

## **Section A. Identification of Domestic Violence and Referral by Public Health Nurses and Employee Assistance Counselors.**

Hypothesis 1 addresses identification of domestic violence and hypothesis 2 focuses on referral after domestic violence is identified. The background, method, results, and discussion from the two hypotheses on identification and referral by public health nurses will be described In Part One, followed by similar information related to employee assistance counselors in Part Two. A general discussion of the two hypotheses will follow in Part Three, incorporating the results for public health nurses and employee assistance counselors.

### **Part One: Identification and Referral for Public Health Nurses**

#### **Background**

While violence against women by their male partners is recognized as a serious public health problem, health care professionals frequently do not screen for domestic violence. Nurses could play an important role in the secondary prevention of abuse of women through detection and intervention in the beginning stages. Public health nurses in particular are in a position to detect community problems before other health care providers.

Unfortunately, public health nurses often lack training and experience in assessing for domestic violence and making referrals in situations where violence is identified. This study evaluated the efforts of a domestic violence advocacy organization (the Domestic Abuse Intervention Project) to improve the response of public health nurses to domestic violence. This project provided domestic violence training to public health nurses, developed a domestic violence response protocol, and monitored its use by public health nurses with their clients.

#### **Hypotheses and Research Question**

Hypothesis 1a. Enhanced assessment for public health nurses will increase the percent of women being identified as experiencing domestic violence.

Hypothesis 2a. Enhanced screening and assessment for public health nurses will increase the percent of women being referred.

Research Question. What factors influence the identification of domestic violence and referral to information or services by public health nurses?

#### **Method**

##### **Population and Sample**

The population of this study included women who received home visits from county public health nurses as part of a maternal and child health home visiting program. The study took place in a small city in the Upper Midwest. Women were referred to the maternal and child home visiting program from a variety of sources, including the Women, Infant and Children Program (WIC) and other community agencies. Some women sought out services after receiving information about them from friends, relatives and neighbors. Many of the women and their children were considered at risk for health related problems because of medical concerns, being low income, or having a variety of psycho-social problems. Women may be visited during a pregnancy or after the child is born.

The sample included 486 women who received home visits in 1994, 442 who received home visits in 1996, 372 women who received visits in 1997, and 224 women who were visited in 1998. All of the women who received home visits in 1994, and whose files were available in 1997, were included in the sample. Of 442 who were visited in 1996, 225 (57%) had forms in their files indicating that a domestic violence assessment had been done. Of the 372 women who were visited in 1997, 183 (49%) had forms in their case files indicating that a domestic violence assessment had been completed. Of the 224 women seen in 1998, 51 (23%) had forms in their case files indicating that a domestic violence assessment had been done. Fewer women were visited in 1997 and 1998 because of declining birth rates, the reduction of staff, and an increased emphasis by public health nurses on community level intervention (J. Larson, personal communication, January, 1998, September, 1999).

The only demographic information available from the public health case files was the age of the women receiving services. Data on women's ages were available for 486 women seen in 1994 and for the women who were assessed in 1996, 1997, and 1998.

**Table 1**  
Ages of 1994, 1996, 1997 and 1998 Public Health Home Visit Clients

Age Groupings	1994 (N=486)	1996 (N=225)	1997 (N=183)	1998 (N=51)	1997-98 (N=234)
Under 21	18%	19%	22%	12%	20%
21-25	27%	27%	32%	14%	28%
26-30	26%	28%	27%	23%	27%
31-35	19%	15%	16%	23%	17%
36-40	8%	8%	2%	26%	7%
over 40	1%	3%	1%	2%	1%
mean age	26.7	26.8	25.2	29.9	26.1

### Design

The enhanced domestic violence assessment procedures were evaluated by using a non-equivalent comparison group design to determine whether these procedures resulted in higher rates of identification and referral by public health nurses for women who received home visits before or after a birth of a child. Data collected from case files during the baseline year (1994), prior to the initiation of the enhanced domestic violence assessment, were compared to case file information

from 1996, 1997, and 1998 when the enhanced assessment had been implemented by public health nurses. Data from the pilot year, 1996, is included in this study because the enhanced assessment protocol and research procedures were fully implemented throughout this year.

Factors influencing identification and referral (related to the research question) were examined in several ways. Evaluators met with the public health nurses regularly early in the project to discuss issues related to the screening and assessment process. The public health nurses completed a brief questionnaire related to screening and assessment activities in August, 1997 and participated in a focus group discussion of the entire process in February, 1999, which concluded with a brief questionnaire. Additionally, data collected from the current study were cross-referenced with information in the Domestic Abuse Information Network (DAIN), which provided information about women who had been identified by the criminal justice or criminal court system as having experienced domestic violence.

