Violent Victimization of Women and Men: Physical and Psychiatric Symptoms

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Background: Our objectives for this exploratory study were (1) to assess the prevalence in a family practice of violent victimization of women and men by partners, friends, families, and strangers, and (2) to compare the physical symptoms, depression, alcohol use problems, and social support of women and men who were or were not victimized in the previous 12 months.

Methods: We conducted a cross-sectional, multicenter study of family practice patients (1999–2000). One-thousand twenty-four patients, including 679 women and 345 men from 18 to 64 years of age completed a standard health history and a demographic questionnaire. The health history questionnaire included a question about violent victimization.

Results: Violent victimization was reported by 9.9% of the women and 10.9% of the men. Patients who were victimized were grouped into those who were victimized by partners (4.9% of women and 3.0% of men); by friends, or family, or strangers (2.3% of women and 5.0% of men); or by more than one category of persons other than partners (2.6% of women and 3.0% of men). Almost one third of patients victimized by partners were also victimized by another person. Women who were victimized had more physical symptoms than women who were not victimized. Women who were victimized and men who were victimized by their partners had more depressive symptoms than other women and men. Patients who were victimized by more than one category of other victimizers reported more alcohol use problems than other patients. Patients who were victimized reported less social support than patients who were not victimized.

Conclusions: Both women and men report violent victimization in response to a screening question. Violence by partners and by others is related to physical and psychiatric symptoms in women and in men. (J Am Board Fam Pract 2003;16:32–9.)

Violent victimization of women is a serious public health problem that is frequently encountered in family practice.[1] Between 3% and 22.7% of women report violence by partners each year in large community samples,[2–4] emergency departments,[5,6] and community medical practices.[7–13] Several large-scale studies have shown a relation between violence by partners and women's health.[8,10,12,14–16] Women's health tends to improve when they are no longer abused by their partners.[15] Concern about the health consequences of violence from partners toward women has reached such awareness in the health community that the American Academy of Family Physicians,[17] the American College of Obstetricians & Gynecologists,[18] the American Public Health Association,[19] and the Council on Scientific Affairs of the American Medical Association[20] have issued calls for domestic violence screening for all women patients.

For a violence assessment instrument to be effective in a primary care setting, administration must be practical (ie, brief) and flexible enough to be used during routine office visits as well as in crisis situations, the questions must be simple and acceptable to patients, and the instrument must be reliable and valid.[21] Although numerous reliable and valid assessment instruments have been developed for the detection of partner-violence, only a few appear to meet these criteria—the WAST (Woman Abuse Screening Tool),[21] the HITS

(hurt, insulted, threatened, screamed),[22] and the Brief Conflict Tactics Scale, evaluated by Feldhaus et al.[6] The WAST includes seven[21] or eight[23] interview questions developed to assess emotional and physical partner abuse in women patients. The first two questions make up the WAST-Short, a screening tool for the degree of relationship difficulty. The HITS includes four self-report questions to assess partner violence in female patients. The Brief Conflict Tactics Scale includes one self-report question derived from three interview questions. The WAST and the HITS have adequate levels of reliability, and all three measures have adequate levels of validity.

A consideration of the health consequences of the victimization of men is largely absent in the literature, a surprising finding particularly because violent victimization is more prevalent among men than women.[24,25] Violent victimization of both women and men by persons other than partners is also widespread,[24,25] and studies have found increased health care utilization and psychiatric problems among women and men who have been victims of crime than among women [24,26] and men[24] who have not been victimized. Violence screening of both women and men for both partner and nonpartner violence has not yet been advocated by health care provider groups.

We had two objectives in this exploratory study. In addition to assessing partner victimization of women and men, we also included the categories of victimization adopted by the US Department of Justice Statistics,[25] including victimization by partners, strangers, friends, and family. Second, we compared physical symptoms, depressive symptoms, alcohol problems, and social support of women and men who have been violently victimized in the past year by partners or ex-partners, by those other than partners (family, friends, strangers), or by more than one category of victimizers (eg, partners and friends). The comparison between persons victimized by partners and persons victimized by others will help us understand differences associated with violence as such. The comparison between persons victimized by partners or by others compared with persons victimized by more than one category of victimizers (eg, partners or partners and friends) is important because multiple victimization might be an important dimension in understanding the health consequences of violent victimization.

