

Do Responses to an Intimate Partner Violence Screen Predict Scores on a Comprehensive Measure of Intimate Partner Violence in Low-Income Black Women?

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Study objectives: Screening for intimate partner violence has been advocated as an emergency department (ED) procedure. This study aimed to ascertain whether a 5-item intimate partner violence screening questionnaire could be used effectively in the ED with low-income black women to accurately predict partner abuse status.

Methods: Data were collected from 200 black women who answered in the affirmative to at least 1 item on the intimate partner violence screener questionnaire, the Universal Violence Prevention Screening Protocol. The women completed a comprehensive battery of measures, including the Index of Spouse Abuse, a commonly used and psychometrically sound measure of intimate partner violence.

Results: Bivariate logistic regression analyses revealed that, compared with women below the physical–intimate partner violence cut point on the Index of Spouse Abuse, women above the cut point on physical–intimate partner violence on the Index of Spouse Abuse were more likely to answer yes to Universal Violence Prevention Screening Protocol screening questions related to physical, sexual, and emotional abuse; threats to be harmed physically; and being afraid. Compared with women below the nonphysical–intimate partner violence cut point on the Index of Spouse Abuse, women above the cut point on nonphysical intimate partner violence on the Index of Spouse Abuse were more likely to answer yes to each screening question on the Universal Violence Prevention Screening Protocol. The 2 Universal Violence Prevention Screening Protocol screening items related to physical abuse best predicted the 2 Index of Spouse Abuse scales. Accurate prediction of physical and non-physical abuse on the Index of Spouse Abuse required affirmative responses to 4 or more screening questions on the Universal Violence Prevention Screening Protocol.

Conclusion: A brief intimate partner violence screening device in the emergency care setting can identify abused, low-income, black women. The study is limited by the fact that universal screening was not conducted, the inclusion of only women who acknowledged some form of intimate partner violence, a reliance on retrospective self-reports, and the questionable generalizability of the findings to groups other than low-income black women.

[*Ann Emerg Med.* 2003;42:483-491.]

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0196-0644/2003/\$30.00 + 0
 doi:10.1067/mem.2003.397

INTRODUCTION

Intimate partner violence is a pattern of coercive behavior that includes physical, sexual, and psychologic abuse of one partner by the other partner in the context of a current or past intimate relationship. Data reveal that women accounted for 85% of the more than 790,000 victims of intimate partner violence in 1999, and intimate partners murdered more than 1,200 women in that same year.¹ Data are mixed about racial differences in rates of intimate partner violence, with some researchers finding comparable rates between groups,² others reporting higher rates among black than white females,³ and yet other researchers indicating that between-group differences are no longer present after social class is controlled for.⁴ A recent study conducted by the National Institute of Justice found that black women experience intimate partner violence at rates similar to those of white women, except for black women aged 20 to 24 years, who experience significantly higher rates of intimate partner violence.¹ There is also evidence that low income is related to intimate partner violence.^{3,5} Intimate partner violence has already been recognized as a major public health problem for all women, including black women, and warrants special attention among low-income black women, a potentially doubly at-risk population.⁶⁻⁹

Although intimate partner violence is associated with significant morbidity and mortality, the majority of abused women have never informed a health care provider that they have experienced coercive physical, sexual, or emotional abuse in their intimate relationships¹⁰ or do not seek medical care for injuries related to the abuse.^{11,12} The reasons victims fail to report their intimate partner violence status to their health care providers are multifaceted and often include fear, humiliation, social isolation, the perception that the health care professional will not care, and the belief that the health care system will not respond.¹³ Fear of reporting of intimate partner violence may be particularly prominent within the black community because of the black population's general distrust of the health care system, because black women often feel the need to pro-

tect their male partners because of the discrimination often exhibited by the legal system toward black men, and because of the value placed within the black community on privacy as it pertains to family matters.¹⁴⁻¹⁶ In a survey of 90 primarily black women, racism and discrimination because of poverty were perceived as significant barriers to seeking help.¹⁷

The emergency department (ED) has gained increased attention as a venue for identifying victims of intimate partner violence and initiating interventions to prevent further abuse.¹⁸⁻²² A commonly held belief is that 17% to 35% of women who present to EDs are there for the medical and psychologic sequelae of intimate partner violence.^{18,20-23} However, when screeners assess intimate partner violence in women in EDs, prevalence rates fall below the 17% to 35% range and range from 3% to 14% for acute episodes.^{18,20,24-26} Unfortunately, physicians in the ED detect few cases of intimate partner violence, which is particularly problematic because only a small percentage of women voluntarily share their abuse status in this setting.¹⁸

