Health Problems of Partner Violence Victims

Comparing Help-Seeking Men to a Population-Based Sample

Denise A. Hines, PhD, Emily M. Douglas, PhD

Background: National population-based studies show that 40%–50% of physical partner violence victims in a 1-year time period are men. However, studies assessing the health concerns related to partner violence victimization tend to focus on women, and none have assessed the health of male physical partner violence victims who sought help for their victimization.

Purpose: To understand men's mental and physical health concerns that may be related to partner violence victimization.

Methods: In 2012–2013, two samples of men—611 physical partner violence victims who sought help and 1,601 men from a population-based sample—completed online questionnaires on their demographics, various types of partner violence victimization, physical health, mental health, and other risks. Data were analyzed using logistic regression, log binomial models, and robust Poisson models in 2013.

Results: In comparison to the population-based sample of men, male partner violence victims who sought help had significantly poorer health, particularly with regard to post-traumatic stress disorder, depression, high blood pressure, sexually transmitted diseases, and asthma. These differences remained after controlling for sample differences in demographics, substance use, previous traumatic exposure, and social support.

Conclusions: Practitioners should assess for health problems among partner violence victims and for partner violence victimization among men presenting with health problems.
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Introduction

Information regarding partner violence (PV) by women toward men in the U.S. comes from several sources, including the National Family Violence Survey (NFVS)[1]; National Violence Against Women Survey (NVAWS)[2]; and the National Intimate Partner and Sexual Violence Survey,[3] which show that within any given year, 40%–50% of all physical PV victims are men. The NFVS gives the highest estimates of PV against both genders. Within a given year, 9.5% of men experience minor assault (e.g., slapping), whereas 4.5% experience severe assault (e.g., beating up) from a female partner.[4] Because large numbers of men sustain PV in a given year, it is important to understand the health concerns of male victims. The current study compares the health of a sample of help-seeking male physical PV victims to a population-based sample of men.

PV victimization may be related to health through several mechanisms. Certain health conditions may directly result from PV; other health conditions may result from maladaptive coping in response to PV victimization, and still others may be associated with a biological response to the stresses of experiencing PV.[5] Although both genders are PV victims, most studies on PV victims' health concerns focus on female victims of physical PV in comparison to female non-victims. Community studies of female victims show that they have poorer mental health than non-victims[6–9] and are at increased risk for depression,[10–12] anxiety,[10] sleep problems,[10] and post-traumatic stress disorder (PTSD).[12] They are more likely to engage in risky health behaviors: smoking,[8,9] alcohol abuse,[12,13] and drug abuse.[12,14] Studies show a range of physical health problems for female victims in comparison to non-victims: poor overall

From the Department of Psychology (Hines), Clark University, Worcester; and the School of Social Work (Douglas), Bridgewater State University, Bridgewater, Massachusetts

Address correspondence to: Denise A. Hines, PhD, Clark University, Department of Psychology, 950 Main St., Worcester MA 01610. E-mail: dhines@clarku.edu.

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health,[6,9,14–17] functional disability,[6,7,10,16] cardiovascular problems,[13,15] respiratory infections,[11,15] asthma,[13] and sexually transmitted diseases (STDs).[6,9,13,18]

Some college-, community-, and population-based studies have evaluated PV-related health problems for both genders.[13,14,16,17,19–23] NVAWS analyses show that for both genders, PV victimization correlates with depressive symptoms, chronic mental illness, and drug abuse.[16,17] NVAWS data also show that in comparison to non-victims, male victims have poorer overall health[14,17] and more functional disabilities.[16] Other population-based samples show that in comparison to non-victims, male PV victims have higher rates of smoking,[13] alcohol abuse,[13] depressive symptoms,[23] STDs,[18] functional disabilities,[13] and asthma,[13] as well as poorer overall health.[18] Community-based[24] and college student[19–21,25] studies show that in addition to alcohol abuse,[19] depressive symptoms,[20,21,24] and poorer overall health,[24] male PV victims have more anxiety[20] and PTSD symptoms[25] in comparison to non-victims.

