Maternal Domestic Violence Screening in an Office-Based Pediatric Practice

Gregory W. Parkinson, MD; Richard C. Adams, MD; and Frank G. Emerling, MD

ABSTRACT. Background. Maternal domestic violence (MDV) screening by pediatricians is not well-studied.

Objectives. To determine the practicality and dynamics of routine MDV screening in a private pediatric office and to determine the rate of MDV in Upper Cape Cod, Massachusetts.

Setting. A 3-pediatrician, private pediatric office in Falmouth, Massachusetts.

Participants. Mothers of children aged 1 month to 10 years scheduled to undergo a well-child visit between February 7 and July 7, 2000.

Intervention. Completion of an 11-item questionnaire related to violence.

Results. Seven hundred sixty-six families were scheduled for well visits. Five hundred ninety-two eligible mothers presented to the office. Five hundred fifty-three completed questionnaires were returned (71.2%). The rate of MDV was 2.5% in current relationships (95% confidence interval [CI]: 1.4–4.3), 14.7% in past relationships (95% CI: 11.9–18.0), and 16.5% overall (95% CI: 13.5–19.9).

Increased incidence of MDV was associated with the following variables: 1) harm to a child (odds ratio [OR]: 5.7, 95% CI: 2.6–12.3), 2) being in a relationship other than a first marriage (OR: 4.6, 95% CI: 2.7–7.8), 3) having been previously asked about MDV (OR: 3.5, 95% CI: 2.1–6.1), 4) having 4 or more children (OR: 3.1, 95% CI: 1.6–6.1), 5) Women, Infants, and Children’s program eligibility (OR: 3.0, 95% CI: 1.8–5.0), 6) having public insurance (ie, Medicaid or Children’s Medical Security Plan) (OR: 2.2, 95% CI: 1.3–3.7), 7) a history of failure to present for a scheduled well-child visit (no-show; OR: 2.0, 95% CI: 1.0–4.2) and 8) anonymous questionnaire completion (OR: 1.7, 95% CI: 1.0–2.9).

Thirty-two and one-half percent (32/91, 95% CI: 25.6–46.0) of mothers with a history of MDV recall having previously been asked about this by a health professional, compared with 16.9% overall (93/551, 95% CI: 13.9–20.3). Eighty-two and eight tenths (82.8) percent (457/552, 95% CI: 79.3–85.8) of mothers favored pediatricians asking about MDV.

Discussion. This information was gathered within the context of normal work hours in a busy office. No additional staff were required. Hence, routine MDV screening appears feasible.

The results suggest that a documented history of child abuse in a family makes it very likely that the mother has also been abused. However, child abuse among abused mothers is probably underreported.

Furthermore, because most mothers favor domestic violence screening, concerns about lack of acceptance of maternal screening at pediatric visits seem to be unfounded. Screening may actually increase satisfaction with care.

In addition, families who do not show up for appointments are at higher risk. Therefore, screening only at well visits will miss an important group.

Conclusions. Maternal domestic violence screening at well-child visits is practical in a private pediatric office setting. Current rates of screening are low; however, most mothers favor such screening. Furthermore, MDV screening should also be offered on a catch-up basis for those who miss well-child visits, as is currently recommended for immunizations. Pediatrics 2001;108(3). URL: http://www.pediatrics.org/cgi/content/full/108/3/e43; maternal domestic violence, pediatrician, office screening.

ABBREVIATIONS. MDV, maternal domestic violence; WIC, Women, Infants, and Children; OR, odds ratio; CI, confidence interval.

Maternal domestic violence (MDV) is alarmingly common. Current literature suggests that in the general population, 13% to 30% of women have been involved in an abusive relationship at some time in their lives.1

The American Academy of Pediatrics recommends MDV screening at the time of well-child visits.2 However, information about such screening is limited. There is currently 1 published study of routine MDV screening during pediatric visits. The rates of MDV were 31% overall and 17% in the last 2 years.3 This study was conducted in 2 hospital-owned suburban practices. It involved only 154 mothers, and 65% were on Medicaid. Before this, Wissow et al4 conducted interviews of mothers presenting to pediatric primary clinic in a large, urban teaching center; 69% of families were on Medicaid. The incidence of family violence was 40% over the previous year.

