DOMESTIC VIOLENCE SCREENING IN THE EMERGENCY DEPARTMENT OF AN URBAN HOSPITAL

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Victims of domestic violence appeal to the health care system through emergency room visits for injuries related to violent episodes or for proxy care for other complaints. Screening for persons who are at high risk for violence or who are victims of violence has not been performed in emergency rooms when patients present for care, nor have all health care professionals been educated in the ways to ask the questions and assess the patients. The questions for identifying domestic violence victims have not been routinely asked on admission to the emergency department, and documentation of this information is not consistent. The purpose of this survey study was to identify the numbers and characteristics of adult victims of domestic violence who present to the emergency department of an urban community medical center during a 10-day period to estimate the extent of the domestic violence in the community served by the acute care facility. Findings demonstrated that emergency department staff had difficulty asking the questions, and the responsibility for the screening was relegated to the triage nurse. Questions were not asked of each adult presenting to the emergency department, and health care staff identified various reasons for their resistance. Although only 12% of persons were screened and only during the hours of 0700 through 1900, positive screens for physical abuse were found in 24.6% ($n = 20$) of the 81 women screened. Routine screening of all patients and sensitivity to the needs of those who have experienced domestic violence are integral to prevention and safety of those who are victimized. Injury prevention programs can then be instituted in the community with the collaborative efforts of local citizen groups and the health care facility. (*J Natl Med Assoc.* 2002;94: 484–491.)

Key words: emergency department ♦ screening ♦ domestic violence

Domestic violence shatters the family unit while profoundly affecting the health, well-being, and lives of the members of that family. The cyclic nature of such violence, with abused children potentially becoming teen and adult abusers, perpetuates violence and intensifies the need for intervention at an early stage, with prevention as the hallmark. When an individual enters the health care system for emergency care or clinic visit, nurses, physicians, and other professional health care providers become the key persons with the potential to identify vic-

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tims, interrupt the cycle, and begin intervention.[1-3]

Victims appeal to the health care system through emergency room visits for injuries related to violent episodes or for proxy care for other complaints. In fact, health care providers may see more results of violence in their patient contacts than law enforcement agencies.[4-6] Screening for persons who are at high risk for violence or who are victims of violence has not been done in emergency rooms when patients present for care, nor have all health care professionals been educated in the ways to ask the questions and assess the patients. The questions for identifying domestic violence have not been included on admission sheets for the emergency department, and documentation of this information is not consistent.

The purpose of this study was to identify the numbers and characteristics of adult victims of domestic violence who present to the emergency department of an urban medical center in the Philadelphia area during a 10-day period in late winter, 1996. Data were recorded to estimate the extent of the domestic violence in the community served by the acute care facility. The research question addressed in this study is: "What is the prevalence of domestic violence victims presenting to the emergency department of a North Philadelphia acute care facility during a 1-week time period?"

The Albert Einstein Medical Center Emergency Department is located in the "Logan" section of North Philadelphia and is a level 1 regional trauma resource center. This emergency department functions as a base medical command facility for the Fire/Rescue Service of the Philadelphia Fire Department. In addition to its clinical responsibilities and activities, the emergency department is the home for a combination DO/MD Emergency Medicine Residency Program. The department supports the training of 40 emergency medicine residents, 10 to 15 nurse practitioner and physician assistant students, and 30 to 35 off-service interns. This emergency department is also a clinical training site for medical students from two schools of medicine in the city, as well as an elective rotation for senior medical students from throughout the country.

The yearly adult census in the emergency department (February 1995 to February 1996) was 39,422 patients over the age of 18 years, with 21,151 females and 18,271 males. The pediatric population served during that period totaled more than 18,700, with the majority of children (14,069) under 13 years of age. The community served is multi-cultural with minorities that include Asian, Hispanic, and African-American families.