Methods

Participants were recruited from the waiting rooms of four family practice clinics in the metropolitan Detroit area. The study was conducted three half-days a week in each clinic. Three of the sites are residency-training clinics and one is a faculty practice clinic. One residency-training clinic is located in the city of Detroit, whereas the other three sites are located in Detroit suburbs. Every patient who came into the office during the study recruitment days was approached by a research assistant to solicit the patient's participation in a "research project on health." Study procedures were approved by each institution's Institutional Review Board, and all participants gave informed consent before participating. Participants completed the research materials in the waiting room before seeing their physician.

Of 855 women asked to participate, 713 (84%) completed the research materials. Of the 468 men asked to participate, 350 (75%) completed the research materials. Questionnaires from women who reported men's symptoms (eg, "had a drip or discharge from your penis") and men who reported women's symptoms (eg, "do you bleed from your vagina after intercourse?") were excluded. Questionnaires were also excluded because of missing data. Final data analysis included information from 679 women and 345 men who ranged in age from 18 to 64 years.

The research materials included a demographic questionnaire, 55 questions selected from the Milcom Health History Update and Physical Examination questionnaire,[27] and the following Brief Conflict Tactics Scale item shown[6] to be an effective screening question for partner violence for women in emergency department settings: "Have you been hit, kicked, punched, or otherwise hurt by someone in the past year?" This item represents the severe violence items of the Conflict Tactics Scale and has been found to have adequate sensitivity (.53 and 0.58) and specificity (.89 and 0.95) when compared with two standard partner-violence assessment instruments, the Index of Spouse Abuse[28] and the Conflict Tactics Scale.[29] We added to this question by including four categories of victimizers (someone in your family, partner/ex-partner, friend/someone you know, stranger) to which patients checked "yes" or "no."

The original Milcom Health History Update and Physical Examination questionnaire was developed by Holister, Inc, in cooperation with the Society of Teachers of Family Medicine and includes 88 "yes-no" self-report items related to "the past year." The questionnaire provides a comprehensive review of systems and an assessment of mood symptoms, eating and drinking habits (including four CAGE questions), work and play activities, sexuality, family functioning, and social support (including the Family APGAR).

With permission from Holister, Inc, we extracted 18 of 43 physical symptom items representing each body system (eg, head, ears, eyes, nose, throat: "During the past year, have you had frequent headaches?" respiratory and cardiovascular: "During the past year, have you had tightness or pain in your chest?" gastrointestinal and genitourinary: "During the past year, have you had abdominal discomfort or pain?" and skin and extremities: "During the past year, have you had any skin problems or noticed any changes in your skin?"). Genital symptom questions were excluded from final data analysis because they differed according to sex. The physical symptom items and categories were reviewed and approved by a board-certified family physician.

We retained all eight Milcom mood items and refer to them in this report as "depressive symptoms." Included in this category are both classic depressive symptoms (eg, "During the past year, have you felt 'blue,' lonely, or depressed?") and symptoms of anxiety and agitation (eg, "During the past year, have you been more irritable than usual?"). Family physicians and researchers have noted that most patients with mood disorders in primary care have a mixture of depressive and anxiety features.[30,31] We retained all five Milcom alcohol-screening items (referred to in this report as "alcohol use problems"), which includes the four CAGE questions and a question about amount of alcohol consumed per day ("Do you drink more than two alcoholic beverages a day?"). We retained 9 of 11 social support items, which includes five items from the Family APGAR (eg, "Is there someone with whom you can always discuss your personal problems?"). The social support category includes four instrumental support items (eg, "How satisfied are you with the way your family helps you when you are in trouble?") and five expressive support items (eg, "How satisfied are you with the way your

family expresses affection and responds to your feelings or moods?").

Milcom items have obvious face validity and are familiar to practicing physicians. Alpha coefficients for the item clusters were 0.78, 0.85, 0.83, and 0.77, respectively, which indicates a psychometrically acceptable level of consistency between the items within each category. We calculated an average score, the percentage of symptoms, for each cluster for data analysis.

We calculated descriptive statistics for demographic variables, violence categories, and our health history variables. Study participants were divided into four groups: those who reported no victimization, those who reported victimization by partners (and not by others), those who reported victimization by persons other than partners (friends, family members, or strangers), and those who reported multiple victimization. We compared the demographic variables and health history variables for the groups using the multivariate analysis of covariance test with sex and groups as factors, and age as a covariate, with follow-up tests for continuous variables. We used chi-square tests for categorical variables. We were not able to conduct a priori power analyses because effect sizes have not been established for our measures. Failure to find group differences in our dependent variables should therefore be viewed cautiously.