A large, recent study assessed the ability of pediatricians to predict MDV among families presenting for care5; the rate of MDV was significantly underestimated by pediatricians. This was conducted by researchers at the pediatricians’ offices rather than by the pediatricians themselves during the visit. This suggests that if MDV is to be detected by pediatricians, then it is likely that indirect observations alone are an insufficient means of screening.

The current study was undertaken to investigate the practicality and dynamics of MDV screening in a
private pediatric office at the time of well visits, as well as to determine the rate of MDV in our region.

METHODS

Setting
The study was conducted at Falmouth Pediatric Associates, a 3-pediatrician group practice in Falmouth (Cape Cod), Massachusetts during a 5-month period between February and July 2000.

Practice Population
Patients and families seen at this office are almost entirely year-round residents of the Upper Cape Cod area. This practice cares for approximately half of the children in the area. The local population is predominantly white (of a broad range of European descent), with a combined minority of <10% black (primarily of Cape Verdian descent) and Native American (Wampanoag) peoples.

Eligibility Criteria
Mothers were considered eligible if they were scheduled for a well-child visit with a child aged 1 month to 10 years of age inclusive during the study period. The 1-month visit is the second well-child visit at our office; the first visit was omitted so that new parents would have a chance to orient to the practice without other distractions. Ten years was used as the upper age-limit because mothers are often not present in the examination room after this age.

Permanent, nonbiologic mothers, such as adoptive parents, were also considered eligible.

Exclusion Criteria
Mothers were excluded if they were accompanied in the examination room by the father, if they had previously completed the questionnaire, if they were not the permanent guardian (eg, stepmother-in-split custody situations), or if they were unable to read/write in English.

Patient Recruitment
Children within the age criteria who were scheduled for a well-child visit were identified before the office visit. A list of those eligible was posted at the nurses’ station. Charts were marked with a sticker to flag the child’s eligibility. After the visit, the list was updated depending on whether or not the questionnaire was a) handed out, b) deferred (because of maternal absence, paternal presence, or no-show) or c) refused. Visits rescheduled before the time of the appointment were not considered no-show.

The mother was given the questionnaire when she and her child were brought into the examination room. To avoid the creation of difficult situations for mothers, care was taken to try to avoid speaking the words “domestic violence” when a child was present who might later question this subject. Mothers had the option of filling out the questionnaire anonymously and leaving it in a locked box in the examination room. They could also leave the questionnaire out for the doctor to review when he came in the room. A questionnaire was considered to have been completed anonymously if the last name of the mother and child was absent and the questionnaire was not given to the doctor to discuss.

All mothers who received a questionnaire also received a “personalized safety plan” (Appendix 2), regardless of whether the questionnaire was completed. This describes available local MDV resources and steps to be considered before leaving an abusive relationship.

Those who had been deferred on their scheduled day for whatever reason were placed on a second list, which was posted at the receptionist’s desk and at the nurses’ station. If a staff member noted that this mother brought any of her children in for a visit (sick or well) during the remainder of the study period, the questionnaire was offered. This was done to avoid the bias that would have been present if only those who arrived for their well-appointment (without the father) were questioned.

The study was conducted at Falmouth Pediatric Associates, a 3-pediatrician group practice in Falmouth (Cape Cod), Massachusetts during a 5-month period between February and July 2000.

Setting
The study was conducted at Falmouth Pediatric Associates, a 3-pediatrician group practice in Falmouth (Cape Cod), Massachusetts during a 5-month period between February and July 2000.

Eligibility Criteria
Mothers were considered eligible if they were scheduled for a well-child visit with a child aged 1 month to 10 years of age inclusive during the study period. The 1-month visit is the second well-child visit at our office; the first visit was omitted so that new parents would have a chance to orient to the practice without other distractions. Ten years was used as the upper age-limit because mothers are often not present in the examination room after this age.

Permanent, nonbiologic mothers, such as adoptive parents, were also considered eligible.

Exclusion Criteria
Mothers were excluded if they were accompanied in the examination room by the father, if they had previously completed the questionnaire, if they were not the permanent guardian (eg, stepmother-in-split custody situations), or if they were unable to read/write in English.

