

# Changes in intimate partner violence during the early stages of the COVID-19 pandemic in the USA

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Received 16 May 2020

Revised 20 August 2020

Accepted 22 August 2020

Published Online First

1 September 2020

## ABSTRACT

The objective of this study is to describe intimate partner violence (IPV) severity and types of victimization during the early stages of the COVID-19 pandemic. A survey was distributed through social media and email distribution lists. The survey was open for 14 days in April 2020 and 2441 participated. Information on IPV, COVID-19-related IPV severity, sociodemographics, and COVID-19-related behaviors (eg, job loss) were collected. Regression models were used to evaluate COVID-19-related IPV severity across victimization types and sociodemographics. 18% screened positive for IPV. Among the respondents that screened positive, 54% stated the victimization remained the same since the COVID-19 outbreak, while 17% stated it worsened and 30% stated it got better. The odds of worsening victimization during the pandemic was significantly higher among physical and sexual violence. While the majority of IPV participants reported victimization to remain the same, sexual and physical violence was exacerbated during the early stages of the pandemic. Addressing victimization during the pandemic (and beyond) must be multi-sectorial.

## INTRODUCTION

Nationwide stay-at-home policies following the COVID-19 pandemic abruptly interrupted daily life and introduced strains or exacerbated stressors (like job loss, poor mental health and lack of social support) across the USA.<sup>1 2</sup> Past literature has shown parenting stress,<sup>3</sup> economic hardship,<sup>4</sup> food insecurity,<sup>5</sup> eviction threat and utilities non-payment<sup>5</sup> increase the risk of violence, like intimate partner violence (IPV). The Centers for Disease Control and Prevention (CDC) define IPV as abuse or aggression that occurs in a close relationship of current or former spouses and dating partners.<sup>6</sup>

The World Health Organization (WHO)<sup>7</sup> and European Commission<sup>8</sup> recently summarised evidence indicating a 'shadow pandemic', with the strong potential of increased IPV across the globe as seen during the Ebola pandemic.<sup>9</sup> In the beginning of the pandemic (March–April), community-based victim organisations reported 25%–50% increase in hotline calls, up to 150% increase in website traffic and a 12.5% increase in IPV related police activity.<sup>10</sup> Conversely, by the end of April, the International Rescue Committee found a dramatic drop in the number of reported cases due to the suspension of protection services for women and restrictions on mobility, lack of information and increased isolation.<sup>11</sup> However, no scientific study has evaluated whether self-reported victimisation, and specifically

the severity and type of abuse, changed during early stay-at-home policies.

The purpose of this study is to describe the impact of COVID-19 on the change of IPV severity among a convenience sample of adults residing in the USA. We hypothesised that self-reported IPV worsened following the initiation of the pandemic.

## METHODS

### Study design

This cross-sectional analysis was part of a larger study aimed to measure behavioural responses to the novel SARS coronavirus outbreak and subsequent shelter-in-place and work-from-home policies.

### Study setting and population sample

A 15 min survey was distributed through the authors' university, department, lab and private social media accounts (ie, LinkedIn, Facebook, Twitter and Instagram) and to professional email distribution lists (eg, American Public Health Association, Society of Behavioral Medicine). Eligible participants must have been residing in the USA and over the age of 18 to provide consent. The survey was open for 14 days in April 2020. The posts reached approximately 47 796 social media users, of which, 2766 (5.7%) agreed to participate and were eligible (figure 1). The current study only includes those that answered positively to currently having an intimate partner (n=1759).

