Prevalence of Domestic Violence in an Inpatient Female Population

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Studies have evaluated the prevalence of domestic violence in populations of patients in emergency and primary care settings, but there are little data on patients admitted to hospitals. We undertook a study to evaluate the prevalence of domestic violence among female inpatients. Of 131 consecutive female patients between the ages of 18 and 60 admitted to a nontrauma urban teaching hospital asked to complete a self-administered survey about domestic violence, 101 completed the questionnaire. Twenty-six percent of the respondents reported being in an abusive relationship at one time. Two patients felt that domestic violence contributed to their current reason for admission. No respondents were asked about domestic violence by health care providers. Domestic violence is an uncommon but important precipitant to nontrauma hospital admissions. Physicians should query all female inpatients about domestic assault.

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Domestic violence accounts for one third of all intentional assaults against women, and it is a significant risk factor for suicide, substance abuse, and chronic somatic disorders.^{1,2} Studies of patients in outpatient and emergency settings have shown prevalence rates from 8% to 54% and incidence rates of 9% to 14%.³⁻⁸ Little is known about the degree to which domestic violence contributes to inpatient admissions of women. This study investigates domestic violence in female inpatients and its relation to inpatient admissions.

METHODS

A 32-item questionnaire was developed to evaluate the prevalence and incidence of domestic violence in women admitted to an urban, nontrauma hospital with 277 beds. The questionnaire included nine questions about demographic information and seven questions about violence within the individual's neighborhood. One

question asked about violence within intimate relationships: "At any time, has a husband or partner ever hit you, kicked you, or physically hurt you?" A woman responding affirmatively to this question was identified as having experienced domestic violence, and these women were asked another 14 questions about the violence they had experienced as well as medical treatment they had received for injuries resulting from the violence.

Female patients admitted consecutively from October through December 1994 were evaluated for entry into the study. Patients were excluded from the study if they could not speak English, or were too ill to cooperate. Women under age 18 or over age 60 were excluded because the mandated reporting requirements for minors and elders would potentially reduce the response rate for all age groups. Consent was obtained from patients in their hospital rooms with no friends or family present. The questionnaire was either self-administered (77%) or verbally administered by one of the investigators (23%) depending on patient preference. Each patient's medical record was abstracted for demographic information and for whether any nurse or physician documented screening for domestic violence in the patient's admitting notes.

Proportions were compared using χ^2 analysis, with 95% confidence intervals (CI) included.

RESULTS

During the study period, 195 women between 18 and 60 years of age were admitted; 64 women were excluded because of admission to an intensive care unit or intubation ($n = 42$), altered mental status ($n = 11$), inability to understand English ($n = 9$), or isolation due to stem cell transplant ($n = 2$). Of the remaining 131 eligible patients, 101 (77%) completed the questionnaire, 20 (15%) refused, and 10 (8%) were discharged before being approached with the questionnaire.

The mean age of the respondents was 43 years. Seventy-one percent were white, 26% were African American, 3% were Hispanic, and 1% were Asian. Eighty percent had a high school education or less. Sixty-eight percent had private insurance, 21% had Medicaid, 9% had Medicare, and 1% were uninsured. Sixty-six percent currently had a husband or partner. Five percent were admitted because of trauma. Forty-seven percent were on the medical service, 45% were on the surgical service, 5% were on the gynecology service, and 1% were on the psychiatry service. Patients who refused to participate or were discharged prior to recruitment did not differ on age, ethnicity, insur-

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ance status, or service of admission (p values all $>.05$). Only one nonresponder was admitted because of trauma.

Twenty-six (26%; 95% CI 17%, 33%) of the respondents stated that they had been abused by a husband or partner at some time. Nineteen of these 26 women (73%; 95% CI 58%, 86%) reported having incurred contusions, 3 (12%; 95% CI 0%, 24%) reported stabbings, 3 (12%; 95% CI 0%–24%) reporting fractures, and 4 (30%; 95% CI 12%, 48%) reported forced sexual contact. Of the 26 respondents reporting abuse, 5 (19%) stated that abuse had occurred within the previous year. Those reporting abuse did not differ from those reporting no abuse (Table 1). Reported rates of abuse were lower, however, with verbal questioning (2 of 21, 10%), than with self-administered questioning (24 of 80, 30%), but this difference was not statistically significant.

