

# Dating Violence in College Women

## Associated Physical Injury, Healthcare Usage, and Mental Health Symptoms

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- ▶ **Background:** College-aged women report experiencing violence from a partner within the dating experience.
- ▶ **Objectives:** This study used a correlational design, to report physical injury, mental health symptoms, and healthcare associated with violence in the dating experiences of college women.
- ▶ **Methods:** A convenience sample of 863 college women between 18 and 25 years of age from a private, historically Black university in the South, and a private college in the mid-Atlantic completed the Abuse Assessment Screen, a physical injury checklist, and the Symptom Checklist—R-90. Data analysis consisted of frequencies, ANOVA, and MANOVA.
- ▶ **Results:** Almost half (48%) ( $n = 412$ ) reported violence and, of these, 39% ( $n = 160$ ) reported more than one form of violence. The most commonly reported injuries were scratches, bruises, welts, black eyes, swelling, or busted lip; and sore muscles, sprains, or pulls. Victims had significantly higher scores on depression, anxiety, somatization, interpersonal sensitivity, hostility, and global severity index than nonvictims. Victims of multiple forms of violence had significantly higher mental health scores and reported greater numbers of injuries than victims of a single form of violence. Less than half of those injured sought healthcare for injuries and less than 3% saw a mental health professional.
- ▶ **Discussion:** Study findings suggest the importance of screening and identification of victims of violence. Knowledge of physical and mental health effects of violence can guide intervention, prevention, and health promotion strategies. Future research is needed to describe barriers to seeking healthcare, screening practices of college health programs, and programs to identify victims.
- ▶ **Key Words:** college women • interpersonal violence • mental health symptoms • physical injury

Although dating represents a carefree period of romantic experimentation, for many dating becomes harmful owing to the experience of violence. Prevalence of dating violence ranges from about 30% for physical violence, 8% for stalking, 90% for emotional violence, and 20% for sexual violence (Fisher, Cullen, & Turner, 2000; Johnson & Sigler, 2000; Riggs & O’Leary, 1996; Tjaden & Thoennes, 1998b). *Dating violence* is the term often used to describe adolescent and college student intimate partner violence.

Intimate partner violence is a pattern of purposeful coercive behaviors that may include inflicted physical injury, psychological abuse, sexual assault, progressive social isolation, stalking, deprivation, intimidation and threats. These behaviors are perpetrated by someone who is, was or wishes to be involved in an intimate or dating relationship with an adult or adolescent victim and are aimed at establishing control of one partner over the other (Family Violence Prevention Fund, 1999).

According to the United States Department of Justice, women aged 16–24 are most at risk for nonfatal violence from an intimate partner (U. S. Department of Justice, 1998).

The purpose of this study was to explore the violence that occurs in dating experiences of college women. The specific aims were to: (a) compare mental health symptoms of women who have been a victim of dating violence with those who have not; (b) describe the types of physical injuries resulting from violence in dating experiences and the healthcare sought; and (c) compare mental health symptoms and the number of physical injuries of women who have experienced multiple forms of dating

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violence with women who have experienced one form of violence.

## Background

### Mental Health Symptoms Associated With Dating Violence

Mental health reactions to victimization include depression, anxiety, posttraumatic stress disorder, somatic complaints, and anger (Bohn & Holz, 1996; Campbell, 2002). However, linkages to mental health symptoms must be viewed with caution, as cross-sectional research cannot account for preexisting conditions.

Severe physical dating violence has been associated with suicidal ideation or attempts in adolescent females (Silverman, Raj, Mucci, & Hathaway, 2001). In a study of psychological abuse using a sample of mainly White females, undergraduate victims reported higher levels of hostility than nonvictims did but there were no differences between the two groups in depression, anxiety, and somatization (Pape & Arias, 1995). In the National College Women Sexual Victimization Survey, three in 10 women reported being "injured psychologically" from stalking (Fisher et al., 2000). In another sample of predominantly White females, stalked individuals reported more post-traumatic stress symptoms and had greater severity of mental health symptoms than victims of harassment or controls (Westrup, Fremouw, Thompson, & Lewis, 1999).