Results

To assess potential confounding factors, we compared demographic differences of patients at the four clinics. The four clinics did not differ in terms of the proportion of patients who reported having been hit ($P = .55$). The clinics did differ in race and ethnicity. One clinic included predominantly African-American patients, whereas another included predominately white patients ($P < .001$). Patients at the four clinics differed in income ($P < .001$), and the average income at one clinic was higher than the average income at the other three clinics ($P < .001$). Patients at the four clinics did not differ in education ($P = .11$).

Of the women, 9.9% reported severe violent victimization by one or more categories of persons in the past year. Of the men, 10.9% reported severe violent victimization by one or more categories of persons in the past year. Among the women, 7.4% reported severe violent victimization by partners,

2.6% by family, 1.9% by friends, and 1.7% by strangers. Among the men, 4.7% reported severe violent victimization by partners, 3.5% by friends, 2.4% by family, and 5.1% by strangers. Victimization by more than one category of assailants was reported by 2.6% of women and 3% of men. For example, 12% of women victimized by partners were also victimized by strangers, and one half of the women victimized by strangers were also victimized by partners.

The participant demographics are shown in Table 1. The women were younger than the men ($P = .006$). The participants in the four victimization groups differed in age ($P < .001$), and patients who were victimized by those other than partners or by multiple others were younger than patients who were not victimized or who were victimized by partners. The women had less education than the men ($P = .009$). The participants in the four victimization groups differed in education ($P = .008$), and patients with multiple victimization were younger than patients who were not victimized ($P = .005$). The women had lower incomes than the men ($P < .001$). While men in the four victimization groups did not differ by income, women who were victimized by those other than partners and women victimized by multiple others had lower incomes than women who were not victimized, ($P < .01$ in each case)

The physical and psychiatric symptoms are shown in Table 2. The multivariate analysis of covariance test showed differences in physical symptoms, depression, alcohol use problems, and social support, as a function of sex (Wilks $\Lambda < 0.001$), victimization group (Wilks $\Lambda < 0.001$), and the interaction between sex and victimization group (Wilks $\Lambda < 0.001$), and age was a significant covariate ($P < .001$).

With respect to physical symptoms, follow-up tests with the analysis of variance showed that women reported more symptoms than men ($P < .001$), and the four victimization groups differed in the proportion of physical symptoms reported ($P < .001$). The interaction between sex and groups was reliable ($P < .001$) and follow-up tests showed that women who were victimized reported more physical symptoms than women who were victimized by partners ($P < .001$ in each case), and women who were multiply victimized reported more symptoms than women who were victimized by partners ($P < .001$). Among the men, the four victimization groups did not differ in physical symptoms. Age was a significant covariate ($P = .02$).

With respect to depression, follow-up tests with the analysis of variance showed that women reported more depressive symptoms than men ($P < .001$), and the four victimization groups differed in the proportion of depressive symptoms reported ($P < .001$). The interaction between sex and groups was reliable ($P = .05$), and follow-up tests showed that among the women, each of the victimized groups reported more depressive symptoms than those who were not victimized ($P < .001$ in each case), whereas among the men, men victimized by their partners reported more depressive symptoms than men who were not victimized ($P < .001$) and men who were victimized by persons other than partners ($P = .04$). The men had more alcohol use problems than the women ($P = .03$). The four victimization groups differed in alcohol use problems ($P < .001$). Follow-up tests showed that participants who reported multiple victimization had more alcohol use problems than patients in the other victimization groups ($P = .002$ in each case).

With respect to social support, the groups differed ($P < .001$), and follow-up tests showed that patients who were not victimized reported more social support than patients victimized by persons other than partners ($P = .006$) or by partners ($P < .001$) or by multiple others ($P < .001$). Patients victimized by multiple others reported less social support than patients victimized by their partners ($P = .01$). Age was a significant covariate ($P = .04$).

With respect to sex-specific symptoms, among women the groups differed ($P < .001$), and age was a significant covariate ($P = .02$). Follow-up tests showed that women in each of the victimization groups reported more sex-specific symptoms than women who were not victimized ($P = .03$ in each case). Among men, the victimization groups did not differ and age was a significant covariate ($P < .001$).

As a follow-up to multivariate analysis of covariance, discriminant function analyses were conducted for men and women separately to discover how well the study variables contributed to the classification of the participants into the groups of interest. Because one assumption of discriminant function is relatively similar-sized groups, we took the total of all victimized women and victimized men and randomly sampled an equal number of men and women who were not victimized (and sampled proportionately from the four clinics) be-

Table 1. Demographics of Male and Female Patients (n = 1,024) Aged 18 to 64 Years, Not Victimized or Victimized by Partners, Nonpartners, or Multiple Others.