### Measures

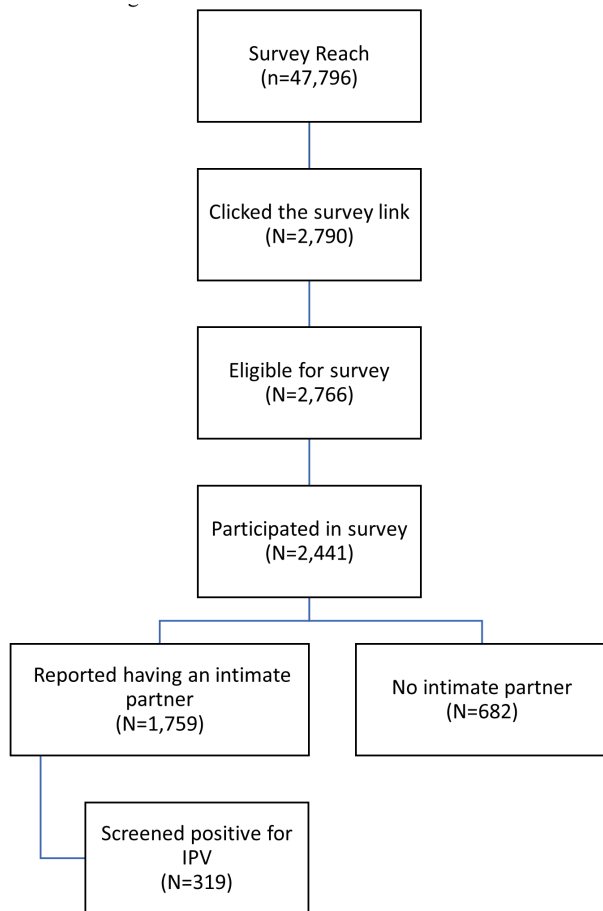
IPV was measured using the validated 5-item, Extended Hurt, Insulted, Threatened and Scream (E-HITS) construct.<sup>12</sup> Participants responded to, "How often does your partner: (1) physically hurt you; (2) insult or talk down to you; (3) threaten you with harm; (4) scream or curse at you; (5) force you to have sexual activities". Each item was answered on a 5-point Likert scale: 1=never; 2=rarely; 3=sometimes; 4=fairly often; 5=frequently. Responses were summed (range 5–25) and participants were considered IPV positive if they had a cut-off score of 7 or greater (sensitivity=75%; specificity=85%).<sup>12</sup>

COVID-19-related IPV severity: of the participants that screened positive for E-HITS, a follow-up question was asked: "Since the coronavirus outbreak, has this gotten... 1) Much better; 2) Somewhat better; 3) Stayed the same; 4) Somewhat worse; and 5) Much worse". Response categories were further categorised into: (1) much better/somewhat better; (2) stayed the same; and (3) somewhat worse/much worse.



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**To cite:** Jetelina KK, Knell G, Molsberry RJ. *Inj Prev* 2021;**27**:93–97.



**Figure 1** PRISM Diagram for Study Population. IPV, intimate partner violence.

Sociodemographic variables included *age* (continuous), geographic *region* (West, Northeast, Midwest, South), *sex at birth* (male, female), *race/ethnicity* (white Non-Hispanic (NH), other NH, Hispanic), *annual household income* (<US\$80 000; US\$80–150 000, >US\$150 000) and *number of children* under the age of 18 (0, 1, 2, 3+).

COVID-19-related behaviours included *job status/income change* (yes/no), self-reported *change in alcohol use* (more/less/same/do not drink) and *working from home* (yes/no) since the COVID-19 pandemic.

### Statistical analyses

Univariate (eg, tabulations, percentages, means and SD) was used to describe the study sample. Bivariate logistic regression was used to evaluate the relationship between sociodemographics and COVID-19-related changes (independent variables) and IPV victimisation (dependent variable). Bivariate multinomial regression models were used to evaluate the relationship between victimisation type, sociodemographics and COVID-19-related changes (independent variables) and change in IPV severity (dependent variable). If data were missing, participants were dropped from bivariate analyses. Analyses were conducted using Stata V.14.3.

### RESULTS

Eighteen per cent of respondents screened positive for IPV ( $n=319$ ), with the majority of victims experiencing insulting (97%) or screaming (86%; [table 1](#)). The odds of victimisation

were significantly lower among women (OR =0.63; 95% CI 0.50 to 0.82) compared with men, and significantly higher among those with a job/income change due to the pandemic (OR=1.63; 95% CI 1.17 to 2.27), compared with those with no change in job status/income.

Among the respondents that screened positive for victimisation, 54% stated the victimisation stayed the same during the COVID-19 pandemic, while 17% stated victimisation worsened and 30% stated victimisation improved ([table 2](#)). The risk of IPV worsening was 4.38 (95% CI 1.27 to 15.10) times higher among physical victimisation compared with non-physical victimisation and 2.31 times higher among sexual victimisation compared to non-sexual victimisation. The risk of IPV getting better was 2.46 times higher (95% CI 1.47 to 13.14) among physical victimisation compared with non-physical victimisation.