Rape is associated with feelings of helplessness, powerlessness, anxiety, and fear; posttraumatic stress disorder; multiple somatic complaints; and genital injuries (Burgess & Holmstrom, 1974; Koss & Cook, 1998). Shapiro and Schwarz (1997) reported that those who reported date rape endorsed more trauma symptoms than those who did not report rape (Shapiro & Schwarz, 1997).

### Physical Injury Associated With Dating Violence

There is limited research to describe physical injury from dating violence and resulting healthcare. Women who reported stalking also reported injuries from physical assault by their stalker, such as swelling, cuts, scratches, bruises, broken teeth, and knife or gunshot wounds (Kohn, Flood, Chase, & McMahon, 2000). Fisher, Cullen, and Turner (2000) reported that in about one in five rape and attempted rape incidents, victims reported injury, most often bruises, black eyes, cuts, scratches, swelling, or chipped teeth.

The most thorough report on abuse is the National Violence against Women Survey (NVAWS), a telephone survey of a nationally representative sample of 8,000 adult women and 8,000 men on physical abuse, sexual victimization, threats and coercion, stalking, and emotional abuse (Tjaden & Thoennes, 1998a, 1998b, 2000). The survey found that in more than one third of all rapes and physical assaults against women by intimates, the victim sustains an injury and that in about one third of injury cases, healthcare was received. While most of the women reported relatively minor injuries (66–73%), such as scratches, bruises, and welts, relatively few women reported more serious types of injuries (2–17%), such as lacerations, broken bones, dislocated joints, head or spinal cord injuries, chipped or broken teeth, or internal

injuries (Tjaden & Thoennes, 1998a, 2000). However, the study was framed as a crime survey, which could have limited responses about interpersonal violence.

### Research on Occurrence of Multiple Forms of Violence

Most of the dating violence research has focused solely on physical violence, with an emphasis on perpetration of acts (Jackson, 1999; Lewis & Fremouw, 2001). Limited research on dating violence includes all possible forms of physical, sexual, and psychological violence and stalking. The NVAWS provides compelling evidence of different types of victimization, and that indicates many victims may experience more than one type of violence. Women with emotionally abusive partners were more likely to report being raped, physically assaulted, and/or stalked by their partners even when controlling for sociodemographic and relationship variables (Tjaden & Thoennes, 2000). Similarly, victims of stalking from the National College Women Sexual Victimization Study reported that in 15.3% of the incidents, the stalker threatened or attempted to harm them, and in 10.3% of the incidents, the stalker forced or attempted sexual contact (Fisher et al., 2000).

In a study of sheltered battered women who also reported sexual abuse, 99% of the participants experienced at least one physical health symptom and attributed many of the physical health symptoms to the experience of abuse (Eby, Campbell, Sullivan, & Davidson III, 1995). Similarly, Campbell and Soeken (1999) report that physically abused women who also reported sexual abuse had significantly higher scores on negative health symptoms and gynecological symptoms than women who reported only physical abuse. Although these studies report on adult women, both had participants who were between 18 and 24 years of age and can contribute to understanding the impact of intimate partner violence on the health of women.

The study of dating violence has centered most often on physical violence and the perpetration of violence. Research exploring the health-related effects has been limited, and most studies have used middle class and White samples (Jackson, 1999; Lewis & Fremouw, 2001). This study sought to build on the existing knowledge of dating violence by the inclusion of Black participants and the use of a victim perspective to obtain data on associated physical and mental health effects.

## Design and Method

### Research Setting and Sample

The study took place at two universities, a historically Black private college in the South, and a private college in the mid-Atlantic region. Data collection occurred on both campuses in residence halls and meeting rooms over the 2002–03 academic year.