Patient Recruitment
Children within the age criteria who were scheduled for a well-child visit were identified before the office visit. A list of those eligible was posted at the nurses’ station. Charts were marked with a sticker to flag the child’s eligibility. After the visit, the list was updated depending on whether or not the questionnaire was a) handed out, b) deferred (because of maternal absence, paternal presence, or no-show) or c) refused. Visits rescheduled before the time of the appointment were not considered no-show.

The mother was given the questionnaire when she and her child were brought into the examination room. To avoid the creation of difficult situations for mothers, care was taken to try to avoid speaking the words “domestic violence” when a child was present who might later question this subject. Mothers had the option of filling out the questionnaire anonymously and leaving it in a locked box in the examination room. They could also leave the questionnaire out for the doctor to review when he came in the room. A questionnaire was considered to have been completed anonymously if the last name of the mother and child was absent and the questionnaire was not given to the doctor to discuss.

All mothers who received a questionnaire also received a “personalized safety plan” (Appendix 2), regardless of whether the questionnaire was completed. This describes available local MDV resources and steps to be considered before leaving an abusive relationship.

Those who had been deferred on their scheduled day for whatever reason were placed on a second list, which was posted at the receptionist’s desk and at the nurses’ station. If a staff member noted that this mother brought any of her children in for a visit (sick or well) during the remainder of the study period, the questionnaire was offered. This was done to avoid the bias that would have been present if only those who arrived for their well-appointment (without the father) were questioned.

Mothers were then asked if they had previously been asked about MDV by any health care provider. They were also asked to respond, using a 5-point Likert scale, to the statement: “I think it is a good idea for pediatricians to ask mothers about domestic violence.” (1 = strongly agree, 3 = neutral, 5 = strongly disagree).

Statistical Analysis
Data were entered into and analyzed in EpilInfo Version 6.04 (Atlanta, GA) and Systat Version 9.0 (Chicago, IL) with data cleaning at the time of entry and duplicate data review to reduce error. The relationship between risk factors and MDV was examined initially using 2 × 2 tables, with χ² analysis and Mantel-Haenszel correction where appropriate.

A multivariate model using stepwise logistic regression was subsequently fitted from the risk factors that had demonstrated significant associations (P < .05) within the univariate statistics.

Each result is expressed as an odds ratio (OR)—the odds of MDV with a certain risk factor compared with the odds of MDV without the same risk factor. An OR >1 indicates a higher risk of MDV.

RESULTS
Study recruitment and completion data are shown in Fig 1. A total of 766 families were identified as scheduled to present on at least 1 occasion with 1 or more children for well-child visits during the study period. Four hundred sixty-six eligible mothers completed the questionnaire at the initial visit. Two hundred ninety-two mothers were not studied on the first scheduled visit; of these, 93 did eventually complete it, giving a total of 553. Hence, the overall response rate was 71.2% (553/776), including 93.4% (553/592) of those who were eligible and arrived at the office. 47.6% (263/553) of completed questionnaires were done anonymously.

Demographic information is shown in Table 1. The mean maternal age was 32.6 (standard deviation: ± 6.5) years and median number of children was 2.0 (range: 1–11).

A total of 65.3% (359/550) of eligible respondents were currently married and 63.5% (346/545) had private insurance, whereas 32.5% (177/545) had some form of public insurance. WIC eligibility was used as an indirect measure of income; 39.0% were WIC-eligible currently or in the past (214/497, ± 52 unsure of eligibility).

Denominators differ slightly because of differences in response rate for individual questions.
The overall rates of MDV are shown in Table 2. Fourteen and seven tenths (14.7%) percent (81/552, 95% confidence interval [CI]: 11.9–18.0) of mothers acknowledge having ever been abused in a previous relationship; 91.3% (73/80) of this abuse had taken place more than a year earlier. Two and a half percent (14/552, 95% CI: 1.4–4.3) were currently in a relationship in which they had been abused; 71.4% (10/14) had taken place more than a year earlier. In total, 16.5% (91/552, 95% CI: 13.5–19.8) were abused by a partner at some time in their life.