One of the major issues related to screening for intimate partner violence and associated prevalence rates concerns the measurement tools to be used. Feldhaus et al²⁵ developed a 3-item screening tool for detecting intimate partner violence in the ED, the Partner Violence Screen. Compared with more comprehensive measures of intimate partner violence, including the Index of Spouse Abuse²⁷ and the Conflict Tactics Scale,²⁸ the Partner Violence Screen correctly identified women in 64.5% and 71% of the cases, respectively. No information could be located on the sensitivity and specificity metrics of the Partner Violence Screen. Another screening measure, the Universal Violence Prevention Screening Protocol, was developed at George Washington University Medical Center and included 5 questions related to intimate partner violence for the previous 12 months and the past month.²¹ This measure was chosen as the screening tool for the current study because it is more comprehensive than the Partner Violence Screen.²⁵ The Universal Violence Prevention Screening Protocol was adapted and modified for the current study because an item related to

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emotional abuse was added to address the broader spectrum of intimate partner violence–related behaviors.

The overarching objective of this study was to ascertain whether an expanded version of the Universal Violence Prevention Screening Protocol can serve as a useful screening tool for intimate partner violence in the ED with low-income black women. More specifically, to evaluate the characteristics of the Universal Violence Prevention Screening Protocol, this study was designed for the following: (1) to determine whether low-income black women who scored above the clinical cut points on the physical subscale of the Index of Spouse Abuse would be more likely than those who scored below the cut point to respond in the affirmative to each of the screening questions on the Universal Violence Prevention Screening Protocol; (2) to ascertain whether low-income black women who scored above the clinical cut point on the nonphysical subscale of the Index of Spouse Abuse would be more likely to respond in the affirmative to each of the screening questions on the Universal Violence Prevention Screening Protocol than those who scored below the cut point; (3) to discover which items on the screening measure have the highest positive predictive value and sensitivity value for the 2 subscales of the Index of Spouse Abuse; and (4) to determine the number of affirmative responses on the Universal Violence Prevention Screening Protocol that are needed for the health care provider to have confidence that intimate partner violence has been adequately assessed. We do not address the specificity of the measure because we are more interested in capturing all potential intimate partner violence cases and less concerned about obtaining false positives that would be reflected in low specificity.

METHODS

The protocol was approved by the university and hospital's institutional review boards. Two hundred black women who reported a history of partner abuse during the previous year were recruited from the ED of a large, inner-city, Level I trauma hospital and interviewed, after providing written informed consent, as part of a

larger study. Because the original intent of the larger study was to compare abused black women who attempted suicide with abused black women who had never attempted suicide,²⁹ all of the participants in the sample were recent victims of intimate partner violence. In addition, half the women sought treatment in the ED after a suicide attempt (attempters; n=100) and the other half presented to the ED for medical care and had never made a suicide attempt (nonattempters, n=100). The attempters were recruited 24 hours a day, 7 days a week, in response to the principal investigator (NJK) receiving a page from the ED about a black female who had tried to harm herself and required medical attention. Thus, the attempters were recruited as they presented to the hospital. Hospital protocol requires that the research team be contacted for all women who attempt suicide, and thus it is unlikely that any cases were missed. Research team members rotated through the ED at various times of the day and days of the week for the duration of the study to recruit nonattempters. Universal screening was not used to secure study participants. Rather, all black women who attempted suicide were screened with the Universal Violence Prevention Screening Protocol, and a demographically comparable group of nonattempters who sought care from the same site at times comparable with those of the attempters were screened.

To be included in the study, the women needed to answer in the affirmative to at least 1 item on the Universal Violence Prevention Screening Protocol screening questionnaire when it was administered in the ED. These questions can be found in [Table 1](#). Question 5 on the Universal Violence Prevention Screening Protocol was added to the measure by our research team because the original Universal Violence Prevention Screening Protocol did not adequately assess the key construct of emotional abuse. The interval for the questions was the previous year. No psychometric data were available on the Universal Violence Prevention Screening Protocol despite its use in multiple EDs.

Women were excluded from participation if they (1) did not have an intimate partner within the previous year; (2) did not report experiences of physical or non-

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physical intimate partner violence within the previous year; (3) had a life-threatening medical condition; (4) had significant cognitive impairment; or (5) were unable to complete the protocol. Of the 141 attempters who were referred, 29% were excluded. Of the 320 women approached to participate in the nonattempters group, 69% were excluded.