To be included in this study, the woman must have been between 18 and 25 years of age, dated a male within the past year, and be able to read English. The researchers anticipated similar prevalence as previously reported and sampled to ensure adequate numbers of victims to create subgroups. A sample size of 863 participants was adequate

to provide individuals who had experienced dating violence. Power analyses were conducted (Cohen, 1988) and all target sample sizes were smaller than the 863 sample obtained.

## Instrumentation

### Physical, Sexual, and Psychological Violence

The Abuse Assessment Screen (AAS) measured the occurrence of intimate partner violence within the past year (Soeken, McFarlane, Parker, & Lominack, 1998). All items yielded a yes/no response that coded participants as victims or nonvictims. The item pertaining to violence while pregnant was excluded because pregnancy precluded study participation. Pregnant women were excluded from the study because the study was not designed to assess and manage the additional concerns of pregnancy. The researchers added an item about stalking or harassment, that used the same terminology and phrasing as the items on the AAS.

The Nursing Research Consortium on Violence and Abuse developed the AAS in 1991, and since then researchers have reported effective use with adolescent and young adult samples (Coker, McKeown, et al., 2000; Curry, 1998; Lown & Vega, 2001). The AAS has been effectively used in studies with Blacks (Coker, Smith, McKeown, & King, 2000; Curry, 1998; Dunn & Oths, 2004). Using a test-retest approach and on comparison with similar measures, the AAS was established as a reliable and valid measure to screen for relationship violence (Soeken, McFarlane, Parker, & Lominack, 1998). The reliability for this study was 0.76 using 851 participants.

### Mental Health Symptoms

The SCL-90-R measured mental health symptoms and general psychological health. Particular subscales of interest were somatization, interpersonal sensitivity, depression, anxiety, and hostility. The global severity index, based on the total scale, reported overall psychological distress. A number of studies have used the SCL-90-R and have shown it to be a reliable instrument with internal consistency coefficients between 0.80 and 0.90, and a valid instrument through correlations with other instruments (Derogatis, 1994). Researchers report effective use of the SCL-90-R with Black participants (Champion, Shain, Piper, & Perdue, 2002; Martin, Kilgallen, Dee, Dawson, & Campbell, 1998). Reliability coefficients for this study were as follows: total scale = 0.97 ( $n = 703$ ), somatization subscale = 0.84 ( $n = 842$ ), interpersonal sensitivity = 0.87 ( $n = 841$ ), depression = 0.90 ( $n = 830$ ), anxiety = 0.85 ( $n = 847$ ), and hostility = 0.79 ( $n = 850$ ).

### Physical Injury

Any participant who reported experiencing violence indicated if physical injury occurred. The list of injuries was consistent with the literature on interpersonal violence and the National Violence Against Women Survey (Brockmeyer & Sheridan, 1998; Eby et al., 1995; Tjaden & Thoennes, 1998b). They also reported if they visited healthcare providers after injuries.

## Human Subjects Considerations

Institutional review board approval was obtained at both settings. To ensure confidentiality, the participants and universities were unnamed. Each survey was numbered, and participants used that number to sign the consent form. Each participant received information on the study, educational pamphlets, and community and campus resources. They also received the phone numbers of one of the researchers (who is a certified Psychiatric Clinical Nurse Specialist) and the university counseling offices. All participants were aware that they could discontinue if any emotional distress occurred. No problems were presented during data collection.

## Data Collection

After receiving approval from campus officials, the researchers approached young women in designated areas on campus to discuss participation in the study. Potential participants were told about the study, its purpose, and what participation entailed. Study participation included completing a pen-and-paper survey. Participants received no incentives for study participation.

As with most research on partner violence, the researchers were concerned about the safety of the participants (Dutton et al., 2003). All signs and e-mails described the study topic as dating and violence. The surveys were completed either at the researcher's table or in the participant's room. Any young women who were accompanied by males were not approached about participation. No safety issues emerged during data collection.