A history of child abuse was acknowledged in 2.0% (11/550) of families. Ten and nine tenths percent (10.9%; 60/552) of households owned at least 1 gun.

Several variables were associated with a history of MDV (Table 3); these included: 1) a history of harm to a child (OR: 57.3, 95% CI: 1.3–1232.4), 2) being in a relationship other than a first marriage (OR: 4.6, 95% CI: 2.7–7.8), 3) having been previously asked about a history of MDV (OR: 3.5, 95% CI: 2.1–6.1), 4) having 4 or more children (OR: 3.1, 95% CI: 1.6–6.1), 5) being WIC-eligible (current or previously; OR: 3.0, 95% CI: 1.8–5.0), 6) having public insurance (Medicaid or Children’s Medical Security Plan; OR: 2.2, 95% CI: 1.3–3.7), 7) having previous “no-showed” for a well-child visit (OR: 2.0, 95% CI: 1.0–4.2), and 8) filling out the survey anonymously (OR: 1.7, 95% CI: 1.0–2.9). Additional analysis of these risk factors is shown in Table 4.

Multivariate analysis suggests a persistent role of MDV and the following risk factors: harm to a child, being in a relationship other than a first marriage, having been previously asked about MDV, having 4 or more children, and being WIC-eligible.

Sixteen and nine tenths percent (16.9%; 93/551, 95% CI: 13.9–20.3) of respondents recall having previously been asked by a health professional about MDV. Even among those with a history of MDV, only 35.2% (32/91, 95% CI: 25.6–46.0) had ever been asked about MDV by a health care professional.

Using the 5-point Likert scale, participants were asked to comment on the statement “I think it is a good idea for pediatricians to ask mothers about domestic violence” (1 = strongly agree, 3 = neutral, 5 = strongly disagree; Table 5). The mean score was 1.6 (standard deviation ± 1.0). 82.8% (457/552, 95%
TABLE 1. Demographics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number (%, 95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean maternal age (years ± standard deviation)</td>
<td>32.6 (±6.5)</td>
</tr>
<tr>
<td>Median number of children/family (range)</td>
<td>2.0 (1–11)</td>
</tr>
<tr>
<td>Marital status</td>
<td>Number (%)</td>
</tr>
<tr>
<td>Single/common law</td>
<td>108 (19.6)</td>
</tr>
<tr>
<td>First marriage</td>
<td>359 (65.3)</td>
</tr>
<tr>
<td>Separated/divorced</td>
<td>35 (6.3)</td>
</tr>
<tr>
<td>Second or other marriage</td>
<td>47 (8.5)</td>
</tr>
<tr>
<td>Widow</td>
<td>1 (0.2)</td>
</tr>
<tr>
<td>Total</td>
<td>550 (100.0)*</td>
</tr>
<tr>
<td>Insurance type</td>
<td>Number (%)</td>
</tr>
<tr>
<td>Private</td>
<td>332 (60.9)</td>
</tr>
<tr>
<td>Medicaid</td>
<td>166 (30.5)</td>
</tr>
<tr>
<td>Children’s Medical Security Plan</td>
<td>11 (2.0)</td>
</tr>
<tr>
<td>Military</td>
<td>16 (2.9)</td>
</tr>
<tr>
<td>Medicaid and private</td>
<td>14 (2.6)</td>
</tr>
<tr>
<td>Military and private</td>
<td>2 (0.4)</td>
</tr>
<tr>
<td>None</td>
<td>4 (0.8)</td>
</tr>
<tr>
<td>Total</td>
<td>545 (100.0)*</td>
</tr>
<tr>
<td>WIC eligibility</td>
<td>Number (%)</td>
</tr>
<tr>
<td>Yes</td>
<td>214 (39.0)</td>
</tr>
<tr>
<td>No</td>
<td>283 (51.5)</td>
</tr>
<tr>
<td>Unsure</td>
<td>52 (9.5)</td>
</tr>
<tr>
<td>Total</td>
<td>550 (100.0)*</td>
</tr>
<tr>
<td>Gun ownership</td>
<td>Number (%)</td>
</tr>
<tr>
<td>Yes</td>
<td>60 (10.9)</td>
</tr>
<tr>
<td>No</td>
<td>492 (89.1)</td>
</tr>
<tr>
<td>Total</td>
<td>552 (100.0)*</td>
</tr>
</tbody>
</table>

* Differences in denominators reflect response rates for individual questions.