Although children were not participants in this initial study, the researchers recognize that children are the unwilling viewers, as well as recipients, of domestic violence in the family. The children do indeed suffer consequences, including post-traumatic stress syndrome, and are vulnerable to injury and death during episodes of domestic violence.[7,8] Further programs are in the planning stages and will be conducted to assess this special concern and implement prevention programs for youths.

BACKGROUND AND SIGNIFICANCE

Domestic violence knows no cultural, racial, socioeconomic, religious, or educational barriers. All family members have the potential for becoming victims, with infants, children, women, and the elderly being the most vulnerable. Women have an even greater risk during times of separation, divorce, financial constraints, or during pregnancy.[9] *The Diagnosis and Treatment Guidelines on Domestic Violence*[10] identify that battered women may account for 22% to 30% of women seeking care in the emergency department, and most of those are seen by medical and nontrauma services. Recent figures estimate that women receive 95% of the serious injuries that occur during domestic violence episodes; however, statistics for men's injuries and their severity are unknown.[4]

The forms of physical violence vary in severity and include pushing, shoving, punching, kicking, restraining or tying down, assaulting

with a weapon, refusing to help during injury or illness, and placing a family member in a dangerous situation or place. Emotional or psychological abuse may be seen as threats, intimidation, extreme jealousy, degradation, and false accusations. Forms of sexual abuse are often the most difficult to assess because forced sexual acts or sexual degradation may not be identified by the adult female and, in some cases, the adult male client in heterosexual or homosexual relationships.[2] Domestic violence also tends to escalate throughout a threatening relationship. Clearly, health care professionals need to assess all female patients/clients for domestic abuse.[1,8,10,11]

Because of the high prevalence of domestic violence, particularly episodes involving women and children, routine screening is advised by health care personnel in the emergency room. Health care professionals in this area must be educated in the ways to ask the questions, identify those at risk, assess the need for intervention, and initiate referrals as necessary.[1] Domestic violence is occurring at an alarming rate, is under-reported, and often is not recognized by physicians and nurses.[12] The practice of asking the questions must be part of the routine assessment, and the follow-up must be individualized so as not to compromise safety.

The danger for victims in identifying the cause of the injury leads to the more common or socially acceptable complaints of accidents or falls as the reasons for bruises, fractures, lacerations, and/or blunt trauma. As soon as the incident is acknowledged, the threat is clear: naming the cause of the violence or the perpetrator increases the potential for more violence in quantity and/or severity upon return to the home setting.[3]

Treating the domestic violence issue as a serious public health concern allows health care professionals access into the identification and intervention process.[6] Episodes of violence among partners and family members result in intentional injuries, a costly result to the family, to the community, and to the citizens of this country. The cost is physical (increased medical care needs, disability, and potentially death), emotional (psychological health negatively affected), economic (health care costs escalate and incomes are taxed beyond their capabilities), and sociological (safety, trust, and relationships within groups are challenged, if not devastated). The criminal justice and legal systems have embarked on problem solving campaigns, yet violence continues.[6] The public health concern must also be addressed. Intervention must be made in the domestic violence cycle. Victims must be identified, violence must be acknowledged as unacceptable, nonjudgmental support needs must be offered, and referrals for safety, education, and therapy must be instituted.[6,8,13,14]

METHODS

This prospective study was epidemiologic in design, with a target population of all adult patients, both male and female, who presented to the emergency department for care during a 10-day period of time. Institutional Review Board approval was obtained prior to initiation of the study. A one page domestic violence screening form was added to the history and physical form that was completed upon admission. Patients were told that the questions were part of an injury prevention study being done with all adults who came to the emergency department for care during that time period. Informed consent was obtained from each patient prior to the interview after the health care professional read aloud the description of the study at the top of the data collection instrument. If the patient was conscious and gave verbal consent, he or she was asked to initial the data collection form prior to answering the questions.

Each subject was interviewed alone in a private area and was told that participation was voluntary. Confidentiality and anonymity were maintained for the study. Subjects were free to withdraw from participation during the interview. Referrals to Social Services were offered

to those who had a positive screening, as would be the protocol for any emergency department patient who identified abuse or violence in their homes.