## Data Analysis

The researchers used Statistical Package for Social Scientists 11.0 (SPSS) for data analysis. All statistical analyses were conducted for  $\alpha = .05$  level of significance. Data analysis for comparing victims with nonvictims included the entire sample of 863 participants, with 412 victims and 451 nonvictims. Subsequent analyses included only the 412 victims. The victims were divided into two groups: those who had experienced any one form of violence ( $n = 252$ ) and those who had experienced any two or more forms of violence ( $n = 160$ ). The decisions to divide the sample reflected consideration of keeping the group sizes fairly equivalent to meet the assumptions of ANOVA techniques.

The sample was composed of young women between the ages of 18 and 25 ( $M = 19.3$  years,  $SD = 1.46$ ). There is little consistency which ages determine late adolescence and early adulthood (Berry, 2004). Although many agree that the age range begins at 18, the ending age of the range varies from 21, 22, or 24 (Cutler & Marcus, 1999; Grace, 1998; Neinstein, Juliani, & Shapiro, 1991). This sample was largely in late adolescence because 94% ( $n = 813$ ) were ages 18–22 (Cutler & Marcus, 1999). The grade-point average ranged from 1.0 to 4.0 ( $M = 3.17$ ,  $SD = 0.51$ ). Participants reported an average of three boyfriends, with a range of 0–30 boyfriends. The most often reported dating situations were (a) involved in a relationship with a boyfriend (40%,  $n = 343$ ) and (b) not currently dating, but dated within the past year (34%,  $n = 296$ ).

Most participants were single (99%,  $n = 855$ ) and Black (70.5%,  $n = 608$ ). Further ethnic breakdown of the sample was: White (17.5%,  $n = 151$ ), Asian/Pacific Islander (6.1%,  $n = 53$ ), American Indian (0.1%,  $n = 1$ ), Hispanic (1.3%,  $n = 11$ ), and mixed race/multiracial (4.5%,  $n = 39$ ). The level of household income was evenly distributed, \$50,000–\$74,999 (24%,  $n = 201$ ) as the most frequently reported category.

## Results

### Assessment of Violence

In this study, 48% ( $n = 412$ ) of the participants had experienced some form of violence within the past year. Victims who experienced any one form of violence were classified as single and those who experienced any two or more forms of violence were designated as multiple. For example, a young woman who reported only experiencing psychological violence was a single victim, while an individual who reported both psychological and physical violence was classified as a multiple victim. The experience of the two forms of violence may or may not have been within the same relationship or by the same perpetrator. Of the 412 women who reported experiencing intimate partner violence, almost 40% ( $n = 160$ ) had experienced more than one form of violence. No significant differences existed in age, race, and other demographic variables between victims and nonvictims or in those victims who experienced a single form of violence and those who experienced multiple forms of violence.

### Mental Health Symptoms and Dating Violence

Correlational analysis was conducted for mental health symptoms and demographic characteristics. Despite

significant correlations ( $p < .01$ ) among the mental health symptoms, each represented a different concept and was included in the analysis. No other significant correlations existed among mental health symptoms and demographic characteristics. There was a difference between victims and nonvictims on mental health symptoms as analyzed using MANOVA (Wilks'  $\lambda = 0.023$ ,  $f = 7190.83$ ,  $df = (5, 857)$ ,  $p < .001$ ). The effect size for the MANOVA was 0.26, which indicates a moderate effect (Cohen, 1988). As seen in Table 1, post hoc ANOVA statistics were significant suggesting that dating violence victims had significantly higher mental health symptom scores than nonvictims. Each ANOVA was found to be significant using Bonferroni's adjustment as the  $\alpha = .01$  protecting against the inflation of the family-wise error rate associated with conducting multiple ANOVAs.

The global severity index, which indicated general psychological distress, was derived from the total scale necessitating a separate ANOVA. The mean scores for victims ( $M = 59.44$ ,  $SD = 10.73$ ) were higher than the scores for nonvictims ( $M = 53.78$ ,  $SD = 11.08$ ). Findings suggest that victims had significantly higher general psychological distress than nonvictims had ( $F = 57.89$ ,  $df = 1, 861$ ,  $p < .001$ ).