The aforementioned studies used only convenience and population-based samples, which have relatively low rates (~4%) of severe PV.[1] Research[26] shows that health problems for female severe PV victims are exponentially worse than for minor PV victims; this may also be true of men, although there is little research on male severe PV victims. Recently, studies[27–29] emerged with sizeable samples of male severe PV victims of all forms (physical, psychological, and sexual). These findings, combined with high rates of PTSD, suggest that male severe PV victims have experiences similar to women in shelter samples. In fact, one study[30] of men showed that 2.1% of non-PV victims evidenced PTSD, 8.2% of minor PV victims did, and 57.9% of severe PV victims did. Thus, it is likely that in comparison to a population-based sample, additional health concerns would be exponentially worse among a sample of male severe PV victims.

The purpose of the current study is to evaluate the health of a sample of men who have sustained female-perpetrated physical PV and sought help (i.e., help-seeking sample), compared with a population-based sample of men. The hypothesis is that men in the help-seeking sample have poorer health than men in the population-based sample.

Methods

Participants and Procedure

In 2012–2013, two samples of men were recruited: a help-seeking sample of physical PV victims and a population-based sample. For both, men had to speak English, live in the U.S., and be aged 18–59 years to be eligible; they also had to have been involved in an intimate relationship with a woman lasting at least 1 month in their lifetimes. Additionally, to be eligible for the help-seeking sample, men had to have sustained a physical assault from their female partner at some point in their relationship, and they had to have sought assistance for their partner's violence from a doctor or dentist, mental health professional, domestic violence agency or hotline, websites on PV against men, lawyer, police, clergy, family, or friend.

To recruit the help-seeking sample (n=611), advertisements were posted on the study's research webpage and webpages of agencies that specialize in male PV victims, men's health, fathers' issues, and divorced men's issues. Announcements were e-mailed to researchers and practitioners who registered for an e-mailing list through the research webpage. The advertisement stated that the researchers were conducting "a study on men who experienced aggression from their girlfriends, wives, or female partners," and provided a link to the anonymous online questionnaire. After consent (N=1,150), the next two survey pages contained questions assessing for the above screening criteria. Men who were eligible (n=837) were allowed to continue. Men who were not eligible were thanked and redirected to an exit page. Table 1 displays demographics of the 611 eligible men who completed the survey.

Knowledge Networks (KN), a survey research firm, collected data from a population-based sample of 1,601 men. KN offers an Internet research panel representative of the U.S. population. Panel members are chosen through an intensive, list-assisted random-digit-dial methodology, supplemented by traditional mailing address–based sampling. They are invited to participate in the web panel, and those who agree (~56%) are enrolled. Those who do not have Internet access are sent an Internet appliance and provided with Internet access. When they complete surveys, participants receive points to exchange for prizes.

To increase the likelihood of panel members' participation in our study, KN provided extra points and sent reminder e-mails three times during the month of data collection. KN sent an e-mail to male panel members aged 18–59 years, informing them about a study on how well men and women get along, and men's health. Of the 3,536 men invited to participate, 2,174 (61.5%) entered the survey; 90% consented, and of those who consented, 82.5% were eligible. Seventeen eligible men did not complete the survey. Table 1 displays the final sample's demographics.

The methods for this study were approved by the IRBs. All participants were apprised of their rights. Men in the help-seeking sample participated anonymously. Men in the population-based sample participated confidentially. At the completion of the survey, participants were given information about obtaining help for PV victimization or psychological distress, and how to delete their web-browser history.

Measures

Men reported their age, race/ethnicity, personal income, education, height, and weight. Race/ethnicity was assessed because the granting agency mandated reporting of racial/ethnic recruitment. Men provided information on the current status of their relationship; length of their relationship with their female partners; how long ago the relationship ended (if applicable); and whether they parented minor children with their partner.

Men completed 32 items from the Revised Conflict Tactics Scales (CTS2)[31] to assess psychological, physical, and sexual

Table 1. Demographic and Other Differences Between Samples, % Unless Otherwise Noted