	Victimization		Violent Victimization by			P Value		
	No	Yes	Partners	Nonpartners	Multiple Others	Sex	Groups	Sex by Groups
	No. (%)	*No. (%)*	*No. (%)*	*No. (%)*	*No. (%)*			
Number of patients								
Women (n = 679)	611 (90.0)	68 (10.0)	34 (5.0)	16 (2.3)	18 (2.7)			
Men (n = 345)	308 (89.3)	37 (10.7)	10 (2.9)	17 (4.9)	10 (2.9)			
	Mean (SD)	*Mean (SD)*	*Mean (SD)*	*Mean (SD)*	*Mean (SD)*			
Age, years						.006	<.001	.06
Women	38.2 (11.5)	30.5 (9.0)	32.8 (8.5)	30.8 (10.1)	25.9 (7.5)			
Men	38.5 (11.2)	35.9 (11.8)	38.6 (8.6)	33.8 (13.0)	36.8 (13.0)			
	Percent	*Percent*	*Percent*	*Percent*	*Percent*			
Race or ethnicity						.28	.44	
Women								.28
White	58.3	48.5	58.8	25.0	50.0			
Black	36.8	44.1	32.4	62.5	50.0			
Other	4.9	7.4	8.6	12.5	0.0			
Men								.07
White	61.7	52.8	22.2	70.6	50.0			
Black	31.9	47.2	77.8	29.4	50.0			
Other	7.4	0.0	0.0	0.0	0.0			
	Mean (SD)	*Mean (SD)*	*Mean (SD)*	*Mean (SD)*	*Mean (SD)*			
Education						.009	.008	.21
Women	13.3 (1.9)	12.5 (1.9)	13.0 (1.8)	12.4 (2.5)	11.7 (1.3)			
Men	13.8 (2.0)	13.4 (2.4)	12.9 (2.0)	13.8 (2.5)	13.2 (2.7)			
	Percent	*Percent*	*Percent*	*Percent*	*Percent*			
Income						<.001		
Women							<.001	
< $10,000	8.3	26.2	12.1	33.3	47.1			
$10,000–$24,999	21.1	27.7	30.3	33.3	17.7			
$26,000–$49,999	33.2	23.1	30.3	20.0	11.8			
$51,000–$74,999	22.5	15.4	21.2	6.7	11.8			
≥ $76,000	14.9	7.7	6.1	6.7	11.8			
Men							.45	
< $10,000	2.8	2.9	0	0	10.0			
$10,000–$24,999	16.2	20.6	25.0	18.8	20.0			
$26,000–$49,999	36.4	26.5	37.5	25.0	20.0			
$51,000–$74,999	26.2	38.2	12.5	56.2	30.0			
≥ $76,000	18.4	11.8	25.0	0.0	20.0			
Marital status						.08		
Women							<.001	
Married	51.0	20.6	14.7	31.2	22.2			
Single	9.0	16.2	20.6	6.2	16.7			
Living with partner	24.6	48.5	47.1	56.2	44.4			
Other	15.4	13.2	17.7	6.2	16.7			
Men							.003	
Married	51.8	21.6	20.0	17.7	30.0			
Single	9.0	13.5	30.0	11.8	0.0			
Living with partner	30.2	43.2	20.0	58.8	40.0			
Other	9.0	21.6	30.0	11.8	30.0			
Employed outside the home						.02	.04	
Women							.01	
Full time	65.0		61.8	26.7	40.0			
Part time	32.1		32.4	66.7	46.7			
None	2.9		5.9	6.7	13.3			
Men							.72	
Full time	71.6	68.6	77.8	68.8	60.0			
Part time	27.0	31.4	22.2	31.2	40.0			
None	1.4	0.0	0.0	0.0	0.0			

fore running our analyses. Predictor variables included age, income, education, physical symptoms, depressive symptoms, alcohol use problems, and social support. For the nonvictimized women and victimized women, 77% and 71%, respectively,

were correctly classified. Depressive symptoms, age, physical symptoms, and social support combined for a total of 51% of the variance of group membership. Depression was the single greatest predictor, accounting for 23% of the variance of

Table 2. Percentage of Physical Symptoms, Depressive Symptoms, Alcohol Use Problems, and Social Support for Female and Male Patients Not Victimized or Victimized by Partners, Nonpartners, or Multiple Others.