Derogatis (1994) used the Symptom Checklist-90—Revised to screen for psychiatric disorders and to provide a value that indicated "caseness" or risk for a psychiatric disorder and the need for further diagnostic screening. The criterion for caseness was met by 37% of the participants ( $n = 319$ ). Not being a victim of dating violence significantly reduced the odds of caseness ( $OR = 0.463$ , 95%  $CI = [0.349, 0.614]$ ,  $p < .01$ ), suggesting that nonvictims had lower odds of meeting the criterion for caseness

TABLE 1. Mental Health Symptoms Victims and Nonvictims

Mental Health Symptoms	<i>n</i>	<i>M</i>	<i>SD</i>	ANOVA		
				<i>df</i>	<i>p</i>	<i>f</i>
Somatization				1	33.25	
Nonvictims	451	50.07	10.10	861		<.001
Victims	412	54.26	10.33			
Interpersonal sensitivity				1	32.75	
Nonvictims	451	56.35	10.69	861		<.001
Victims	452	60.49	10.54			
Depression				1	33.25	
Nonvictims	451	53.94	10.53	861		<.001
Victims	412	58.51	9.84			
Anxiety				1	27.25	
Nonvictims	451	50.02	10.50	861		<.001
Victims	412	53.91	11.42			
Hostility				1	43.41	
Nonvictims	451	52.10	9.53	861		<.001
Victims	412	57.53	10.68			

Note. ANOVA = Analysis of variance.

**TABLE 2. Physical Injury Associated With Violence**

Injury	<i>n</i>	%
Any injuries received	132	32.0
Scratches	62	15.0
Sore muscles, sprains, strains, or pulls	60	14.6
Bruises, welts, black eyes, swelling, busted lip	53	12.9
Genital injury, bleeding genitalia, sore or irritated genitals	39	9.5
Acquired an STD	36	8.7
Bite marks, wounds	21	5.1
Lacerations, knife wounds, cuts	13	3.1
Broken bones, dislocated joints*	7	1.7
Knocked unconscious, passed out*	3	0.7
Head or brain injury*	2	0.5
Chipped or knocked out teeth*	2	0.5
Spinal cord injuries*	0	0
Perforated or shattered ear drum*	0	0
Gunshot injuries*	0	0

\*Severe injuries.

compared with victims. Of the victims, 172 (42%) met the criterion for caseness, as compared with nonvictims, where 113 (25%) met the criterion for caseness. About 60% of those who met the criterion for caseness ( $n = 190$ ) were victims of dating violence. Physical injury after violence was not significantly associated with caseness.

### Physical Injury Associated With Violence

Of the 412 participants who reported experiencing violence, almost a third ( $n = 132$ ) reported physical injury. The most commonly received injuries were scratches, sore muscles, sprains, strains, or pulls, and bruises, welts, black eyes, swelling, or busted lip. Injuries were categorized as severe and less severe (Brockmeyer & Sheridan, 1998; Eby et al., 1995; Tjaden & Thoennes, 1998b). Most of the reported injuries (89%,  $n = 118$ ) were less severe. About 13% ( $n = 52$ ) reported severe injuries and 38 individuals reported both less severe and more severe injuries (see Table 2).

About 40% ( $n = 56$ ) of the participants who reported injury sought healthcare, which was most commonly an outpatient appointment with a healthcare provider (7%,  $n = 27$ ), student health services (4%,  $n = 18$ ) or emergency services (4%,  $n = 18$ ). Other healthcare providers seen are as follows: mental health professional (3%,  $n = 11$ ), inpatient hospitalization (1%,  $n = 5$ ), and ambulance/paramedic services (1%,  $n = 4$ ). In addition, just over half of the victims told someone that they had experienced violence. Of these, friends were most often told (50%) and clergy the least often (>2%). It is interesting to note that counselors were told at rates of less than 6% and families at less than 25%.