Medical residents, medical students, nurse practitioner students, registered nurses, and physician assistant students (subsequently referred to as the health care professionals) in the emergency department were instructed by one of the researchers about the data collection prior to the implementation of the study. Included in the instructions for all data collectors was an instructional video explaining how to establish rapport with the patients and how to ask violence screening questions.[9] As the heath care professional completed the history and physical, the top portion of the survey was also completed recording the demographic data from the chart and the preprinted self-adhesive chart label was placed in the upper left corner. Names were blacked out from the labels placed on the survey instrument upon completion of the data collection, but code numbers were assigned for ID numbers.

The health care professional asked five questions, two with completion answers, that addressed the occurrence of threatening or abusive behavior during the previous year. Four of the questions were derived from the Abuse Assessment Screen utilized by Campbell and colleagues[9] in their intrapartum screening instrument. The instrument also contained one question related to safety with the persons who are in the home. The five items are representative of questions suggested by domestic violence intervention teams as critical to the screening of patients who may be victims of domestic violence or potentially at risk to become victims.[2,6,10,15] Content validity for the instrument has been derived from the literature and from a panel of experts in public health and social work who participated in preliminary meetings. Reliability has not been established for this instrument. However, the questions are similar or, in some cases, identical to those questions that have been adopted for use in emergency departments throughout the country.

Table 1. Sex, (Age ≥ 18)

	Patients ≥18 y/o Presenting to ED	Number of Patients Survey
TOTALS	891	106
Females	469	81
Males	422	25

The assessment screening was positive for domestic violence if a *negative* response was given for question 1 or *positive* responses were given to any of the remaining questions. If patients answered "yes" to question 3 about being physically hurt, they were asked to identify the relationship and how many times. If patients answered "yes" to question 4, which addressed forced sexual activities, they were asked to identify the relationship of that person and how many times. The emergency room protocol for referral and intervention was followed for those who identified risk for victimization in their homes. The completed surveys were separated from the charts after data were recorded.

Sample

All patients, both male and female, who presented to the emergency department during the study period, were potential subjects. Reported statistics showed that 891 subjects were seen in the emergency department who met the criteria of being 18 years of age or older, understood English, and were alert and responsive. Only 106 persons were asked to participate in the question/answer survey by the triage nurses. Those patients who presented with ambulance escort from a known domestic violence episode or who were admitted with a chief complaint of spousal or partner abuse were not documented by the data collectors (Table 1.)

Data Collection

Although all health care professionals in the emergency department were trained for data

collection, only triage nurses on day shifts actually participated in the screening. The triage nurses explained to patients that a study was being done, assured the patients of confidentiality, and asked the questions with each patient who met the inclusion criteria during their triage time. The nurses then recorded data on the surveys and identified their own roles in the emergency department. The forms had individual code numbers, day and date of care, presenting complaint, admission diagnosis, pregnancy status (if female), and demographic data categories of age, gender, race/ethnicity, and home zip code for public health census data information. The data collectors included patient comments and observational data on the comment section after the five questions (see Appendix A).

The form was separated from the patient chart upon completion of the screening and was placed in a collection box in a protected area/office in the emergency department. All data forms were collected by the physician investigator or another member of the research team on a daily basis and locked in a file cabinet until data were analyzed. The study was conducted for 10 consecutive days on a 24-hour basis, yet review of the data revealed that no surveys were administered by any health care professional after 1900 or before 0700 throughout the study. At the completion of 10 days, all data forms were removed from the file cabinet by the researchers and entered into data analysis. Those patients who were referred for advocacy and/or social services care or who refused participation were not individually identified in the data analysis.

Data Analysis

Demographic data are presented in descriptive format and percentages are identified in Tables 1 to 7.