	Population-based sample (n=1,601)	Help-seeking sample (n=611)	χ^2 or t	p-value
Male participant demographics				
Age (M [SD])	41.77 (11.35)	43.89 (9.18)	4.52	<**0.001**
White	76.5	75.5	0.28	0.599
Black	10.2	4.1	21.09	<**0.001**
Hispanic/Latino	11.8	4.9	23.57	<**0.001**
Asian	1.9	4.3	10.16	**0.001**
Native American	1.4	2.9	5.54	**0.019**
Income (in thousands; M [SD])	48.5 (27.6)	47.7 (27.7)	0.63	0.531
Educational status (M [SD])[a]	3.68 (1.83)	4.71 (1.63)	12.90	<**0.001**
BMI (M [SD])	28.62 (6.01)	28.26 (5.53)	1.29	0.199
Relationship demographics				
Currently in a relationship	86.5	26.3	730.93	<**0.001**
Relationship length (months; M [SD])	150.09 (122.86)	112.33 (87.62)	8.05	<**0.001**
Time since relationship ended (months; M [SD])	6.55 (29.91)	45.17 (54.33)	16.63	<**0.001**
Minors involved in the relationship	41.6	67.7	118.83	<**0.001**
Victimization from partner aggression (% ever)				
Minor psychological aggression	76.9	99.7	163.34	<**0.001**
Severe psychological aggression	24.3	95.8	514.97	<**0.001**
Controlling behaviors	18.9	94.3	571.57	<**0.001**
Legal/ administrative aggression	12.9	91.4	1,191.87	<**0.001**
Any physical aggression	23.6	100	580.14	<**0.001**
Minor physical aggression	22.6	98.8	1,028.59	<**0.001**
Severe physical aggression	9.4	86.0	1,215.04	<**0.001**
Any sexual aggression	11.3	48.1	179.26	<**0.001**
Minor sexual aggression	11.5	44.2	286.97	<**0.001**
Severe sexual aggression	2.8	28.3	320.92	<**0.001**
Any injuries	5.7	72.3	522.48	<**0.001**
Minor injuries	6.1	72.3	1,049.01	<**0.001**
Severe injuries	2.6	41.3	571.47	<**0.001**
Substance use				
Smokes	17.3	25.7	19.26	<**0.001**
Frequency of drinking in past year (M [SD])[b]	3.17 (2.45)	3.41 (2.45)	2.07	**0.039**
No. of times intoxicated in past year (M [SD])[b]	0.96 (1.49)	1.11 (1.75)	1.88	0.060
Ever used marijuana	45.2	51.9	7.80	**0.005**
Ever used illicit drugs	19.3	22.0	2.01	0.156
Used illicit drugs in past year	2.7	2.1	0.56	0.170

(continued on next page)

Table 1. Demographic and Other Differences Between Samples, % Unless Otherwise Noted *(continued)*

	Population-based sample (n=1,601)	Help-seeking sample (n=611)	χ^2 or t	p-value
Social support and other trauma (M [SD])				
Social Support Score	20.89 (5.00)	15.83 (6.29)	17.83	**<0.001**
Childhood Neglect Score	12.15 (1.94)	12.39 (2.08)	2.48	**0.011**
Childhood Sexual Abuse Score	2.52 (1.13)	2.96 (1.49)	6.50	**<0.001**
Childhood Violence Exposure in Home Score	3.51 (1.41)	3.89 (1.65)	5.03	**<0.001**
TEQ Score	1.48 (1.63)	2.55 (1.86)	12.37	**<0.001**

Note: Boldface indicates statistical significance ($p<0.05$).
[a]Educational status: 1=less than high school, 2=high school graduate or GED, 3=some college/trade school, 4=2-year college graduate, 5=4-year college graduate, 6=at least some graduate school.
[b]Mean represents the average number of times per week the person drank/was intoxicated.
TEQ, Traumatic Events Questionnaire.

aggression and injury victimization from their female partners. Consistent with previous research,[28,30,32] the CTS2 was supplemented with nine items on controlling behaviors and six items assessing legal/administrative aggression (e.g., filing false accusations of abuse against partner). Reliability and validity of these subscales have been established.[28,33] Participants responded to items depicting each tactic by indicating the number of times their partners used each tactic in the previous year and whether their partners ever engaged in that behavior during their relationship. Each subscale was coded to indicate whether the behaviors ever happened during the course of the relationship. Reliability for the current samples ranged from 0.82 (injury) to 0.94 (physical aggression). Table 1 displays the percentage of each sample ever victimized by each form of aggression.

The Post-Traumatic Stress Disorder Checklist (PCL)[34] contains 16 items assessing PTSD symptomatology, covering three symptom clusters: re-experiencing, numbing/avoidance, and hyperarousal. Participants indicate on a 5-point scale (1=*not at all*; 5=*extremely*) the extent they were bothered by each symptom in the previous month. Items were added together. Because a score of 45 or higher is indicative of PTSD,[34] the scores were dichotomized to specify the presence/absence of PTSD. The PCL demonstrates excellent reliability.[34–36] Cronbach's α was 0.97 for the help-seeking and 0.93 for the population-based sample.