### Multiple Victims and Mental Health Symptoms

The MANOVA comparison of mental health symptoms in single and multiple victims was significant (Wilks'  $\lambda = 0.96$ ,  $f = 3.74$ ,  $df = 5$ , 406,  $p < .003$ ) as were post hoc ANOVAs (Table 3). Again, the effect size was moderate (0.21). As seen in Table 3, victims who experienced multiple forms of dating violence had significantly higher mental health scores as compared to victims who experienced one form of violence. Each ANOVA was found to be significant using Bonferroni's adjustment as the  $\alpha = .01$  protecting against the inflation of the family-wise error rate associated with conducting multiple ANOVAs.

A separate ANOVA for the global severity index revealed that victims with multiple occurrences had significantly greater general psychological distress than single victims ( $F = 15.70$ ,  $df = 1$ , 410,  $p < .001$ ). The mean scores for multiple victims ( $M = 57.80$ ,  $SD = 10.89$ ) were higher than the mean scores for single victims ( $M = 52.03$ ,  $SD = 9.98$ ).

Again, 318 participants (37%) met the criterion for "caseness." Of those who met the criterion for caseness and victim status, 45% ( $n = 86$ ) were multiple victims. Single victims had decreased odds of experiencing caseness as compared to multiple victims (OR = .61, 95% CI = (.406, .901),  $p < .01$ ). Of the victims who experienced multiple forms of violence, 78 (49%) met the criteria for caseness, as compared with victims who experienced a single form of violence, among whom 94 (37%) met the criteria for caseness.

### Multiple Victims and Number of Injuries

The mean number of injuries reported from single victims was 0.33 ( $SD = 0.90$ ) and from multiple victims was 1.43 ( $SD = 1.68$ ). Significant differences were revealed by the ANOVA in the number of injuries reported by each group ( $F = 74.96$ ,  $df = 1$ , 41,  $p < .01$ ). As one would expect, the number of injuries reported by multiple victims was significantly greater than the number of injuries reported by single victims. However, the relationship between the severity of injuries and the number of forms of violence was not significant.

### Discussion

Limitations of the study include representativeness of the sample, premorbid conditions, sampling bias, and self-report concerns. Because the study contained Black college women, results should not be generalized to other groups. One limitation of the retrospective, cross sectional design is that causality and preexisting conditions cannot be taken into account; this limitation applies to mental health symptoms.

In the statistical analyses the assumption was that the sample represented a normally distributed population, but in reality the convenience sample was a nonprobability one, which is a limitation on the generalizability of the findings. Individuals could choose to participate or not to because of previous experience with violence, which could lead to inaccurate prevalence rates because of sampling bias. As with any method using self-reports, there was the possibility that participants could have underreported

TABLE 3. Mental Health Symptoms Single and Multiple Victims

Mental Health Symptoms	ANOVA					
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>df</i>	<i>p</i>	<i>f</i>
Somatization						
Single	252	53.16	10.52	1	7.53	
Multiple	160	56.00	9.80	410		<.006
Interpersonal Sensitivity						
Single	252	58.92	10.97	1	14.86	
Multiple	160	62.96	9.32	410		<.001
Depression						
Single	252	56.97	9.10	1	16.47	
Multiple	160	60.93	9.11	410		<.001
Anxiety						
Single	252	52.63	11.32	1	8.34	
Multiple	160	55.93	11.32	410		<.004
Hostility						
Single	252	56.30	10.55	1	8.74	
Multiple	160	59.46	10.63	410		<.003

abuse or responded to items in what they felt was a positive manner.

The mean scores of victims on all mental health symptoms were significantly higher than the scores of nonvictims, which have been reported in previous research. In this research premorbid conditions and causality are not taken into account, but previous research on domestic violence suggests that mental health sequelae are the likely outcomes of intimate partner violence (Campbell et al., 2002).