Once in the study, the women completed a comprehensive battery of measures in a 2- to 3-hour face-to-face interview with trained and supervised research assistants. Because of the low literacy levels in the sample, all measures were read aloud to the participants. This battery of culturally competent measures included the Index of Spouse Abuse, a commonly used measure of intimate partner violence.^{27,30} The Index of Spouse Abuse, a 30-item scale, assessed the presence and severity of physical (Index of Spouse Abuse–physical) and nonphysical (Index of Spouse Abuse–nonphysical) abuse inflicted on a woman by her partner. Participants rated the degree of abuse on each item using a 5-point Likert-type scale. The scale has good internal consistency reliability ($\alpha=.92$) and discriminant, content, and construct validity.

The dependent variables for the study were the clinical cut points on the Index of Spouse Abuse–physical (cut point=10) and Index of Spouse Abuse–nonphysical

(cut point=25) subscales, with participants receiving a 0 if they scored below the cut point and a 1 if they scored above the cut point. The weighted cut points were those determined through psychometric analyses by the scale’s authors.²⁷ The predictor variables were responses to each of the 5 screener Universal Violence Prevention Screening Protocol items (0=no, 1=yes). More details on the methods and results of this study can be found in a series of papers by Kaslow et al²⁹ and Thompson et al.³¹

In terms of the data analytic strategy, all analyses were conducted using the SPSS statistical software (version 11.5; SPSS, Inc., Chicago, IL). We treated the data as bivariate categorical for all analyses so that we could compute sensitivity and positive predictive value data. Bivariate logistic regression was used to test the first 2 aims of determining whether women who scored above the clinical cut points on the physical and nonphysical subscales of the Index of Spouse Abuse also responded in the affirmative to the Universal Violence Prevention Screening Protocol screening questions. To discover which items on the screening measure have the highest positive predictive value and sensitivity value for the 2 subscales of the Index of Spouse Abuse (third specific aim), we computed the positive predictive value and sensitivity of the screener items to determine the proportion of women the screener identified as positive for intimate partner violence who actually were intimate partner violence victims (based on Index of Spouse Abuse responses; positive predictive value) and the proportion of women who were intimate partner violence victims who screened positively (sensitivity). Positive predictive value was computed by dividing the number of women identified as positive by the screener item who really were intimate partner violence victims (true positives) by the number of women the screener identified as positive, regardless of their Index of Spouse Abuse status (true+false positives). Sensitivity was computed by dividing the number of women identified as positive by the screener item who really were intimate partner violence victims (true positives) by the number of women who were intimate partner violence victims regardless of if the screener identified them as such (true positive+false negative). To determine the

Table 1.
Five screener questions for intimate partner violence.

| Question | Answer | |
|---|--------|-----|
| Have you been in a relationship with a partner in the past year? | No | Yes |
| If yes, within the past year has a partner: | | |
| (a) Slapped, kicked, pushed, choked, or punched you? | No | Yes |
| (b) Forced or coerced you to have sex? | No | Yes |
| (c) Threatened you with a knife or gun to scare or hurt you? | No | Yes |
| (d) Made you afraid that you could be physically hurt? | No | Yes |
| (e) Repeatedly used words, yelled, or screamed in a way that frightened you, threatened you, put you down, or made you feel rejected? | No | Yes |

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number of affirmative responses on the Universal Violence Prevention Screening Protocol that would optimally increase a health care provider's confidence that intimate partner violence was being assessed adequately (fourth specific aim), we formed 4 groups representing the number of positive responses on Universal Violence Prevention Screening Protocol risk according to dummy coding. The 4 groups included 1 positive response on the Universal Violence Prevention Screening Protocol (n=29), 2 positive responses on the Universal Violence Prevention Screening Protocol (n=37), 3 positive responses on the Universal Violence Prevention Screening Protocol (n=58), and 4 or 5 positive responses on the Universal Violence Prevention Screening Protocol (n=70). Categories for 4 and 5 Universal Violence Prevention Screening Protocol responses were combined because of small cell sizes when the Universal Violence Prevention Screening Protocol composite was crossed with the Index of Spouse Abuse scales. The group with only 1 positive response on the Universal Violence Prevention Screening Protocol served as the reference category to which the other groups were compared. Two parallel logistic regression models were tested, 1 for Index of Spouse Abuse-physical and 1 for Index of Spouse Abuse-nonphysical.

