

Intimate Partner Violence Among Women Presenting to a University Emergency Department

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ABSTRACT

Objective: To establish point and one-year prevalence data regarding partner violence (PV) for women presenting to a university teaching hospital, University of California, Irvine Medical Center (UCIMC), one of 15 emergency departments in Orange County, and to determine differences in partner violence rates when comparing descriptive variables such as race, income and education. **Methods:** An anonymous, written survey was administered to a convenience sample of 370 women presenting to University of California Irvine Emergency Department over a 12 month period. **Results:** Partner violence has a point prevalence of 6.7% and a one-year prevalence of 37.0%. Women who have experienced previous abuse are more likely to present with complaints related to PV acutely. Lower income levels correlate with a higher incidence of physical, emotional, and sexual abuse. We found no correlation between race and likelihood of PV. **Conclusion:** PV in Orange County, California occurs quite frequently. The one-year prevalence compares to that of the entire state

of California, but is at the higher limit when other areas are compared. Detection rates among EPs should be improved, and services to women who have suffered PV will need to be enhanced within Orange County.

INTRODUCTION

Partner violence (PV), also referred to as intimate partner, domestic, or family violence, affects nearly 1 in 3 women during their lifetimes.¹ Nearly 2000 women are murdered annually by an intimate partner despite a decline in intimate partner homicides over the last 18 years.² Many professional organizations, including the American College of Emergency Physicians, American College of Obstetricians and Gynecologists, American Medical Association, American Academy of Family Practice, Emergency Nurses Association, and the US Department of Health and Human Services, have made identification of women subject to PV a primary goal for emergency and primary care physicians.³⁻⁸ Emergency physicians (EPs) are in a unique position that allows them an early opportunity to identify and intervene in cases where PV plays a role. While many emergency departments (EDs) have implemented a standard screening tool for partner violence, detection rates remain poor, due both to patient and health provider factors.⁹⁻¹¹ Estimates suggest that between one quarter million and one million women in the US will seek treatment annually at an emergency department for physical injuries related to partner violence.¹² It is likely that many other women present with complaints related to emotional and/or sexual abuse, including disorders related to pregnancy, suicide attempts, chronic pain syndrome, depression, and sleep disorders, which are not recognized as PV.¹³ The National Violence Against Women Survey reports that 26% of the 500,000 women who report being victims of sexual assault each year were assaulted by an intimate partner.¹⁴

Although data on the incidence and prevalence of partner violence is more readily available for large metropolitan areas, or entire states, limited information is available regarding PV in smaller locales and areas outside large metropolises. No data is yet available for Orange County, California, a largely suburban

Box 2. Partner Violence Survey Instrument Definitions:

1. **Partner**• A person with whom you are having an intimate relationship. Typically this is a person you would call your boyfriend, girlfriend, partner, fiancé, husband, wife or lover and you may or may not live with.
2. **Ex-partner**• The relationship has ended, possibly because of break-up or divorce. This is the person you might refer to as your ex-boyfriend, ex-lover or your ex-husband.
3. **Emotional abuse**• This would include forms of mistreatment such as insults, threats and intimidation.
4. **Forced you to have sex**• This would include rape• physically forcing a person to have sex against their will.

Orange County as a whole. There is a larger proportion of people reporting some college education among survey participants, whereas Orange County data report a higher number of college graduates. Income is markedly different between groups (see Table 1).

just under the *n* needed for statistical significance. No surveys were excluded from statistical analysis. Fewer than five surveys had unanswered questions.

Demographics of women presenting to the emergency department reflect those of the general Orange County population with regards to age distribution and employment. Race differs in that a larger number of persons report being black in the study group than in

Overall, the calculated point prevalence for partner violence (“yes” answers to any of questions 1, 2 or 3) is 6.7% (25/370). The one-year prevalence for PV (“yes” answers to any of questions 4, 5, or 6) is 37.0% (137/368). Emotional abuse was the most common form of PV reported, with 3.0% (11/370) answering “yes” to question 2 and 18.9% (70/369) answering “yes” to question 5. Physical abuse within the past

Table 1. Demographics

	Study Participants	Orange County ¹⁵
Median age (years)	35.2	33.3
Income (USD)	<15,000	34,026 [‡]
Race [†]		
Percent Caucasian	51.3	51.3
Percent Hispanic	29.7	30.8
Percent Black	7.0	1.7
Percent Vietnamese	1.6	4.8
Percent Other	10.0	9.8
Highest education (percent)		
No High School	8.2	10.5
Some High School	12.6	10.0
High School Graduate	26.6	17.5
Some college	32.6	23.3
College graduate	19.7	28.2
Graduate/professional degree	Not measured	10.4
Percent employed	50.5	54.1 [□]

[‡]Median income reported for fulltime year-round employed women; study participants reported individual income within a given categorical range; the mode is reported for the study group. No inquiry was made as to full vs. part-time work.

