Intimate Partner Violence (IPV) Screening in an Orthopaedic Hand Clinic Reveals Need for Intervention

Miriyam Ghali, Nicolette Ann Schurhoff, Danielle C. Marshall, Nikhil Navnit Patel, William Henry Cade, Seth D Dodds¹ ¹UNIVERSITY OF MIAMI, MILLER SCHOOL OF MEDICINE

INTRODUCTION:

Intimate Partner Violence (IPV) is estimated to affect 20-50% of women and 10-16% of men in the United States, with musculoskeletal injuries being the second most common manifestation of IPV. This study aims to compare clinical characteristics and patient-reported health outcomes (PROs) of patients who prospectively screen positive and negative for IPV in an urban, diverse orthopaedic hand clinic population.

METHODS:

This IRB-approved prospective clinical study included all patients ≥ 18 years old presenting to orthopaedic hand clinic at a large Level 1 trauma hospital with an upper extremity injury. Participants completed two validated IPV screening surveys (Direct IPV Screening Tool and E-HITS Screening Tool), two PRO guestionnaires (EQ-5D-3L and Return to Function (RTF)), and a study-specific clinical survey prior to orthopaedic hand evaluation. All statistical tests were 2-sided, and an alpha level of 0.05 was used to determine statistical significance. The Kruskal-Wallis test compared mean ranks differences in PRO scores between groups. The frequencies of categorical variables were compared using Pearson x2 or Fisher's exact test of association.

RESULTS:

Over nine months, 500 patients (51.7% men) with a mean age of 45 years were enrolled. 170 patients (34.0%) were uninsured, 233 (46.6%) were non-citizens, 464 (92.8%) identified as non-white, and 298 (59.6%) reported Spanish as their dominant language. 120 patients (24.0%) screened positive for IPV (Group 1), and 380 (76.0%) screened negative (Group 2). Patient demographics and socioeconomic characteristic are presented in Tables 1 and 2. Group 1 was significantly associated with citizenship status (p = 0.05), marital status (p = 0.005), and housing status (p = 0.01). Group 1 reported significantly higher EQ-5D-3L (p = 0.0026) and RTF (p = 0.0042) disability scores than Group 2. The difference in EQ-5D-3L between groups surpassed the minimally important difference (0.074) reported in the literature both overall and within EQ-5D-3L subcategories of mobility, pain/discomfort, and anxiety/depression.

DISCUSSION AND CONCLUSION:

This study uncovered a high rate of self-disclosed IPV (24.0%) among hand patients at first screening attempt. Patients who disclose IPV report clinically significant lower health-related guality of life and higher disability scores. These findings in a majority male, non-white, and only 66% insured population validate prior findings that orthopaedic patients who disclose IPV have worse clinical outcomes. This is the first study to prospectively implement a formal IPV screening tool in a diverse and vulnerable population and confirms feasibility of routinely screening in IPV in the orthopaedic hand clinic setting.