### DISCUSSION

This is the first study to analyse self-reported victimisation, and specifically changes in severity and type of abuse, during early stages of the pandemic in the USA. The prevalence of IPV overall was slightly higher in the study compared with the general population (18% compared with 12%).<sup>13</sup> Interestingly, the prevalence of victimisation among men was higher in this study (23%) compared with the general population (11%), while the prevalence of victimisation among women was lower (16%) compared with the general population (25%).<sup>13</sup> This discrepancy may be due to gender preference or sexuality, as IPV victimisation is higher among sexual minority couples compared with heterosexual relationships.<sup>14 15</sup> Unfortunately, though, gender preference was not collected in this survey.

Interestingly, and contrary to our hypothesis, the majority of victimisation stayed the same throughout the beginning of the pandemic at stay-at-home policies. Among participants that did report change in victimisation, the severity of victimisation was more likely to get better during the COVID-19 pandemic compared with worse. This discordant finding may be due to three hypotheses. First, the majority of IPV is through controlling behaviour.<sup>16</sup> With stay-at-home policies implemented, we can imagine that perpetrators may have more control over victims and more knowledge about whereabouts, thus running into less conflict with partners. Second, given this sample was recruited through social media, by default, the participants must have had access to a computer or smartphone and internet. It is possible that the most severe of victims do not have these freedoms and so were systematically missed in our sample. Third, the study population was majority NH White. While victimisation does not discriminate, some past literature has shown blacks having higher rates of victimisation than whites.<sup>17</sup>

It is important to note that among the types of victimisation, physical victimisation was most likely to change during the pandemic, as it both significantly improved and worsened among victims. This may be due to perpetrators wanting to avoid hospitals, so ensuring victimisation is less physical than normal. Moreover, self-reported sexual violence significantly worsened among victims, which is likely reflective of spending more hours of the day at home. However, more research should explore these interesting findings and hypotheses.

### Limitations

Results should be considered in light of three limitations. First, recruitment was through a social media network, convenience sample leading to limited generalisability. Further, we cannot calculate the true response rate (how many eligible

**Table 1** Sample description, N=1730

	Total sample N=1730 (100%)	Victims† N=319 (18%)	Non-victims N=1411 (82%)	Odds of victimisation OR (95% CI)
<b>Victimisation‡</b>				
Physical	27 (2)	27 (8)	–	–
Insult	461 (27)	310 (97)	–	–
Threaten	29 (2)	29 (9)	–	–
Scream	369 (21)	273 (86)	–	–
Sexual	62 (4)	50 (16)	–	–
<b>Sociodemographics</b>				
Age (mean, SD)	42 (13)	43 (12)	42 (13)	1.01 (0.99 to 1.01)
<b>Region</b>				
West	176 (9)	34 (11)	138 (10)	Ref
Northeast	126 (6)	15 (5)	105 (7)	0.58 (0.30 to 1.12)
Midwest	123 (6)	26 (8)	91 (6)	1.16 (0.65 to 2.06)
South	1348 (66)	240 (75)	1062 (75)	0.92 (0.61 to 1.40)
Missing	261 (13)	4 (1)	15 (1)	
<b>Race/ethnicity</b>				
White NH	1480 (73)	265 (83)	1164 (82)	Ref
Other NH	127 (6)	27 (8)	106 (8)	0.98 (0.61 to 1.58)
Hispanic	172 (8)	27 (8)	141 (10)	0.84 (0.55 to 1.30)
Missing	255 (13)			
<b>Sex</b>				
Male	592 (29)	134 (42)	444 (32)	Ref
Female	1196 (59)	185 (58)	963 (68)	0.63*** (0.50, 0.82)
Missing	246 (12)	0 (0)	4 (0)	
<b>Income</b>				
<US\$80 000	332 (16)	55 (17)	261 (19)	Ref
US\$80–150 000	637 (31)	114 (36)	506 (36)	1.07 (0.75 to 1.52)
>US\$150 000	790 (39)	148 (46)	613 (43)	1.25 (0.81 to 1.61)
Missing	275 (14)	2 (1)	31 (2)	
<b>No children</b>				
0	904 (44)	152 (48)	717 (51)	Ref
1	284 (14)	49 (15)	226 (16)	1.02 (0.72 to 1.46)
2	399 (20)	76 (24)	311 (22)	1.15 (0.85 to 1.57)
3+	177 (9)	39 (12)	136 (10)	0.14 (0.09 to 2.01)
Missing	270 (13)	3 (1)	21 (2)	
<b>COVID-19 behaviours</b>				
<b>Change in job status/income</b>				
No	269 (13)	157 (49)	768 (54)	Ref
Yes	949 (47)	64 (20)	192 (13)	1.63** (1.17, 2.27)
Missing/NA	816 (40)	98 (31)	451 (32)	
<b>Change in alcohol use</b>				
More	541 (37)	102 (32)	423 (30)	Ref
Less	139 (7)	26 (8)	106 (8)	1.02 (0.63 to 1.64)
Same	596 (29)	96 (30)	479 (34)	0.83 (0.61 to 1.13)
Do not drink	330 (16)	58 (18)	262 (19)	0.92 (0.64 to 1.31)
Missing	428 (21)	37 (12)	141 (10)	
Work from home (yes)	916 (45)	167 (52)	726 (52)	1.06 (0.75 to 1.53)

