Role of Victims’ Services in Improving Intimate Partner Violence Screening by Trained Maternal and Child Health-Care Providers—Boston, Massachusetts, 1994-1995

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1 table omitted

FROM 1992 TO 1996, APPROXIMATELY 1 million incidents of nonfatal intimate partner violence (IPV) occurred each year in the United States; 85% of victims were women.1 In 1989, pediatric research found a concurrence of victimization of mothers and their children and supported a recommendation that maternal and child health-care providers (HCPs) pursue training and advocate for increased access to services to promote the safety and well-being of mothers and their children.2 From 1992 to 1997, the Pediatric Family Violence Awareness Project (PFVAP), a training project for maternal and child HCPs, promoted prevention of and intervention for IPV in Massachusetts.3 In 1994, PFVAP conducted a pilot evaluation in two urban community health centers to determine whether HCPs trained to conduct IPV assessment would increase their screening rates of women at risk for IPV if an on-site referral service for victims was available. This report summarizes the results of the pilot project, which indicate that IPV screening rates did not increase after implementing on-site victim services.

Screening rates were assessed for 14 HCPs at two community health centers (centers A and B) in a low-income, racially mixed, urban community in the Boston area. Because the two centers were dissimilar in patient demographics and other characteristics, one could not be compared with the other. Therefore, a phased intervention design was used; IPV screening was measured during two 10-week periods (phases 1 and 2). Phase 1 followed a 2-hour group training session to teach HCPs to implement a brief screening protocol† of female patients and mothers of pediatric patients aged 0-12 years during routine visits using a recommended screening schedule.‡ Phase 2 followed implementation of on-site victim services that offered weekly support groups separately for battered women and children using the identical protocol as in Phase 1. Between the end of phase 1 and the beginning of phase 2, there was a 3-month period.

To document screening in each phase, HCPs recorded during each visit with each female adult patient and each mother of a pediatric patient whether (1) the patient received IPV screening and who performed the screening; (2) any family members were present during the patient visit; and (3) a staff interpreter was present during the visit. Date of birth, race/ethnicity, marital status, date and type of visit, and diagnoses were gathered from the patients’ files. A physician subsequently coded diagnoses into the following categories: routine health-care maintenance, prenatal care, acute/sick, chronic problem, injury, psychosocial, human immunodeficiency virus/sexually transmitted diseases (HIV/STD), and pain.

For both phases, an observed screening rate was calculated for each HCP and defined as the proportion of the HCPs’ patients seen and screened by the HCP during that period. Although the PFVAP protocol recommended screening some patients (pregnant women and mothers of children aged <2 years) more than once a year, patients who were screened at least once during phase 1 were considered “previously screened” and were not included in calculating phase 2 screening rates.

The combined data from both health centers and both phases (after exclusions) comprised 14 HCPs, 642 patients, and 1352 patient visits. Each patient’s final screening status (ever or never screened) was based on combined data from each phase and was evaluated relative to patient demographics and visit characteristics by two separate logistic regression models.

Eleven (79%) of 14 HCPs did not demonstrate increased screening during phase 2, following on-site services implementation. Unadjusted combined screening rates for both health centers decreased significantly from phase 1 (33% patients screened) to phase 2 (23%) (p<0.03). For each phase, health center A had approximately twice the documented screening rate of health center B. On average, screening rates declined 7.4% (standard deviation [SD] = 15.7 percentage points) at health center A and 14.1% (SD = 17.5 percentage points) at health center B.

At both health centers, unadjusted individual HCP screening rates varied during both phases from 1.8% to 92.8% during phase 1 and from 0 to 94.9% during phase 2. The degree of change in HCP screening rates also varied widely. Individual HCP screening rates of decline ranged from 1.8 to 46.6 percentage points. For the three HCPs who demonstrated increases between phase 1 and phase 2, the increase ranged from 0.6 to 24.7 percentage points.

Analyses of visit, HCP, and patient characteristics controlled for health center and used combined rates from both phases to improve the stability of estimates. Several aspects of patient visits predicted the likelihood of screening. Patients were screened more often during routine visits (p<0.01). However, screening was 23 times more likely dur-
have occurred over the course of the study. Finally, phase 2 was delayed to involve the community health centers’ administrative and clinical staff in the process of selecting IPV advocates and to address other administrative details of service development. Because data were not collected on the screening rates of HCPs immediately before phase 2, the effects of the on-site victims’ services on individual HCPs cannot be determined fully.

Maternal and child HCPs see many battered women and their children in various settings, but rarely ask about family violence and IPV.6,8 Practitioners need additional training and support to assess and manage complex cases of family violence longitudinally.10 Further research to explore effective IPV interventions in healthcare settings is needed.