Eight (31%; 95% CI 13%, 49%) sought medical care at some point because of the assaults. Six of the eight women who sought medical care in the past (75%; 95% CI 58%, 92%) stated that a health care professional had asked how they had been injured. Four (16%; 95% CI 2%, 30%) of the abused respondents, or 4% of total respondents, were admitted to the hospital at some time because of an abusive relationship. Two subjects reported abuse as a reason for their current admission. Chart review of the current admission indicated that no health care professionals had asked about domestic violence, but one patient had volunteered information about a current abusive situation.

DISCUSSION

In a nontrauma, urban, referral teaching hospital, we found that the lifetime prevalence of domestic violence in female inpatients was substantial at 26%, and the prevalence of domestic violence within the previous year was

also high at 5%. The finding of previous admission for abuse of 16% of abused patients and 4% of the total population suggests that domestic violence is not an unimportant precipitant to admission.

The study population was heterogeneous demographically. The prevalence of domestic violence may have been underestimated in this study, however, as our population did not include obstetric admissions, and had few admissions because of trauma, or to the psychiatric service. Rates of abuse may be higher in pregnant women.⁹ Also, the presence of higher rates of admissions for trauma most likely would have increased prevalence rates, as would psychiatric admissions, given the strong association of depression and suicidal behavior with prior abuse.¹⁰ Violence in intimate relationships is a problem for both teens and elders; these groups were not studied.^{2,11} Finally, it is possible that abused women were discharged more quickly or refused participation at higher rates, thereby underestimating our findings. Comparative demographic data between participants and those who refused or were discharged prior to recruitment, however, did not reveal significant differences.

A single question, similar to that used in this study, has been used in other studies,^{8,12} to identify prevalence rates of 12% and 18.9%. Given the severity of injuries, including fractures and stabbings, it seems unlikely that we have overestimated rates of domestic violence. The single question, in fact, may underestimate violence, particularly when the abusive relationship is characterized more by serious threats of assault than actual assault.

Previous studies from other settings have reported varying rates^{6–9}: studies using trained, in-person interviews have reported prevalence from 10% to 34%; studies using nonanonymous self-administered questionnaires have reported rates from 9% to 12%^{8,9}; and studies reporting anonymous surveys have reported prevalence rates as high as 34%.⁷ Several other studies provide one more example of how the method of questioning and the population source affect measured rates. Abbott and colleagues reported incidence and prevalence rates of 11.7% and 54.2%, respectively, in their emergency department setting,³ compared with previous reports of up to 30% incidence rates.^{4–5} The differences in findings, in part, were a result of the latter studies employing broader, non-trauma samples, and determining presence of domestic violence using more specific questions about assaults. Despite the wide range of findings, however, all data suggest that domestic violence is a common precipitant to health care utilization.^{3,13}

Although one study has shown that patients are willing to volunteer information about domestic violence when asked by their providers,⁸ providers have been reluctant to do so in a variety of settings, especially in the absence of direct evidence of traumatic injury.¹⁴ This appears to be true in the inpatient setting as well. Standardized intake forms that include questions about violence,⁸ as well as resources available to providers and patients when vio-

Table 1. Characteristics of Women Admitted to Hospital Reporting Previous Domestic Violence*

Patient Characteristics	Domestic Violence Reported (n = 26)	Domestic Violence Not Reported (n = 75)
Age, mean years $\pm$ SD	43 $\pm$ 11	43 $\pm$ 12
White, %	72	68
Private insurance, %	63	72
Less than 12 years of education, %	24	19
Admitted with trauma, %	12	3
Service of admission, %		
Medical	44	48
Surgical	36	44
Gynecologic	16	7
Psychiatric	4	1

* p values all $>.05$.

lence is reported, are needed in order for inquiry about domestic violence to become more routine.

Domestic violence is an uncommon but important problem for female inpatients. Although we currently lack information about the cost to the health care system incurred by domestic violence and by outcome studies to document the effect of medical intervention, the frequency of the problem suggests that physicians should incorporate questions about domestic violence into the routine history of all female patients, identify resources to assist women who report domestic violence, and become knowledgeable about potential local reporting requirements.^{2,15} These findings suggest the need for a full-scale study to examine the effect of domestic violence on hospital admission rates and related health care costs, and to study the outcome of strategies for health care intervention to assist domestic violence victims.

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