RESULTS

Women in both groups ranged in age from 18 to 59 years, with the mean age of the sample being 31.96 years. The sample was low income as evidenced by the fact that only 41% of the women were employed, only 27% of the women reported a monthly household income higher than \$1,000, only 56% graduated from high school, and half of the sample could read at the 9th-grade level or above. χ^2 Analyses on nominal data and analyses of variance on continuous data revealed no significant between-group differences on any of the demographic variables or on the severity of either physical or nonphysical intimate partner violence.³¹

With regard to the first specific aim, results revealed that compared with demographically similar women who scored below the Index of Spouse Abuse-physical

cut point, women who were above the cut point on the Index of Spouse Abuse-physical scale were 6 times more likely to answer affirmatively to Universal Violence Prevention Screening Protocol item 1 (physical), 5 times more likely to answer affirmatively to Universal Violence Prevention Screening Protocol item 2 (sexual), 3 times more likely to answer affirmatively to Universal Violence Prevention Screening Protocol item 3 (threat), 4 times more likely to answer affirmatively to Universal Violence Prevention Screening Protocol item 4 (afraid), and 3 times more likely to answer affirmatively to Universal Violence Prevention Screening Protocol item 5 (emotional).

Results from the logistic regression analyses to determine whether women who scored above the cut point on the Index of Spouse Abuse-nonphysical subscale were more likely than women who scored below the cut point to respond affirmatively to the Universal Violence Prevention Screening Protocol screening questions (Aim 2) are presented in Table 2. There were statistically significant differences between women scoring above and below the Index of Spouse Abuse-nonphysical abuse subscale on 4 of the 5 Universal Violence Prevention Screening Protocol screener items. Odds ratios ranged from 2 (item 4) to 6 (item 2).

Results from the sensitivity and positive predictive value analyses (Aim 3) are presented in Table 3. In terms of the positive predictive value of Universal Violence Prevention Screening Protocol items relative

Table 2. Logistic regression results for predicting Index of Spouse Abuse-physical and nonphysical abuse status.

| Item No. | Index of Spouse Abuse-Physical | | Index of Spouse Abuse-Nonphysical | |
|----------------|--------------------------------|------------|-----------------------------------|------------|
| | Crude Odds Ratio | 95% CI | Crude Odds Ratio | 95% CI |
| 1 (physical) | 6.06* | 2.92-12.61 | 3.38* | 1.61-7.08 |
| 2 (sexual) | 5.00* | 2.00-12.51 | 6.02* | 2.04-17.78 |
| 3 (threatened) | 3.22* | 1.41-7.38 | 3.19* | 1.26-8.08 |
| 4 (afraid) | 4.03* | 2.05-7.92 | 2.47* | 1.22-4.99 |
| 5 (emotional) | 3.27* | 1.08-9.89 | 2.51 | 0.80-7.89 |

*95% CIs that do not include 1 are statistically significant.

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to the Index of Spouse Abuse–physical scale, Universal Violence Prevention Screening Protocol items 2 and 3 had the highest positive predictive value, followed by Universal Violence Prevention Screening Protocol items 1 and 4, and then Universal Violence Prevention Screening Protocol item 5. Results for the positive predictive value of Universal Violence Prevention Screening Protocol items relative to the Index of Spouse Abuse–nonphysical scale paralleled those for the Index of Spouse Abuse–nonphysical scale. Again, Universal Violence Prevention Screening Protocol items 2 and 3 had the highest positive predictive value, followed by Universal Violence Prevention Screening Protocol item 1, Universal Violence Prevention Screening Protocol item 4, and Universal Violence Prevention Screening Protocol item 5.

In terms of sensitivity relative to the Index of Spouse Abuse–physical scale, Universal Violence Prevention Screening Protocol item 5 had the highest sensitivity, followed by Universal Violence Prevention Screening

Protocol item 1 and then Universal Violence Prevention Screening Protocol item 4. Universal Violence Prevention Screening Protocol items 2 and 3 had low sensitivity values. Results for the sensitivity of Universal Violence Prevention Screening Protocol items relative to the Index of Spouse Abuse–nonphysical scale paralleled those for the Index of Spouse Abuse–physical scale. Again, Universal Violence Prevention Screening Protocol item 5 had the highest sensitivity, followed by Universal Violence Prevention Screening Protocol item 1 and then Universal Violence Prevention Screening Protocol item 4; Universal Violence Prevention Screening Protocol items 2 and 3 had low sensitivity values.

