsch EH, Bhandari M. Orthopaedic surgeons' knowledge and misconceptions in the identification of intimate partner violence against women trauma. *Clin Orthop Relat Res.* 2013;471(4):1074–1080.
- Connor PD, Nouer SS, Mackey STN, Tipton NG, Lloyd AK. Psychometric properties of an intimate partner violence tool for health care students. *J Interpers Violence.* 2011;26(5):1012–1035.
- Maiuro RD, Vitaliano PP, Sugg NK, Thompson DC, Rivara FP, Thompson RS. Development of a health care provider survey for domestic violence: Psychometric properties. *Am J Prev Med.* 2000;19(4):245–252.
- Canadian Centre for Justice Statistics. *Family Violence in Canada: A Statistical Profile, 2014.* 2016. Available at: <http://www.statcan.gc.ca/pub/85-002x/2016001/article/14303-eng.pdf>.
- Morgan RE, Truman JL. *Nonfatal Domestic Violence, 2003–2012.* Vol April 2014. 2014.
- Neroini AI, Schei B. Partner violence and health: Results from the first national study on violence against women in Norway. *Scand J Public Health.* 2008;36(2):161–168.
- Abramsky T, Watts CH, Garcia-Moreno C, et al. What factors are associated with recent intimate partner violence? findings from the WHO multi-country study on women's health and domestic violence. *BMC Public Health.* 2011;11(1):109.
- Harwell TS, Spence MR. Population surveillance for physical violence among adult men and women, Montana 1998. *Am J Prev Med.* 2000;19(4):321–324.
- Hannah SD. Psychosocial issues after a traumatic hand injury: Facilitating adjustment. *J Hand Ther.* 2011;24(2):95–103.
- MacDermid JC, Graham ID. Knowledge Translation: Putting the "Practice" in Evidence-Based Practice. *Hand Clin.* 2009;25(1):125–143.
- Lucado AM, Taylor DW, Wendland DM, Connors B. Health promotion, wellness, and prevention in hand therapy: A survey study. *J Hand Ther.* 2016;1–8. <https://doi.org/10.1016/j.jht.2016.11.007>.
- Valdes K, Szekeres M, MacDermid JC. Hand therapists report perceived differences in patient referrals from hand surgeons vs other referral sources: A survey study. *J Hand Ther.* 2017;30(3):1–5. <https://doi.org/10.1016/j.jht.2017.02.008>.
- Grice KO. The use of occupation-based assessments and intervention in the hand therapy setting - A survey. *J Hand Ther.* 2015;28(3):300–306.
- Paterno MT, Draughon JE. Screening for Intimate Partner Violence. *J Midwifery Womens Health.* 2016;61(3):370–375.
- Plichta SB. Interactions between victims of intimate partner violence against women and the health care system. *Trauma Violence Abuse.* 2007;8(2):226–239.

JHT Read for Credit

Quiz: # 622

Record your answers on the Return Answer Form found on the tear-out coupon at the back of this issue or to complete online and use a credit card, go to JHTReadforCredit.com. There is only one best answer for each question.

- # 1. The primary purpose of the study is to
- teach techniques for deflecting IPV events
 - define the legal issues surrounding IPV events in clinical settings
 - describe the attitudes and beliefs of hand therapists regarding IPV issues
 - define therapists' views on treating VIPs
- # 2. Data collection was accomplished by
- surveys completed by therapists
 - investigators interviewing therapists
 - IPV victim interviews
 - surveys completed by IPV victims
- # 3. Approximately _____ % of those responding had experienced some form of IPV
- 25
 - 45

- 55
 - 65
- # 4. The authors found that
- there were no reportable differences between male and female views of IPV
 - victims of IPV were equally divided between genders
 - females were less likely than males to assign blame to victims of IPV
 - females were more likely than males to assign blame to victims of IPV
- # 5. Therapists view addressing IVP as a professional responsibility, but significant barriers exist to their carrying out that role
- false
 - true

When submitting to the HTCC for re-certification, please batch your JHT RFC certificates in groups of 3 or more to get full credit.