				TABLE 2			
IADLE I				Patient Socioeconomic Characteristics by IPV Disclosure ^a			
Patient Demographic and Clinical Characteristics by IPV Disclosure ^a			a		Yes (n = 120)	No (n = 380)	P Value
				Citizenship Status	-	-	0.05
	Yes (n = 120)	No (n = 380)	P Value	United Status Citizen	73 (29.3)	176 (70.7)	
Age, v	45.2 ± 15.8	44.3 ± 15.8	0.47	Non-Immigrant	11 (19.6)	45 (80.4)	
Con			0.12	Undocumented Immigrant	13 (17.1)	63 (82.9)	
362	(2, (2), 5)	227 (70 5)	0.12	Highest Level of Education Obtained	21 (22 2)	46 (22 T)	0.91
Male	62 (21.5)	227 (78.5)		High School Graduate	44 (24 2)	138 (75.8)	
Female	58 (27.5)	153 (72.5)		Some College/Technical Training	28 (23.1)	93 (76.9)	
Primary Languaga Spokan			0.11	College Graduate or Higher	27 (23.1)	90 (76.9)	
rinnary Language Spoken	52 (20.0)	100 (81 1)	0.11	Employment Status Currently in School	1 (8 3)	11 (91 7)	0.15
English	52 (28.9)	128 (71.1)		Working Full-Time	50 (24.2)	157 (75.8)	
Spanish	60 (20.1)	238 (79.9)		Working Part-Time	17 (25.8)	49 (74.2)	
Haitian Creole	4 (36 4)	7 (63 6)		Not working not looking for work	11 (25.6)	32 (74.4)	
Other	2 (22 2)	4 (66.7)		Unemployed and looking for work	11 (14.7)	64 (85.3)	
- Ouler	2 (33.3)	4 (00.7)		Disabled	19 (34.5)	36 (65.5)	
Ethnicity			0.0353	Annual Combined Family Income, Pre-Tax			0.01
Hispanic	77 (21.6)	280 (78.4)		Less than \$20,000	44 (32.8)	90 (67.2)	
White	17 (47.2)	19 (52.8)		S20,000 - 549,000 More than \$50,000	26 (20.2)	44 (74.6)	
Plaak	21 (24.1)	66 (75.0)		Unknown	32 (16.8)	158 (83.2)	
Black	21 (24.1)	00 (75.9)		Insurance Status	01.000	ALC (01.0)	0.29
American Indian	1 (50.0)	1 (50.0)		Insured	84 (25.5) 36 (21.2)	246 (74.5) 134 (78.8)	
Asian	1 (50.0)	1 (50.0)		Housing Status	50 (21.2)	154 (70.0)	0.01
Multiracial Hispanic	1 (20.0)	4 (80.0)		Homeless	14 (33.3)	28 (66.7)	
Other	2 (18 2)	0 (81.8)		Apartment Single family borne	54 (26.9)	147 (73.1)	
	2 (18.2)	9 (81.8)	0.0010	Nursing Home/Assisted Living	4 (66.7)	2 (33.3)	
Smoking Status			0.0013	Facility (ALF)			
Current or Former Smoker	34 (37.0)	58 (63.0)		Prefer not to answer Marital Status	12 (20.7)	46 (79.3)	0 0005
Never Smoker	86 (21.1)	322 (78.9)		Single	56 (23.7)	180 (76.3)	0.0000
Charleon Comorbidity Index (CCI)	. ,	. ,	0.20	Married	26 (17.1)	126 (82.9)	
Charlson Comorbidity Index (CCI)	88 (22 ()	202 (77.4)	0.29	Separated	6 (42.9)	8 (57.1)	
Mild (1-2)	88 (22.6)	302 (77.4)		Widowed	2 (18.2)	9 (81.8)	
Moderate (3-4)	21 (27.3)	56 (72.7)		In a relationship	11 (22.9)	37 (77.1)	
Severe (> 5)	11 (33.3)	22 (66.7)		Length of Relationship	40 (22.1)	162 (26.0)	0.059
History of Drug or Alcohol Overuse			0.0032	0-5 years	27 (31.0)	60 (69.0)	
matory of Drug of Alcohor Overase	22 (10.0)	22 ((0.0)	0.0052	6-19 years	25 (23.6)	81 (76.4)	
res	22 (40.0)	33 (60.0)		20-39 years	9 (14.3)	54 (85.7)	
No	98 (22.0)	347 (78.0)		Children with Current Partner	9 (40.9)	13 (39.1)	0.09
History of Psychiatric Condition			0.0002	Yes	31 (18.3)	138 (81.7)	
Vec	25 (43.9)	32 (56.1)		No	63 (27.6)	165 (72.4)	
100 N-	25 (+5.5)	248 (78.6)		Not applicable Sexual Orientation	25 (26.0)	71 (74.0)	0.60
INO	95 (21.4)	348 (78.6)		Heterosexual	92 (25.3)	271 (74.7)	
Data are presented as mean ± SD or n (%)				Non-heterosexual	11 (25.0)	33 (75.0)	
				Prefer not to say	12 (19.3)	50 (80.7)	
				around mice presentied ats in (78)			