Results for predicting a woman’s status on the Index of Spouse Abuse–physical scale (Aim 4) indicated that women who had 2 positive Universal Violence Prevention Screening Protocol responses were no more likely than women with only 1 positive Universal Violence Prevention Screening Protocol response to be above the cut point on the Index of Spouse Abuse–physical scale (adjusted odds ratio [AOR] 1.90; 95% confidence interval [CI] 0.69 to 5.20). Women with 3 positive Universal Violence Prevention Screening Protocol responses were almost 4 times more likely than the reference group to score in the Index of Spouse Abuse–physical clinical range (AOR 3.70; 95% CI 1.43 to 9.53), and women with 4 or 5 positive Universal Violence Prevention Screening Protocol responses were 28 times more likely than the reference group to score in the Index of Spouse Abuse–physical clinical range (AOR 28.89; 95% CI 7.81 to 99.54).

For predicting Index of Spouse Abuse–nonphysical status, results indicated that neither women with 2 (AOR 1.35; 95% CI 0.49 to 3.77) nor 3 (AOR 2.05; 95% CI 0.78 to 5.37) positive Universal Violence Prevention Screening Protocol responses were at increased risk for scoring in the clinical range on the Index of Spouse Abuse–nonphysical scale. However, women with 4 or 5 positive Universal Violence Prevention Screening Protocol responses were 13 times more likely than the reference group to score in the Index of Spouse Abuse–physical clinical range (AOR 13.15; 95% CI 3.65 to 47.38).

Table 3. Positive predictive value and sensitivity values for the Universal Violence Prevention Screening Protocol items relative to Index of Spouse Abuse–physical and Index of Spouse Abuse–nonphysical.

| Item No. | Index of Spouse Abuse–Physical | | | | Index of Spouse Abuse–Nonphysical | | | |
|-----------------------|--------------------------------|----|--------|----------------|-----------------------------------|----|--------|----------------|
| | Yes | No | PPV, % | Sensitivity, % | Yes | No | PPV, % | Sensitivity, % |
| 1 (physical) | | | | | | | | |
| Yes | 115 | 16 | 78 | 88 | 112 | 21 | 79 | 84 |
| No | 32 | 27 | | | 30 | 19 | | |
| 2 (sexual) | | | | | | | | |
| Yes | 47 | 83 | 89 | 36 | 46 | 86 | 92 | 35 |
| No | 6 | 53 | | | 4 | 45 | | |
| 3 (threatened) | | | | | | | | |
| Yes | 44 | 87 | 85 | 34 | 41 | 92 | 87 | 31 |
| No | 8 | 51 | | | 6 | 43 | | |
| 4 (afraid) | | | | | | | | |
| Yes | 107 | 24 | 78 | 82 | 104 | 29 | 78 | 78 |
| No | 31 | 28 | | | 29 | 20 | | |
| 5 (emotional) | | | | | | | | |
| Yes | 125 | 6 | 71 | 95 | 126 | 7 | 75 | 95 |
| No | 51 | 8 | | | 43 | 6 | | |

PPV, Positive predictive value.

DISCUSSION

Results from this study revealed that responses to each of the 5 screening items were significantly associated with scores on a more comprehensive and psychometrically sound measure of physical and nonphysical intimate partner violence. The data gleaned provided support for the construct validity of the Index of Spouse Abuse, a more comprehensive questionnaire than the Universal Violence Prevention Screening Protocol. In addition, our findings suggested that 1 physical and 1 sexual item on the Universal Violence Prevention Screening Protocol are the best predictors of physical intimate partner violence and also the best predictors of nonphysical intimate partner violence. Furthermore, the item assessing physical abuse also demonstrated adequate positive predictive value and sensitivity. Unfortunately, however, although the sexual abuse item had good positive predictive value, its sensitivity was quite low, suggesting that many intimate partner violence victims would not be screened as such according to responses to this item. Our findings also demonstrated that accurate prediction of physical and nonphysical abuse, respectively, requires affirmative responses to 4 or more Universal Violence Prevention Screening Protocol items, which suggests that the 3-item screens used by other investigators²⁵ may not sufficiently capture many intimate partner violence victims in the ED. The data also underscored the importance of emergency physicians' inquiring about nonphysical and physical intimate partner violence and making appropriate referrals for women who report either form of abuse. These results suggest that the 5-item measure used in this study can be relatively effective in determining which low-income black women have been abused, particularly because it is not realistic to administer a 30-item questionnaire in the ED. This finding is consistent with those of previous studies that have demonstrated the utility of brief screening measures in detecting intimate partner violence among patients in the ED.^{21,25}