These data were also explored for commonalties by age, gender, pregnancy status if female, and race/ethnicity. The responses to the questions were tabulated and patterns identified. Eighty-one females and 25 males were screened during the study period (Tables 1 and 2). Of the women, 24.6% identified evidence of physical abuse and eight reported sexual abuse (Table 4.). Sadly, of the eight females who reported positive screens for sexual abuse, five also reported physical abuse, while three did not report sexual abuse as physical abuse. Surprisingly, no pregnant subjects screened positive for domestic violence. In this study, 23 women of 106 subjects accounted for 21.6% of those at risk for any violence. When calculated against the total women surveyed, 23 of 81 women (28.3%) had positive domestic violence screens. With females having the greatest risk of being physically and sexually abused by their 'boyfriends' (> 69%) (Table 7).

No male subjects of any age identified positive responses for physical or sexual abuse. However, 7 (28%) of the 25 males surveyed identified positive risks of safety 10 times (Table 4.). Of all 106 subjects screened, 30 (23 females and 7 males) or 28.0% of the total subjects reflected the threat for violence, the lack of safety in their home, or the experienc-

Table 2. Sex and Race

TOTALS (N = 106)	Black 94 (88.6%)	White 6 (5.6%)	Hispanic 4 (3.7%)	Other 2 (1.8%)
Females (81)	76	1	2	2
Males (25)	18	5	2	0

Table 3. Survey Questions (See Appendix A)

Question #1:	Do you feel *safe* with the people in your home?
Question #2:	Have you felt *controlled or forced* to do something you did not want to do by someone close or immediate to you?
Question #3:	Within the past year, have been *hit, slapped, kicked, pushed, or otherwise physically hurt* by someone in your home?
Question #4:	Within the past year, has anyone *forced* you to have unwanted *sexual activity*?
Question #5:	Are you afraid of your partner, or anyone who may be in your home?

Table 4. Survey Responses

	Question #1 "NO"	Question #2 "YES"	Question #3 "YES"	Question #4 "YES"	Question #5 "YES"
N = 106	8 (7.5%)	17 (16.0%)	20 (18.8%)	8 (7.5%)	8 (7.5%)
Female (= 81)	4 (4.9%)	13 (16.0%)	20 (24.6%)[b]	8 (9.8%)[a]	6 (7.4%)
Male (= 25)	4 (16.0%)	4 (16.0%)	0[c]	0[c]	2 (2.4%)

[a]Of the eight "yes" respondents to Question #4 (on sexual abuse), five were also part of the twenty who answered "yes" to Question #3 (on physical abuse). Three however did not indicate that their sexual abuse also was physical abuse.
[b]Twenty female patients acknowledged experiencing physical abuse over the past year. This was a 24.6% incidence rate for the females surveyed.
[c]We identified no males who acknowledged being victims to either physical or sexual abuse during the year previous to the survey.

ing of the actual abuse. The restricted sample limited the ability to calculate statistics on prevalence in this community, yet these results suggest that this emergency department reflects domestic violence percentages which agree with the national aggregate statistics of a range of 22% to 30%.

With the restricted participation of health care professionals and the availability of data from day shift only, the findings are not representative of a prevalence study. Only triage nurses completed the surveys with patients, and not all triage nurses participated. Resistance to asking the questions on the part of the health care staff in the emergency department was noted. Follow-up interviews with the emergency department staff revealed the concerns and rationales for lack of participation. When questioned by the researchers, emergency department staff replied "this was not my responsibility," "I'm too busy doing what I am supposed to do," "I didn't know I was supposed to do this," "I didn't know where the forms were kept," and other similar comments. Some staff indicated fear of retribution from the patient's family members if they addressed these sensitive concerns, whereas others clearly were uncomfortable with asking the questions.