| | Victimization of the Respondent | | | | | P Value | | | | |
	No Victimization (N)	Any Victimization	Partners (P)	Nonpartners (O)	Multiple Others (M)	Sex (P)	Groups	Sex by Groups	Age	Locus of Differences
Physical symptoms						<.001	<.001	<.001	.02	
Women										N < P, O, M
Mean	20.5	35.6	30.0	35.7	46.0					
SD	16.8	22.6	18.6	23.6	25.8					
Men										N, P, O, M
Mean	18.1	21.6	25.7	24.8	12.1					
SD	15.3	19.2	26.3	18.1	7.6					
Depressive symptoms						<.001	<.001	.05	.06	
Women										N > P, O, M
Mean	30.7	60.8	58.5	57.8	68.1					
SD	29.8	32.0	34.1	30.6	29.8					
Men										N, O, M > P
Mean	20.3	34.8	50.0	27.2	32.5					
SD	24.1	28.3	37.6	27.0	27.8					
Alcohol use problems						.03	<.001	.15	.38	N, P, O < M
Women										
Mean	2.9	10.3	7.6	10.0	15.6					
SD	11.2	22.5	19.7	24.2	26.2					
Men										
Mean	10.3	14.1	10.0	7.1	30.0					
SD	20.5	26.2	17.0	14.0	41.4					
Social support						.69	<.001	.12	.04	
Women										N > P, O > M
Mean	84.3	64.9	69.9	70.8	50.0					
SD	20.1	30.1	26.5	30.1	33.3					
Men										N > P, O, M
Mean	81.3	65.2	55.6	71.9	63.3					
SD	21.3	31.0	35.5	28.1	31.4					

group membership. For the nonvictimized men and victimized men, 69% and 59%, respectively, were correctly classified. Alcohol use problem was the only significant predictor, accounting for 27% of the variance of group membership.

Discussion

Almost 1 in 10 women who were patients in family practice offices in the metropolitan Detroit area reported having been violently victimized in the previous year. Our finding that 7.4% of women between the ages of 18 and 64 years had been violently victimized by partners is in harmony with the results of many other studies.[2–12] Our finding of a relation between physical health symptoms and violent victimization by partners[3,9,10,12–14,24,26] and between depression and violent victimization by partners is also in accord with the results of other studies.[3,9–11,14] Although assessment of partner victimization is clearly important, our findings show that victimization by persons other than partners is also associated with health problems and warrants

assessment as well. Multiple victimization has not been given adequate attention in the medical literature, even though it occurs frequently among victimized women and is associated with more physical symptoms than victimization by partners or those other than partners alone. Our data show that women who have been violently victimized have low levels of social support, whereas women who have been multiply victimized have markedly low levels of social support and the greatest number of alcohol use problems.

More than 1 in 10 men in our study population reported having been violently victimized in the past year. Almost one half of the victimized men were victimized by family, friends, or strangers. Approximately one quarter of the victimized men were victimized by their partners, and another quarter were men with multiple victimization. We found that men who have been violently victimized by their partners were more likely to be depressed and experience lower levels of social support than other men. Men who were multiply victimized

were more likely than other men to have alcohol use problems. In our sample, alcohol use problems were not related to victimization by partners or those other than partners alone. One surprising finding is that violent victimization of men by partners or by those other than partners was not related to physical symptoms. This finding is in contrast to the findings of Forjuoh et al,[24] who surveyed a large community sample in Pennsylvania.

Violent victimization appears to represent a serious risk factor for health-related symptoms. We recommend including one item about violent victimization as part of the standard health screening of both women and men. The modified Brief Conflict Tactics Screening item is useful for brief assessment in family practice and other primary care settings. Our findings show the importance of asking not only about whether violent victimization has occurred but also about the perpetrators of victimization. This study further suggests that being "hit, kicked, punched, or otherwise hurt" by a partner, by someone other than the partner, or by multiple perpetrators has different implications for health care and referral.

This study has limitations. Findings of no differences from this study should be interpreted cautiously. Replication is needed with larger samples to allow for the study of larger groups of victimized persons. This research also needs to be extended by using standardized measures of physical symptoms, depression, alcohol use, and social support, and by including physical measures of health and questions about health care use. This study also has strengths. To the best of our knowledge, this study is one of only a few studies of the relation between the victimization of men and men's health. Further, we have considered the effects of several types of victimization on the health of women and men, which have yielded important differences. This exploratory study can be used for variable selection for future violence investigators interested in defining differential correlates of victimization reported by primary care patients. By incorporating one simple question into patient interactions, family physicians can gain important information that will enable them to have a major impact in the health care and lives of violently victimized women and men.

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