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*Suggested questions were (1) “I ask all my patients, do you feel safe in your home?”; (2) “Is anyone hurting you, harassing you, or making you feel afraid?”; and (3) “At any time, has your partner ever pushed, hit, or kicked you?”
†The recommended schedule consisted of screening (1) adult and adolescent females during routine gynecologic, internal or family medicine, or pediatric visits annually; (2) mothers of pediatric patients aged 2-12 years annually; (3) mothers of pediatric patients aged 0-2 years twice annually; and (4) patients during prenatal-care visits once per trimester.
indirectly related death was defined as one that did not result from physical contact with a storm product, but would not have happened if the storm had not occurred.

Thirty-one deaths were considered directly or indirectly related to the storm (29 directly and two indirectly). Deaths occurred in 24 separate incidents in nine Texas counties. Thirty of the victims were Texas residents, and one was a Louisiana resident visiting Texas. Decedents ranged in age from 2 months to 83 years (median: 38 years); 20 decedents were males.

Cause of death for the 31 decedents included drowning (24 [77%]), cardiac origin (three [10%]), multiple trauma (three [10%]), and hypothermia (one [3%]). Of the 29 deaths directly related to the storm, 24 were caused by drowning. Three persons died of multiple trauma, one of hypothermia after submersion in water, and one of cardiac arrhythmia induced after he became trapped in a water crossing (i.e., a road traversing a low-lying area that is subject to flooding). Two died indirectly from the storm: one man died while awaiting rescue by emergency personnel who were unable to reach his residence because of flooding, and a second man died in his truck in a water crossing on his property.

Twenty-two of the 29 cases with known circumstances occurred because a vehicle was driven into high water. These deaths occurred in 16 separate incidents. Four of these incidents resulted in multiple deaths. Of the 16 water-crossing incidents, 11 (69%) occurred at locations known to reporting authorities to have a history of flooding. Of the 16 water-crossing incidents, 10 (63%) involved trucks and/or sport-utility vehicles. Of the other deaths with known circumstances, three were in persons who drowned in their homes and one was in a person who drowned near a boat dock on his property. Two persons died from tornado-related trauma, and one man died of a heart attack.

Most (14 [45%]) deaths occurred on the second day of the storm. No deaths were reported after October 19, though rain and flooding persisted through October 31. Time of the incident leading to death was known for 21 of the 29 cases with known circumstances; 19 deaths occurred within a 24-hour period. Seven deaths occurred during midnight-4 AM.

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CDC Editorial Note: The south central Texas region historically has been susceptible to damage and loss of life resulting from heavy rains. This period of flooding was the second most costly in terms of deaths and the most costly in monetary terms.1

Flooding is the most common type of natural disaster worldwide, accounting for an estimated 40% of all natural disasters.2 Flash flooding is the leading cause of weather-related deaths in the United States, accounting for approximately 200 deaths per year.3

In the United States, the most common cause of flood-related deaths is drowning.5 More than half of flood-related drownings occur when a vehicle is driven into hazardous flood waters.3-5 In the Texas floods, 76% of the deaths with known circumstances occurred because a motor vehicle was driven into flood waters.

The findings in this report are subject to at least two limitations. First, interpretation of storm-related deaths may have varied among medical examiners and Justice of the Peace and Department of Public Safety officials. For example, subjective determination was used to ascertain two deaths indirectly related to the storm, based on the criterion that the deaths would not have happened if the storm had not occurred. Although definitions and methods have been proposed, no standardized method for determining disaster-attributed mortality exists. Second, some post-storm impact deaths may have occurred outside of the study period.

Water-crossing incidents in the Texas floods occurred in vehicles ranging in size from a full-sized produce truck to a compact car. This finding underscores the importance of educating persons residing in flood-prone locations about the hazards of driving vehicles through areas inundated by flash floods and through swiftly moving flood waters.6

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CORRECTION OF IMMUNIZATION SCHEDULE
Incorrect Figure: In the From the Centers for Disease Control and Prevention article entitled “Recommended Childhood Immunization Schedule—United States, 2000” published in the February 16, 2000, issue of THE JOURNAL (2000; 283:876-878), the immunization schedule on page 877 was incorrectly reproduced. The column for age 24 months was omitted, incorrectly showing the recommended age range for hepatitis A vaccine beginning at 18 months. In addition, diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP) was incorrectly recommended for children aged 11 years and older. The recommended vaccine for this age group is tetanus and diphtheria toxoids (Td). The correct schedule is shown on page 1562.

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