The Center for Epidemiologic Studies–Depression (CES-D)[37] scale contains 20 items about feelings and behaviors from the past week. Response options range from 0 (*rarely/none of the time*) to 3 (*most/all of the time*). Items were added together. Scores of 16 or higher are indicative of major depression; therefore, the scores were dichotomized to indicate the presence/absence of depression. Cronbach's α was 0.95 for the help-seeking and 0.90 for the population-based sample.

Physical health conditions were measured using Black and Breiding's[13] methodology. Men indicated (*yes/no*) if they had ever been diagnosed with several health conditions, including STDs, heart disease, diabetes, and asthma. Men were asked whether they currently smoke cigarettes and ever used marijuana. Alcohol and drug use/abuse were measured using the National Women's Study's scale.[38] Participants answered 19 questions about their current and lifetime use of alcohol and illicit drugs and resulting negative experiences. The questions and cut offs were developed using DSM criteria for alcohol/drug abuse and show excellent construct validity. Following the National Survey on Drug Use and Health, men indicated whether they ever took any of the listed medications without a doctor's prescription. Four drug classes were assessed: pain relievers, sedatives, stimulants, and tranquilizers. All four classes were combined into one variable assessing whether they ever abused prescription drugs.

Child maltreatment experiences were assessed using four questions from the Sexual Abuse History and Violence Socialization scales of the Personal and Relationships Profile.[39] Childhood neglect was measured using six items from the Multidimensional Neglectful Behavior Scale.[40] Participants indicated the extent to which they agreed with statements concerning sustaining and witnessing abuse, and the degree to which their parents provided for them (1=*strongly disagree*; 4=*strongly agree*).

The Traumatic Events Questionnaire (TEQ)[41] was used to assess exposure to seven traumatic events. The item assessing adult abusive relationships was eliminated; for all items potentially relating to their abusive relationship, directions specified that the perpetrator be someone other than their abusive partner. Men indicated whether they were exposed to each event. The number of events they were exposed to were added.

The ENRICHD Social Support Instrument[42] contains five items measuring emotional support. Participants indicated on a 5-point scale the extent each statement was true (1=*none of the time*; 5=*all of the time*). Cronbach's α was 0.94 for the help-seeking and 0.95 for the population-based sample.

Statistical Analyses

Data were analyzed in 2013 with SPSS, version 21. Chi-square analyses were performed to investigate the health problems on which the samples differed. Multivariable analyses were conducted to investigate whether sample differences remained after controlling for potential confounders. The samples differed in age, percentage from racial/ethnic minority groups, education, whether they were currently in a relationship, their relationship length, time since the relationship ended, whether they had minor

children, social support, reports of childhood abuse, other trauma exposure, smoking, frequency of drinking, and use of marijuana (Table 1). Robust Poisson models were used when the incidence of health indicators was less than 10% for both samples; if at least one of the samples had an incidence of at least 10% for a health indicator, a log binomial model was used to estimate the prevalence ratios (PRs), in accordance with McNutt and colleagues.[43] Because many confounders were continuous, some log binomial models failed to converge; in those situations, the robust Poisson method was used, as recommended by Deddens and Petersen.[44] In all models, health indicators served as the dependent variables, variables that differed between the samples as covariates, and sample type as the independent variable.

Results

Table 2 displays the percentage from each sample coded as abusing alcohol, prescription drugs, and illicit drugs; scoring above the clinical cut off on the CES-D and PCL; and reporting diagnosis of each health condition. Men

Table 2. Differences Between Samples in Substance Abuse and Mental and Physical Health Problems, % Unless Otherwise Noted