TABLE 2. Violence-Related Issues

<table>
<thead>
<tr>
<th>Issue</th>
<th>Number (%, 95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal history of domestic violence</td>
<td></td>
</tr>
<tr>
<td>In current relationship</td>
<td>14 (2.5, 1.4–4.3)</td>
</tr>
<tr>
<td>In past relationship</td>
<td>81 (14.7, 11.9–18.0)</td>
</tr>
<tr>
<td>In present and past relationship</td>
<td>4 (0.7, 0.2–2.0)</td>
</tr>
<tr>
<td>Total abuse</td>
<td>91 (16.5, 13.5–19.9)</td>
</tr>
<tr>
<td>No abuse</td>
<td>461 (83.5, 80.1–86.5)</td>
</tr>
<tr>
<td>Total mothers</td>
<td>552 (100.0)*</td>
</tr>
<tr>
<td>Child abuse</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>11 (2.0, 1.1–3.7)</td>
</tr>
<tr>
<td>No</td>
<td>539 (98.0, 96.3–98.9)</td>
</tr>
<tr>
<td>Total</td>
<td>550 (100.0)</td>
</tr>
<tr>
<td>Mothers previously asked by health professional about domestic violence</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>93 (16.9, 13.9–20.3)*</td>
</tr>
<tr>
<td>No</td>
<td>458 (83.5, 79.7–86.1)</td>
</tr>
<tr>
<td>Total</td>
<td>551 (100.0)*</td>
</tr>
</tbody>
</table>

* Differences in denominators reflect response rates for individual questions.
** For previously abused mothers the rate was 32/91 (35.2%, 95% CI: 25.6–46.0).

TABLE 3. Variables Associated With Domestic Violence (Total = Past or Present)

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harm to a child</td>
<td>57.3</td>
<td>7.3–1232.4</td>
</tr>
<tr>
<td>Other than first marriage</td>
<td>4.6</td>
<td>2.7–7.8</td>
</tr>
<tr>
<td>Previously asked about domestic violence</td>
<td>3.5</td>
<td>2.1–6.1</td>
</tr>
<tr>
<td>4 or more children</td>
<td>3.1</td>
<td>1.5–6.1</td>
</tr>
<tr>
<td>WIC eligible</td>
<td>3.0</td>
<td>1.8–5.0</td>
</tr>
<tr>
<td>Having public insurance</td>
<td>2.2</td>
<td>1.3–3.7</td>
</tr>
<tr>
<td>History of “no-show”</td>
<td>2.0</td>
<td>1.0–4.2</td>
</tr>
<tr>
<td>Anonymous survey completion</td>
<td>1.7</td>
<td>1.0–2.9</td>
</tr>
</tbody>
</table>

CI: 79.3–85.8) favored being asked about domestic violence, 12.1% (67/552, 95% CI: 9.6–15.2) were neutral and 5.1% (24/552, 95% CI: 3.5–7.3) opposed such questioning. Response to this question did not differ for those who had/did not have a history of MDV.

There were no new social services consultations required, and only 1 mother admitted to any harm to a child in a current relationship; this had been >2 years earlier and social services was already involved.

DISCUSSION

This is the largest study to date of MDV screening incorporated into routine well-child examination and the first in a private pediatric office. The overall incidence of MDV is within the range of currently quoted rates. The rate is probably an underestimate of the true incidence in this community, as the families surveyed did at least present for care at some point.

This incidence of MDV was lower than that of the only previous routine screening study reported by Siegel et al, in which 31% of mothers had been abused. Their population had a substantially higher population of Medicaid. A study of mothers presenting to a pediatric emergency departments in an urban center showed a 52% rate of adult physical abuse. The same group found that abused adult women are more likely to use emergency departments; it is not known if this is also true for pediatric emergency departments.