The use of brief screening tools makes universal screening a more realistic option in EDs because time

constraints, level of patient injury severity, lack of adequate staffing, and inadequate staff education and training make more comprehensive assessments unfeasible and prohibitive. Universal screening for intimate partner violence has been recommended by the American Medical Association since 1992.³² In addition, according to the guidelines set forth by the Joint Commission for the Accreditation of Healthcare Organizations, EDs are required to use a protocol for identifying and treating intimate partner violence survivors. However, universal screening is infrequently done in practice even though protocols exist^{33,34} and mandates are in place. Screening for intimate partner violence in health care settings is not only a priority in the United States but also an international priority.³⁵ For example, in England, the Department of Health now recommends that health professionals consider "routine inquiry" of some or all women patients with a history of intimate partner violence.³⁶ However, there is considerable controversy among health care professionals about the value of screening, with some asserting that there is little evidence that screening leads to improved outcomes for women identified as abused and others arguing that health care professionals should not abandon the goal of identifying and supporting women experiencing intimate partner violence.^{37,38} As more effective interventions for screening and health promotion become available in the ED, the benefits of screening will increase.³⁹ Such screening and intervention programs will need to be done in conjunction with a community-wide response to intimate partner violence.^{13,21}

Our findings are considered with a number of study limitations. First, this was a convenience sample. Every woman who entered this health system was not screened for intimate partner violence, because when the study was conducted, there were neither the resources nor support in the hospital for universal screening. Second, our sample was limited to individuals who presented to the ED and who were willing to acknowledge a history of intimate partner violence. The possibility for selection or recall bias was high because patients had to self-identify as victims of intimate partner violence. Third, because the sample included only women with varying

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degrees of intimate partner violence, the Universal Violence Prevention Screening Protocol was validated only in a group of women who acknowledged experiencing intimate partner violence. To gain a more comprehensive understanding of the sensitivity of the screening protocol, research needs to include all women screened, not just those who screened positive to 1 or more questions. As a result, the findings are limited to women who present to the ED and are willing to acknowledge a history of intimate partner violence when queried. Fourth, the sample was limited to low-income black women, and thus the generalizability of the findings to individuals from other cultural and economic groups is unknown.

Our findings contribute to the extant literature by demonstrating that brief screening tools can detect intimate partner violence in low-income black women who present to EDs. The adapted screening measure used in this project allows for the detection of physical and nonphysical intimate partner violence. The latter is often overlooked by physicians in the ED because it does not present with physical sequelae, which is unfortunate because nonphysical intimate partner violence is related to higher frequencies of serious or chronic illness or visits to a physician; lower levels of self-esteem; more depression, anxiety, symptoms of posttraumatic stress disorder, and alcohol use; more fear of the partner; more frequent use of psychotherapeutic services and psychopharmacologic interventions; and more difficulties leaving the abusive partner because of lower levels of perceived power and control.⁴⁰⁻⁴²

Because low-income black women are not only a population at elevated risk for experiencing intimate partner violence but also a group of women who may be particularly reluctant to disclose their abuse status, it is imperative that EDs develop culturally competent interventions to overcome barriers to universal screening.^{13,43} In addition, EDs need to work collaboratively with mental health services, community organizations, and advocacy groups to ensure the safety of the women who present to the ED with abuse-related concerns.¹⁹ Further, academic emergency physicians, such as our

primary care colleagues, must engage in interdisciplinary research collaborations designed to develop, implement, and evaluate evidenced-based interventions to reduce rates of abuse and reabuse.³⁸ Until evidence-based interventions emerge in this field, emergency physicians should continue to follow clinical guidelines for the assessment and treatment of battered women.⁴⁴

Author contributions: SLH, NJK, and MPT contributed to writing of the manuscript. NJK, MPT, and EJ participated in the study's conception and design. NJK obtained research funding. NJK and EJ supervised the study. MPT managed and analyzed the data. SLH, NJK, and MPT edited multiple drafts of the manuscript and take responsibility for the paper as a whole.

Received for publication March 25, 2003. Revision received June 17, 2003. Accepted for publication June 30, 2003.

Presented as a poster at the Southeast Society for Academic Emergency Medicine conference, Jacksonville, FL, April 2002.

Supported by the Association of Schools of Public Health/Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry grant "Why does interpersonal violence lead to suicidality in women?"

Reprints not available from the authors.

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