	Population-based sample (n=1,601)	Help-seeking sample (n=611)	χ^2 or t	p-value
Substance abuse				
Ever abused alcohol	27.5	27.8	0.03	0.873
Ever abused prescription drugs	17.5	22.4	7.09	**0.008**
Abused illicit drugs in past year	1.1	0.5	1.89	0.170
Mental health				
Depression (scored above clinical cut off)	19.1	73.0	572.18	**<0.001**
PTSD (scored above clinical cut off)	2.0	42.9	641.33	**<0.001**
PHYSICAL HEALTH				
Diagnosed with a cardiovascular problem				
Angina	1.4	6.9	44.83	**<0.001**
Heart attack	2.1	4.2	7.59	**0.006**
Heart disease	1.9	5.4	18.00	**<0.001**
High blood pressure	28.9	44.8	49.96	**<0.001**
High cholesterol	29.6	40.5	23.92	**<0.001**
Stroke[a]	0.9	2.9	12.14	**<0.001**
Diagnosed with an autoimmune disorder				
Fibromyalgia[a]	0.9	3.2	15.62	**<0.001**
Rheumatoid arthritis	3.1	4.4	2.09	0.148
Diagnosed with another disorder				
Arthritis	12.8	18.2	10.46	**0.001**
Asthma	9.1	15.7	20.02	**<0.001**
Cancer	3.0	5.2	5.92	**0.015**
Diabetes	8.9	9.7	0.41	0.524
Gout	4.5	4.9	0.12	0.733
STD	4.1	13.4	60.14	**<0.001**
Uses disability equipment	2.9	7.2	20.59	**<0.001**

Note: Boldface indicates statistical significance ($p<0.05$).
[a]Findings are likely unstable given the small number of men in both samples who endorsed this condition. Caution should be taken when interpreting these results, and replication with larger samples is necessary.
PTSD, post-traumatic stress disorder; STD, sexually transmitted disease.

Table 3. Sample Type Predicting Health Indicators Using Logistic Regression, Log-binomial, and Robust Poisson Models, Controlling for Potential Confounds

Health indicator	B (SE)	Wald	*p*-value	PR (95% CI)
Substance abuse				
Ever abused prescription drugs[a]	0.31 (0.14)	4.75	0.029	1.36 (1.03, 1.78)
Mental health[b]				
Depression	0.84 (0.08)	104.02	<**0.001**	2.32 (1.98, 2.73)
PTSD	2.75 (0.22)	150.37	<**0.001**	15.57 (10.04, 24.15)
Cardiovascular problems[b]				
Angina	1.04 (0.45)	5.36	0.021	2.82 (1.17, 6.76)
Heart attack	1.20 (0.42)	8.29	0.004	3.33 (1.47, 7.55)
Heart disease	1.26 (0.46)	7.43	0.006	3.52 (1.42, 8.68)
High blood pressure	0.52 (0.09)	31.28	<**0.001**	1.69 (1.41, 2.03)
High cholesterol	0.27 (0.10)	7.62	0.006	1.31 (1.08, 1.58)
Stroke	1.19 (0.56)	4.47	0.035	3.29 (1.09, 9.92)
Other health problems[b]				
Arthritis	0.26 (0.17)	2.48	0.116	1.30 (0.94, 1.80)
Asthma	0.63 (0.19)	11.45	**0.001**	1.87 (1.30, 2.69)
Cancer	−0.003 (0.30)	0.00	0.993	1.00 (0.55, 1.80)
Fibromyalgia	1.05 (0.59)	3.18	0.075	2.87 (0.90, 9.11)
STD	0.93 (0.24)	15.02	<**0.001**	2.54 (1.59, 4.07)
Uses disability equipment	0.76 (0.39)	3.90	0.048	2.15 (1.01, 4.57)

Note: Alpha levels were adjusted with a Bonferroni correction because of multiple tests of significance; the adjusted alpha levels were 0.05/15=0.003. Boldface indicates statistical significance ($p<0.003$). For all health indicators, the model uses sample type as a predictor, after controlling for other sample differences. For sample type, 1= help-seeking sample of male partner violence victims, 0=population-based sample of men. For brevity, only the statistics for sample type is presented. Regression coefficients for the covariates are available from the first author on request.
[a]Indicates a log-binomial model.
[b]Indicates a robust Poisson model.
PR, prevalence ratio.

from the help-seeking sample had significantly more health problems, except rheumatoid arthritis, diabetes, and gout. They were significantly more likely to abuse prescription drugs but not alcohol or illicit drugs.

Table 3 presents the results for sample type as a predictor of each health indicator, after controlling for confounders. For the clinical cut offs for PTSD and depression, sample differences remained after controlling for confounders. Help-seeking men were 2.32 times more likely to score above the depression clinical cut off (95% CI=1.98, 2.73) and 15.57 times more likely to score above the PTSD clinical cut off (95% CI=10.04, 24.15). Help-seeking men were also more likely to indicate high blood pressure (PR=1.69; 95% CI=1.41, 2.03). For all other cardiovascular problems, the influence of sample type was no longer significant after instituting a Bonferroni correction for multiple tests of hypothesis. Significant differences remained for asthma (PR=1.87; 95% CI=1.30, 2.69) and STDs (PR=2.54; 95% CI=1.59, 4.07).