The option of anonymous completion of the questionnaire in this study is hoped to have helped achieve accurate reporting; this is supported by the increased rate of MDV among mothers that remained anonymous (OR: 1.7). This might contradict a previous study, which has suggested that women with a history of MDV will tell their physicians if asked. It may be, however, that some women with a history of MDV preferred to remain anonymous, but still would have disclosed if this option were not available.

Mothers were aware that a current history of child abuse would prompt mandatory follow-up; for this reason, child abuse may well have been underreported. In addition, the wording of the question related to child abuse specifically asked about harm by a partner to a child; this unfortunately offered a loophole for mothers who didn’t want to report personal abuse to a child.

Because no change in routine booking or staffing took place, this study supports the practicality of routine office screening. Time required for questionnaire completion was not formally measured, but seemed to take only about 5 minutes and was done while waiting.

Several variables were associated with MDV in this study. As previously described, child abuse was more common in homes in which there had been domestic violence. In fact, failure to report personal abuse made it extremely unlikely that child abuse would be reported. This should serve to further heighten the index of suspicion of child abuse in families where mothers are known/suspected to be victims themselves, but have not disclosed.

Variables associated with low income (WIC and public insurance eligibility) showed a higher likeli-
TABLE 5. Mothers’ Feelings About Domestic Violence (Response to the statement: “I think it is a good idea for pediatricians to ask mothers about domestic violence”)

<table>
<thead>
<tr>
<th>Response</th>
<th>Rate of Response (%), (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>374 (67.8, 63.7–71.6)*</td>
</tr>
<tr>
<td>Agree</td>
<td>83 (15.0), 12.2–18.4)*</td>
</tr>
<tr>
<td>Neutral</td>
<td>67 (12.1), 9.6–15.2</td>
</tr>
<tr>
<td>Disagree</td>
<td>14 (2.5, 1.4–4.3)**</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>14 (2.5, 1.4–4.3)**</td>
</tr>
<tr>
<td>Total</td>
<td>552 (100.0)</td>
</tr>
</tbody>
</table>

* Combined agree/strongly agree 457 (82.8, 79.3–85.8).
** Combined disagree/strongly disagree 28 (5.1, 3.5–7.3).

TABLE 5. Sensitivity, Specificity, and Predictive Values With Respect to Domestic Violence

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sensitivity</th>
<th>Specificity</th>
<th>Positive Predictive Value (95% CI)</th>
<th>Negative Predictive Value (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harm to a child</td>
<td>11.1</td>
<td>99.8</td>
<td>90.9 (57.1–99.5)</td>
<td>85.1 (81.8–88.0)</td>
</tr>
<tr>
<td>Other than first marriage</td>
<td>64.8</td>
<td>70.7</td>
<td>30.4 (24.1–37.5)</td>
<td>91.1 (87.5–93.7)</td>
</tr>
<tr>
<td>Previously asked about MDV</td>
<td>35.2</td>
<td>86.7</td>
<td>34.4 (25.1–45.1)</td>
<td>87.1 (83.6–90.0)</td>
</tr>
<tr>
<td>4 or more children</td>
<td>18.7</td>
<td>93.0</td>
<td>34.7 (22.1–49.7)</td>
<td>85.3 (81.8–88.2)</td>
</tr>
<tr>
<td>Having public insurance</td>
<td>51.7</td>
<td>66.4</td>
<td>23.6 (17.9–30.3)</td>
<td>87.3 (83.1–90.6)</td>
</tr>
<tr>
<td>WIC-eligible</td>
<td>70.3</td>
<td>55.8</td>
<td>24.1 (19.1–29.7)</td>
<td>90.4 (86.2–93.5)</td>
</tr>
<tr>
<td>History of “no-show”</td>
<td>14.3</td>
<td>92.4</td>
<td>27.1 (15.7–42.1)</td>
<td>84.5 (81.0–87.5)</td>
</tr>
<tr>
<td>Anonymous survey completion</td>
<td>58.2</td>
<td>54.4</td>
<td>20.2 (15.6–25.6)</td>
<td>86.7 (83.6–90.0)</td>
</tr>
</tbody>
</table>

The lack of formal reports here should not take away from the value of screening. To begin, it is striking that only 35.2% of women with a known abuse history recall having ever discussed it with a health care provider. Under other circumstances, these women could still have been in such relationships. Furthermore, every mother who participated (and those who did not return the survey) was given an instruction sheet about how to leave an abusive relationship (Appendix 2). Making support available may provide benefits in time. In addition, the study by Siegel et al3 in a different population did yield many new social services referrals.