[□]Employment data for Orange County includes females only; all other Orange County data sets include males and females.

year was reported by 13.0% of study participants (48/370), and 3.5% (13/370) reported current physical abuse. Sexual abuse was by far the least common, with only one participant (0.3%) reporting present injuries. In the past year, 5.1% (19/368) reported some form of sexual partner violence (See Figure 1).

Women who have experienced PV previously have a much higher likelihood than women without previous PV to present with complaints related to partner violence acutely. Odds ratios were calculated for the likelihood of acute physical (OR=3.8) or emotional (OR=49.7) abuse given prior injuries (p -value<0.0005 for each using Fischer's t-test). The sample size was too small to calculate an odds ratio for sexual abuse, but a statistical trend demonstrates that presentation is more likely ($p=0.052$).

A correlation was noted between lower reported income and a higher likelihood of partner violence. Among women who reported incomes under \$25,000, 20% reported physical violence and 29% reported emotional abuse. No participants who had incomes greater than \$75,000 reported either physical or emotional abuse. While not statistically significant, a trend was demonstrated to suggest that both physical and emotional abuse varied inversely with income. There was no correlation found between income and sexual abuse, probably due to small sample size, but it is notable that no persons with income greater than \$50,000 reported any sexual injuries. A correlation between race and PV was noted only when each racial group was also separated by employment. Interestingly, Caucasian, unemployed women had the highest incidence of PV (23%); however, this finding is not statistically significant. Since income was lower in ED patients abused vs. not abused and income of all study patients was lower than for all Orange County, the prevalence rate of unemployed women in this study are likely to be higher than prevalence in the County.

No correlation was found between education and partner violence, nor between employment and partner violence.

DISCUSSION

Despite an overall 30.1% decline in women murdered by intimate partners over the last 18 years, partner violence remains a significant health risk for women.² The National Crime Victimization Survey reports that 8 women per 1000 in the US will experience a violent act perpetrated by an intimate partner yearly.¹⁶ Schafer, Caetano, and Clark conducted a more comprehensive survey, interviewing both partners of 1635 couples, and found a one-year prevalence of male-to-female physical PV of 18%.¹ Their estimate included sexual PV. No national estimate was made for emotional PV, but psychological abuse tends to accompany physical or sexual violence, and may be the sole form of PV committed against a victim. It is likely, then, that this number is significantly higher. The State of California Office of the Attorney General published a factsheet on domestic violence in California, in which they report 147 murders from PV in 2000 and, in the same year, 196,406 calls to California law enforcement for PV, of which 135,156 (68.8%) involved a weapon of some sort.¹⁷ This does not include women who experienced PV but did not contact law enforcement at the time of the incident. The estimated statewide one-year prevalence of physical PV among women is 6%.¹⁸

Among women presenting to emergency departments, estimates of acute presentations of PV in any form are as high as 11.7% as reported by Abbott et al.¹⁹ Dearwater surveyed women presenting to eleven community EDs, five of which were in California and the remaining six in Pennsylvania. His team found that 2.2% of women had ED visits related to an acute PV event. Lifetime prevalences were higher in California (44%) than in Pennsylvania (31%).²⁰ Abbott reported a lifetime prevalence of 54.2% among women in Denver EDs.¹⁸ Studies in other metropolitan areas support these estimates.^{10,21-23} Our findings in Orange County ED patients of a point prevalence of 6.7% and one-year prevalence of 37.0% are consistent with other reports. Although not measured in this study, PV in Orange County is within mid-range estimates, not surprising given the suburban makeup of the area. Many women who suffer PV are not identified by emergency physicians or their primary care physicians.

We suspect, given our practice experience, that this is also the case in Orange County.

We found that PV had a correlation with low income and a history of previous PV, but not with race, nor with low education level. This is in disagreement with many other studies where minorities were at higher risk for PV, and in which women with lower education levels had a higher incidence of PV. A history of alcohol abuse in the abusive partner has also been correlated as a risk factor for acute presentations of PV.²⁴

Our study had several limitations. First is that the population was a convenience sample taken from a single investigation site, rather than a multi-center study with a consecutive sample. The sample size was smaller than the power calculation required to provide statistical significance; however, we feel that the clinical relevance of our data is quite evident. We also recognize that a limited amount of information could be collected in the interest of efficient care within the ED. Although brief, we have confidence that our survey is an excellent screening tool. Feldhaus demonstrated good sensitivity in detecting PV with a three question survey, upon which ours was based.²³ Although not as accurate as the much longer Index of Spouse Abuse and Conflict Tactics Scale, Feldhaus' survey is more appropriate to the ED. A more detailed survey could provide information about the specific types of injuries and abuses suffered by our population sample, as well as better analysis of risk factors associated with PV. We recommend further investigation in this area in order to enhance needed services to women in Orange County. We also recommend continued vigilance on the part of emergency physicians in their efforts to detect PV among the ED population.

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