\*p&lt;0.05; \*\*p&lt;0.01; \*\*\*p&lt;0.001.

†Extended Hurt, Insulted, Threatened, and Scream summation score &gt;7.

‡Not mutually exclusive.

NA, not applicable; NH, non-Hispanic.

participants could have taken the survey but opted not to). Second, all measures were self-reported by participants, thus introducing the potential for systematic under-reporting or over-reporting. However, data were collected via survey (rather than interviews) which has shown to reduce the likelihood of inaccurate reporting to sensitive questions like victimisation.<sup>18</sup>

Third, 'change in victimisation' remains subjective with a recall component of unknown validity. This measure could easily have been affected by individual and situational effects surrounding the pandemic. However, we did collect change in COVID-19-related behaviours (job loss, essential worker status, hours at home) during the same time period, of which, none were

**Table 2** Change in severity among intimate partner violence (IPV) victims (N=281)†

	COVID-19-related IPV severity			IPV worse (compared to IPV same) RRR (95% CI)	IPV better (compared to IPV same) RRR (95% CI)
	Worse N=46 (16%)	Same N=151 (54%)	Better N=84 (30%)		
<b>Type of victimisation‡</b>					
Physical	6 (27)	5 (23)	11 (50)	4.38* (1.27 to 15.1)	2.46** (1.47 to 13.14)
Insult	46 (17)	146 (54)	81 (30)	§	0.93 (0.22 to 3.97)
Threaten	5 (20)	11 (44)	9 (36)	1.55 (0.5 to 4.72)	1.53 (0.61 to 3.85)
Scream	38 (16)	127 (53)	74 (31)	0.90 (0.37 to 2.16)	1.40 (0.63 to 3.09)
Sexual	13 (28)	22 (47)	12 (26)	2.31* (1.05 to 5.06)	0.98 (0.46 to 2.09)
<b>Sociodemographics</b>					
Age (mean, SD)	40 (11)	44 (11)	43 (13)	0.97* (0.94 to 0.99)	0.99 (0.97 to 1.01)
<b>Region</b>					
West	8 (27)	15 (50)	7 (23)	Ref	Ref
Northeast	2 (18)	6 (55)	3 (27)	0.63 (0.10 to 3.84)	1.07 (0.21 to 5.58)
Midwest	3 (12)	16 (64)	6 (24)	0.35 (0.08 to 1.58)	0.83 (0.22 to 2.94)
South	33 (16)	112 (53)	66 (31)	0.55 (0.22 to 1.42)	1.27 (0.49 to 3.25)
Missing	0 (0)	2 (50)	2 (50)		
<b>Race/ethnicity</b>					
White NH	38 (16)	129 (56)	65 (28)	Ref	Ref
Other NH	4 (17)	13 (54)	7 (29)	1.36 (0.40 to 4.58)	1.39 (0.51 to 3.81)
Hispanic	4 (16)	9 (36)	12 (48)	1.51 (0.44 to 5.17)	2.65* (1.07 to 6.60)
Missing					
<b>Sex</b>					
Male	21 (19)	59 (54)	29 (27)	Ref	Ref
Female	25 (15)	92 (53)	55 (32)	0.76 (0.39 to 1.49)	1.22 (0.70 to 2.12)
Missing					
<b>Income</b>					
<US\$80 000	7 (15)	20 (41)	22 (45)	Ref	Ref
\$US80–150 000	19 (19)	61 (60)	22 (22)	0.89 (0.33 to 2.43)	0.33** (0.15 to 0.71)
>US\$150 000	20 (16)	69 (54)	39 (30)	0.83 (0.31 to 2.24)	0.51 (0.25 to 1.06)
Missing	0 (0)	1 (50)	1 (50)		
<b>No children</b>					
0	23 (15)	63 (42)	45 (30)	Ref	Ref
1	6 (12)	28 (57)	11 (23)	0.59 (0.21 to 1.60)	0.55 (0.25 to 1.22)
2	13 (17)	37 (49)	15 (20)	0.96 (0.44 to 2.12)	0.57 (0.28 to 1.16)
3+	4 (10)	21 (54)	12 (31)	0.52 (0.16 to 1.68)	0.80 (0.36 to 1.79)
Missing	0 (0)	2 (67)	1 (33)		
<b>COVID-19 behaviours</b>					
<b>Job status/income changed</b>					
No	29 (19)	84 (54)	43 (27)	Ref	Ref
Yes	11 (17)	33 (52)	20 (31)	0.97 (0.43 to 2.15)	1.8 (0.61 to 2.30)
Missing/NA	6 (10)	34 (56)	21 (34)		
<b>Alcohol use</b>					
More	19 (19)	50 (49)	33 (32)	Ref	Ref
Less	4 (16)	14 (56)	7 (28)	0.75 (0.22 to 2.57)	0.76 (0.28 to 2.08)
Same	15 (16)	52 (54)	29 (30)	0.76 (0.35 to 1.66)	0.85 (0.45 to 1.59)
Do not drink	8 (14)	35 (60)	15 (26)	0.60 (0.24 to 1.53)	0.65 (0.31 to 1.37)
Missing	0 (0)	0 (0)	0 (0)		
Work from home (yes)	33 (20)	87 (52)	46 (28)	1.52 (0.60 to 4.04)	0.75 (0.37 to 1.53)