The next question is who and when to screen; the answer seems to be “all families intermittently”. This study shows that, in terms of easily-accessible demographic information, that those families with public insurance, those that are WIC-eligible, and those with 4 or more children are at higher risk. However, to selectively screen these populations would be both discriminatory and incomplete; this is supported by the low positive predictive value of these variables (24, 24, and 33%, respectively). In addition, Kerker et al5 showed that physicians are poor predictors of which families are at risk for domestic violence; one could speculate that this is attributable to an overreliance on stereotypes.

Traditionally, health behavior screening has been done in conjunction with anticipatory guidance at the well-child checkup. However, by tracking those families who missed well-child appointments, we have demonstrated that not only do these families need MDV screening as much as other families, in fact, they need it more. It follows then that “catch-up” MDV screening after a missed well-child visit may be necessary in the same way as “catch-up” immunizations. Although this risk factor did not maintain a persistent association following the multivariate analysis (suggesting it is linked to another risk factor), it provides very useful information about a population that would otherwise be missed.

Furthermore, it leads to the question of whether other anticipatory guidance/health behavior issues may be more important in those that “no-show”. It may be that instead of a list of topics that are dis-
discussed at each well visit, there should be a running checklist kept, so that those who miss a well appointment could receive “catch-up” anticipatory guidance at other visits. More research is necessary to investigate the value of this approach.

There are several limitations to this study. First, it is a select population in that only those women who bring their children for care were screened (however, in this area the vast majority of children have a primary care provider). Furthermore, those mothers who had previously had their child(ren) removed from their custody would not have taken part. These mothers are at higher risk for MDV.1 This would lead to underreporting, as would the knowledge that a current history of child abuse would prompt a mandatory social services referral. Based on conservative estimates from the literature, at least 30% of homes in which there is MDV also have ongoing child abuse. So, one might expect about 5 active cases of child abuse (versus 1 reported). The numbers involved are small and this study was not designed to examine the reliability of maternal reporting of child abuse.

In addition, demographic information such as ethnic background and exact income, are not included. However, WIC eligibility is an estimate of the latter, and may more readily available to care providers. Furthermore, local demographics are different from many cities; this will limit generalizability.

CONCLUSION

Routine maternal domestic violence screening can be come a part of pediatric practice, and a large majority of women favor such screening. The specificity of acknowledged child abuse with respect to maternal domestic violence was extremely high. Screening candidates should include those that do not keep well-child appointments.

We would welcome the replication of our questionnaire in other pediatric office settings.

ACKNOWLEDGMENTS

The authors wish to thank the staff of Falmouth Pediatric Associates, LLP, for their commitment to this project, Dr Kevin Gordon (Dalhousie University, Halifax, Canada) for manuscript review and advanced statistical analysis, and especially the mothers who participated for their cooperation.

REFERENCES

APPENDIX 1  SAMPLE QUESTIONNAIRE

Today’s Date

Child’s Name (optional) _______________ Child’s Date of Birth __/__/ 
Mother’s Name (optional) _______________ Mother’s Date of Birth __/__/ 

Please confirm that the person filling out this form is the child’s mother  Y    N

In your current relationship have you ever been harmed or felt afraid of your partner?  
  Y    N    No current relationship

In a previous relationship have you ever been harmed or felt afraid of your partner? 
  Y    N

Has your current or past partner harmed any of your children?  Y    N

Are there any guns in your house?  Y    N

Has any health professional ever asked you about domestic violence before?  Y    N

To help other health providers to learn about domestic violence in their communities we need to be able to tell them about our own community. Please answer the following questions. Please leave blank any questions that you do not wish to answer.