Discussion

This study compared the health of a help-seeking sample of male physical PV victims with a population-based sample of men. Consistent with the hypothesis, help-seeking men were significantly more likely to report various health problems. Many significant differences remained after controlling for sample differences in demographics, substance use, and additional traumas. Because other sample differences were controlled, it is possible that these health differences can be attributed to PV victimization, although these findings should be replicated with larger samples in a longitudinal design

with additional confounders controlled. Nonetheless, this study provides evidence that male PV victimization represents a risk to men's health.

The most striking difference between the samples was PTSD. After controlling for potential confounders, the help-seekers were 15.57 times more likely than the population-based sample to score above the PTSD clinical cut off. Thus, consistent with previous research on male PV victims, PTSD is a serious health concern.[30] This study also provided evidence that depression and cardiovascular-related disorders are major concerns for help-seeking male PV victims, with help-seeking men more than two times more likely to reach the clinical cut off for depression and 1.69 times more likely to report high blood pressure. Although the other cardiovascular problems failed to reach the adjusted level of significance, the findings as a whole are suggestive of the potential for increased cardiovascular problems in general for male PV victims. Asthma and STDs were also significantly greater among help-seeking male PV victims.

Several potential mechanisms may account for these associations.[5] Men's health may be directly affected by PV; for example, a PV incident may lead to PTSD symptoms. Some health conditions, such as high blood pressure, may arise from biological responses to stresses caused by PV victimization. Still other health conditions may indirectly result from maladaptive coping mechanisms, such as smoking or substance abuse. Although the analyses showed that the higher rates of certain health conditions among the victims sample were not due to the higher rates of substance use in that sample, smoking or substance abuse could still serve as a mediator in this relationship. Because of the cross-sectional nature of the study, no definitive conclusions can be made regarding causality or the temporal relationships among PV and health conditions. Indeed, having a health condition may increase vulnerability to PV.[45] Thus, longitudinal research is needed to investigate these potential mechanisms among male PV victims, as well as research focusing on potential mediators and moderators of these associations.

Future research should investigate whether there is a dose–response relationship between PV victimization and health. Two population-based studies that included men suggest that such a relationship may exist.[16,18] Dose–response relationships should be investigated among male PV victims as well. Also, the associations between health indicators and PV victimization should be studied among sexual minority men, another group of understudied PV victims.

There is a need to know about a broader array of health indicators among male PV victims, such as gastrointestinal disorders, sleep disorders, suicidal behaviors, and anxiety disorders, all found among female PV victims.[6,10–12,15,46] Also, given the low base rate of some of these disorders, larger sample sizes should be employed. As such, the current findings regarding health problems with low base rates (e.g., fibromyalgia, stroke) should be regarded as preliminary until replicated on larger samples because of the likely instability of the estimates.

Utilizing multiple respondents, instead of self-reports, would improve rigor. Controlling for additional sample differences not measured in this study would increase confidence that the health differences were indeed due to differences in PV victimization. Self-reporting can lead to shared method variance, which may inflate correlations. Generalizability is a concern. Although the population-based sample was drawn from a panel that purports to be population-based, it is unknown whether this sample truly represents the population of adult men in the U.S. who have been in a relationship with a woman lasting at least 1 month. Further, it is unknown whether the sample of help-seeking male PV victims is representative of men who seek help for PV victims or male PV victims in general. Finally, given that a portion of the population-based sample experienced PV and perhaps sought help—the extent of which is unknown—associations are likely attenuated. Future research should focus on recruiting samples that are representative of men in the population who are not abused, who are abused but do not seek help, and who are abused and do seek help, so that more precise health risks for each of these groups can be estimated.

This study provides important information on the health of help-seeking male physical PV victims. Because these men have sought help, professionals who come into contact with male PV victims should be aware that their PV experiences may influence their physical and mental health, and they should assess for a range of health problems. Likewise, health professionals who treat men for the conditions in this study should assess for the presence of PV in their patient's relationships. Currently, the Affordable Care Act only mandates health insurance coverage for PV screening and counseling for women.[47] These results suggest that patients should be screened regardless of gender.

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