Although the emergency department staff supported the study in theory, resistance or inability to conduct the screening was noted in practice. Preparation with films and written guides were ineffective in breaking through the barriers to asking the questions. Discomfort with questioning and uneasiness with the potential answers may have negatively influenced some of the nurses, physician assistants, and physicians. These findings supported those of a recent study in Australian emergency and accident settings. Bates and Brown[16] examined nurse and physician attitudes, management, and knowledge of domestic violence. Their study noted that education and training about the issue are generally minimal in health care professional programs. The health care staff did not have the skills available to use for screening, treatment, or referral of patients who entered the system. Guidelines and protocols for care must be developed, disseminated, and implemented to improve the quality of life

Table 5. Physical Abuse

Physical Abuse (N = 20)	Black	White	Hispanic	Other
Female (= 20)	19	0	0	1
Male (= 0)	0	0	0	0

Table 6. Sexual Abuse

Sexual Abuse (N = 8)	Black	White	Hispanic	Other
Female (= 8)	7	1	0	0
Male (= 0)	0	0	0	0

Table 7. Relationships to Victim

Relationship[a]	Husbands	Boy Friends	Relatives	Other
Physical Abuse	3	11	4	0
Sexual Abuse	3	5	0	0

[a]Not all respondents indicated what was the relationship of their assailant.

for those actual and potential victims of violence in the home.

SUMMARY

This study provided initial data for prevalence of domestic violence in this urban medical center and served as a pilot study for the use of domestic violence questions with all clients on every emergency visit. The prevalence of domestic violence from this study in a multicultural community was alarmingly higher than published statistics. The public health problem is significant. In addition, this study demonstrated the difficulty in accessing cooperation by health care professionals to include questions about domestic violence in their intake history from each patient presenting to the emergency department.

Health care professionals, especially in the emergency department, must be comfortable with and skilled in asking the questions about domestic violence. They must acknowledge that routine screening for the underlying cause of symptoms and injuries in victimized adult and children is essential for breaking the cycle of domestic violence and abuse.[2] Emergency departments provide care for those patients who have both visible and invisible evidence of battering in the home. Routine screening of all patients and sensitivity to the needs of those who have experienced domestic violence are integral to prevention and safety of those who are victimized. Injury prevention programs can be instituted in the community with the collaborative efforts of local citizen groups and the health care facility.

Continuing education of health care providers is necessary to interrupt the cycle of domestic violence and to have a positive impact on the health status of all family members in the area served by this facility. The consequences of not accomplishing this study are neglect of those most vulnerable in our communities, increased injuries and potential deaths of those victimized by domestic violence, and failure to meet the health needs of patients who have approached the safety net of the health care facility.

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Appendix A

Injury Screening Project in the ED

_____ ID CODE # _____

Sticker

Consent Form

The questions on this form are part of an injury screening study being done with all adults who come to the Emergency Department for any type of care during a one-week time period. Your participation in this study is voluntary. You will receive your care whether or not you choose to participate. Your initials on this form and your answering of the questions gives your consent. Your name will not be used in the report of the study. You will be given referral information and services if you have such need. Thank you for your participation.

Please circle: Conscious/Unconscious **If conscious, permission for participation: _____initials**

Day of week: _____ Time of Arrival: _____am/pm Home Zipcode: _____ Shift: D / E / N

Chief complaint on admission to the ED or hospital _____

Admitting diagnosis: _____

If female: Pregnant: Yes /No /not applicable

Injury Assessment Screen

1. Do you feel safe with the people in your home?
   ____ **NO**, not safe ____ YES, safe

2. Have you felt controlled or forced to do something you don't want to do by someone important to you?
   ____**YES** ____ NO

3. Within the past year, have you been hit, slapped, kicked, pushed, or otherwise physically hurt by someone in your home?
   ____**YES** ____ NO

If **YES**, what is the relationship of that person to you? _____ Number of times _____

4. Within the last year, has anyone forced you to have unwanted sexual activity?
   ____**YES** ____ NO

If **YES**, what is the relationship of that person to you? _____ Number of times _____

5. Are you afraid of your partner or any one who may be in your home?
   ____ **YES** ____ NO

PATIENT COMMENTS:

DATA COLLECTOR: RESIDENT ___ MED STU___ NP STU___ PA STU___RN ___Other___

COMMENTS (MAY USE BACK):