How many children do you have?  __________

What is your marital status?  Single  Common-law  1st marriage  2nd or other marriage  
  Separated  Divorced

What type of medical insurance do you have?  None  Mass Health  
  Children’s Medical Security  Military Insurance  Private Insurance

Are you (or were you) eligible for Women, Infants and Children (WIC) program?  Y    N

  Thank you for completing this questionnaire

  The next page contains information to help if domestic violence is an issue in your life.
APPENDIX 2    PERSONALIZED SAFETY PLAN

Suggestions for increasing safety in the relationship

- I will have important phone numbers available to my children and myself.
  Police: 911
  Independence House:
    Hyannis (508) 428-4720 (Collect calls accepted)
    (508) 771-6507
    (800) 439-6507
    Falmouth (508) 457-3591
  National Domestic Violence Hotline: (800) 779-SAFE
  Mass Coalition of Battered Women Service Groups: (617) 248-0922
  Cape Cod Center for Women:
    Falmouth (508) 564-SAFE

- I can tell _____________ and ____________ about the violence and ask then to call the police if they hear suspicious noises coming from my home.

- If I leave my home, I can go (list four places):
  1. ________________________________
  2. ________________________________
  3. ________________________________
  4. ________________________________

- I can leave extra money, car keys, clothes, and copies of documents with ____________

- If I leave, I will bring:

  ✓ Identification
  ✓ Birth certificates for me and my children
  ✓ Social Security cards
  ✓ School and medical records
  ✓ Money, bankbooks, credit cards
  ✓ Keys – house/car/office
  ✓ Driver’s license and registration
  ✓ Medications
  ✓ Change of clothes
  ✓ Welfare identification
  ✓ Passport(s), Green Card(s), work permits
  ✓ Divorce papers
  ✓ Lease/rental agreement, house deed
  ✓ Mortgage payment book, current unpaid bills
  ✓ Insurance papers
  ✓ Address book
  ✓ Pictures, jewelry, items of sentimental value
  ✓ Children’s favorite toys and/or blankets
• To ensure safety and independence, I can: keep change for phone calls with me at all times; open my own savings account; rehearse my escape route with a support person; and review safety plan on _______________(date).

Suggestions for increasing safety when the relationship is over

• I can: change the locks; install steel/metal doors, a security system, smoke detectors and an outside lighting system.

• I will inform ______________ and ______________ that my partner no longer lives with me and ask them to call the police if s/he is observed near my home or my children.

• I will tell people who take care of my children the names of those who have permission to pick them up. The people who have permission are:
  1. ____________________________
  2. ____________________________
  3. ____________________________

• I can tell ________________ at work about my situation and ask ________________ to screen my calls.

• I can avoid stores, banks, and ________________ that I used when living with my battering partner.

• I can obtain a protective order from _________________. I can keep it on or near me at all times as well as leave a copy with _____________________________.

• If I feel down and ready to return to a potentially abusive situation, I can call ______________ for support or attend workshops and support groups to gain support and strengthen my relationships with other people.
Maternal Domestic Violence Screening in an Office-Based Pediatric Practice
Gregory W. Parkinson, Richard C. Adams and Frank G. Emerling
Pediatrics 2001;108;e43
DOI: 10.1542/peds.108.3.e43

Updated Information & Services
including high resolution figures, can be found at:
http://pediatrics.aappublications.org/content/108/3/e43

References
This article cites 8 articles, 3 of which you can access for free at:
http://pediatrics.aappublications.org/content/108/3/e43.full#ref-list-1

Subspecialty Collections
This article, along with others on similar topics, appears in the following collection(s):
Administration/Practice Management
http://classic.pediatrics.aappublications.org/cgi/collection/administration/management_sub
For Your Benefit
http://classic.pediatrics.aappublications.org/cgi/collection/for_your_benefit

Permissions & Licensing
Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
https://shop.aap.org/licensing-permissions/

Reprints
Information about ordering reprints can be found online:
http://classic.pediatrics.aappublications.org/content/reprints

Pediatrics is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since . Pediatrics is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2001 by the American Academy of Pediatrics. All rights reserved. Print ISSN: .
Maternal Domestic Violence Screening in an Office-Based Pediatric Practice
Gregory W. Parkinson, Richard C. Adams and Frank G. Emerling

Pediatrics 2001;108:e43
DOI: 10.1542/peds.108.3.e43

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://pediatrics.aappublications.org/content/108/3/e43