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001.

†COVID-19-related IPV severity missing for n=31.

‡Not mutually exclusive.

§Would not converge.

NA, Not applicable; NH, non-Hispanic.

statistically related to change in victimisation severity. Nonetheless, given the rapidly developing pandemic, the importance of the topic and the need for initial information that improves

our currently minimal empirical evidence, this survey gives us a first look into the intersection of self-reported IPV during the pandemic.

In conclusion, while the majority of IPV participants reported victimisation to remain the same, sexual and physical violence was exacerbated during the early stages of the pandemic. Addressing changes in victimisation must be multisectorial and multilevel.<sup>7</sup> First, much more research needs to be collected from victims themselves to better understand the shadow pandemic and how to innovatively, and effectively, expand programmes. While this study is a first step, we need nationally representative, quantitative data to better refine public health campaigns, like the #SafeHome campaign launched by the WHO in May 2020. Qualitative data can also be leveraged to improve access to services by understanding victims' barriers and facilitators while in isolation. Concurrently, government and policy-makers must include victim services as essential services while continuing to fund programmes. Health facilities should systematically screen for IPV, improving detection, treatment and referral pathways for victims. Health providers must be trained in trauma informed care (in-person and through telemedicine),<sup>19</sup> as this could be the first line of support for victims during the pandemic. Finally, community members must also be made aware of IPV, as neighbours and close friends may be the only line of communication for victims during isolation.

#### What is already known on this subject

- ▶ Job loss, financial struggles, food insecurity, poor mental health and lack of social support increase the odds of violence in the home, like intimate partner violence.

#### What this study adds

- ▶ No scientific study has yet to evaluate whether self-reported victimisation, and specifically the severity of violence, has changed during the early stages of the COVID-19 pandemic.

**Contributors** KKJ conceptualised the project, conducted analyses and wrote the first draft. RJM conducted the literature search and assisted in writing. GK conceptualised the parent study and provided editorial assistance.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

**Competing interests** None declared.

**Patient and public involvement** Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

**Patient consent for publication** Not required.

**Ethics approval** Data collection for this study was approved by the Center for the Protection of Human Subjects at the University of Texas Health Science Center at Houston (HSC-SPH-20-0346).

**Provenance and peer review** Not commissioned; externally peer reviewed.

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