Almost one third of the sample met the criteria for psychiatric diagnosis, and further evaluation that young women are not seeking and/or getting mental health evaluation and treatment. This was consistent with prior literature that only a minority of victims reported using counseling or supportive services (Henning & Klesges, 2002). Barriers to disclosure in healthcare settings of adult domestic violence victims have been identified through research. Common barriers include fear of retaliation, embarrassment, lack of treatment or scorn from the provider, misunderstanding from the staff, fear, and a lack of resources (D'Avolio et al., 2001; Yam, 2000). In addition, because women often disclose abuse to friends and not to family members, counselors, or clergy—all of whom could provide assistance otherwise in getting necessary intervention.

Many participants who reported violence also reported physical injury. Of those reporting physical injury, at least a fifth reported injuries that were more serious. This was consistent with the findings of the National Violence against Women Survey, where about one third of rapes and physical assaults by an intimate partner resulted in physical injury and most of the injuries were rated as less severe (Tjaden & Thoennes, 2000). Yet, in this study, less than

half of the injured received medical attention for their injuries, most from either outpatient medical appointments or student health services. These findings are not surprising in light of similar findings among adult battered women populations.

Women are often hesitant to report violence (Valente, 2000) and many report not discussing intimate partner violence with a physician (Plichta & Falik, 2001). Again, research that explores perceived barriers to discussing abuse in adolescent populations is limited. These findings underscore the necessity for routine screening of all adult and adolescent women for the experience of intimate partner violence at healthcare setting visits (Groves, Augustyn, Lee, & Sawires, 2002).

Because most of the reported injuries (89%,  $n = 118$ ) were classified as less severe or minor injuries like scratches, sore muscles, and bruises, these types of injuries could serve as triggers to assess for the existence of a violent dating experience or partner. Because some participants reported sexually transmitted diseases related to a violent dating encounter, it is important for nurses who work with college-aged females to inquire about experiences of violence with individuals who are seen for sexually transmitted diseases. While the presence of these physical injuries does not provide conclusive evidence of intimate partner violence, they can urge the nurse to screen carefully. Further research can determine which screening techniques work best with college women.

The association of mental health symptoms with physical, sexual, and emotional violence, and stalking has been documented (Campbell, 2002; Campbell, Jones, & Dienemann, 2002; Campbell & Soeken, 1999; Golding, 1999). Victims of single forms of violence had a significantly

decreased likelihood of caseness than victims of multiple forms of violence. The experience of violence is a predictor of future violence (Smith, Thornton, DeVellis, Earp, & Coker, 2002). Therefore, young women who have already experienced more than one form of violence are at risk for continued abuse, which could affect long-term mental health. The cross-sectional approach cannot account for premorbid diagnosis, and thus causality cannot be assumed. However, research on adult women makes it quite likely that an association exists between intimate partner violence and mental health symptoms (Campbell, 2002).

As a young woman experienced more forms of violence, the effects of violence on health increased. Victims of multiple forms of violence reported more physical injuries than victims of single instances. The more the violence that one was exposed to, the greater the likelihood of injuries. It seems plausible that young women who experience more than one form of violence could be involved with partners who are more violent. Overall, a partner who perpetrates multiple forms of violence could have behavior that is more violent. Alternatively, individuals who have experienced multiple forms of violence may have had more than one violent relationship that could have increased the number of injuries sustained. Physical injury represents a threat to the physical and mental health of an individual.

It is suggested in this study that young women do not report or disclose the consequences of violence in the healthcare setting. Perceived barriers to seeking treatment, disclosing, and/or reporting intimate partner violence would improve health promotion activities.

Over half of the women in the sample experienced violence suggesting that many college women are susceptible to the health effects associated with dating violence. Mental health symptoms were significantly greater in women who had experienced violence as compared with women who had not. Mental health symptoms and the number of physical injuries also were significantly greater in women who had experienced more than one form of violence as compared with women who had experienced one form of violence. Almost one third of the participants who reported the experience of violence also reported physical injury. Of those reporting physical injury at least, one fifth reported injuries that were more serious, and yet few sought healthcare. ▀

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