### Operational Definitions

Enhanced assessment was operationally defined as the use of the form and protocol developed by the Enhanced Domestic Abuse Project in consultation with public health nurses. Until 1996, public health nurses in Duluth asked a general question about the women's history of abuse when making home visits before or after the birth of a child. In 1995, a protocol was developed to assess for domestic violence and the public health nurses received training about domestic violence and the community resources available to address it. The protocol involved three steps: screening, assessment and intervention.

After a review of the medical and nursing literature, two questions were decided upon as the screening questions used to initiate the assessment protocol. These questions are two of the five questions used by McFarlane and her colleagues with women at their prenatal visits (McFarlane et al., 1991; McFarlane et al., 1992), and two questions that are known to be effective screens from previous work done in health care settings in this region (Elliott & Johnson, 1995; Johnson and Elliott, 1997). This study required a brief and non-prenatal screen that requested information only about violence between the woman and her current partner. Therefore, only two questions were needed for the screen. These two questions were also selected from all others based on the known dynamics of partner violence that includes both the experience of physical hitting as well as the threat/fear of battery (Graham, Rawlings and Rimini, 1988). Discussion with advocates, previously battered women, and public health nurses both verified and piloted these questions. The screening questions were: "Have you ever been afraid of being hurt by your partner?" and "Have you ever been hit, slapped, pushed or choked by your partner?" If a woman responded "yes" to either of these questions, the public health nurse asked a series of questions to assess the danger and determine the appropriate response.

The percent of women identified by public health nurses as experiencing domestic violence was determined in two ways. First, the percent of women identified by public health nurses was calculated by dividing the number of women identified as having experienced domestic violence during home visits in a given year by the total number of women assessed in that year. Second, it was calculated by dividing the number of women identified during home visits as experiencing domestic violence in a given year by the total number of women who received home visits during the year. Not all women who were seen during 1996, 1997, and 1998 were documented as being assessed for domestic violence. A woman was identified as having experienced domestic violence in 1994 if this issue was noted on the form in use at that time or if the case notes indicated that domestic violence was an issue that was addressed. For 1996, 1997, and 1998, a woman was identified as having experienced domestic violence if she answered "yes" to at least one of the two

questions about having been afraid of being hurt by her partner or having been hit, slapped, pushed, or choked by her partner.

The percent of women who were provided information or referred to domestic abuse services by public health nurses was determined in three ways. First, it was calculated by dividing the number of women referred to domestic abuse services in a given year by the total number of women assessed during home visits in that year. Second, it was calculated by dividing the number of women referred to domestic abuse services in a given year by the total number of women who received home visits during the year. Third, it was calculated by dividing the number of referred women who were also identified as having experienced domestic violence by the total number of women identified during the year. For 1996, 1997, and 1998, a woman was identified as being referred to domestic abuse services if the assessment form indicated that she was directly referred to a domestic abuse service. A direct referral was indicated by the nurse checking on a form that she had referred the woman to a shelter or women's group and/ or that she had arranged transportation to a shelter or other safe housing. A broader definition of "being referred" was also used to include indirect referrals in the form of providing information about domestic violence resources. In this case the nurse checked off on the form that she had given a booklet on domestic violence and/or told the woman about domestic violence resources in the community and/or gave information about calling the police or seeking an order of protection. A woman was identified as being referred to domestic abuse services in 1994 if the case notes indicated that she was provided information or directly referred to any domestic abuse service listed on the forms used during 1997 or thereafter.

#### Data Collection Procedures

During 1996, 1997, and 1998, about ten public health nurses completed a domestic violence protocol form for each woman screened during a home visit, indicating the woman's answers to questions and the nurse's response. These forms were collected by a research assistant and entered into a database to be analyzed. A retired public health nurse reviewed case files from 1994. In order to improve reliability, the retired public health nurse used the domestic violence protocol as a guide for reviewing 1994 cases files by looking for documentation that the women had been identified as domestic violence victims, provided information, and referred to domestic violence services listed in the protocol.

Information related to the research question on factors affecting the assessment process was collected directly from the public health nurses as described in the design section above. Additionally, identification and referral information collected on individual public health clients was cross-referenced with Domestic Abuse Information Network data to determine if women assessed by public health nurses in 1997 and 1998 had been identified by the criminal justice system and/or received domestic violence services.

#### Data Analysis

The percentages of women who were identified as experiencing domestic violence and the percentages of those provided information or direct referrals were determined for each year (1994, 1996, 1997, and 1998) and compared using the Chi-Square or Fisher's Exact Test. Additionally, percentages from 1994 (baseline year) were compared to percentages from the final two enhanced assessment years (1997 and 1998) combined. T-tests were used to analyze whether or not clients' ages and partners' ages were comparable for the experimental and comparison groups. If ages were significantly different between different years, t-test analysis was incorporated to determine if age was related to any of the dependent variables.

Frequencies and percentages were calculated for closed-ended responses to the questionnaire completed by the public health nurses in August, 1997. Open-ended responses to that questionnaire and the discussion in the focus group held in February, 1999 were analyzed qualitatively to identify important themes related to factors affecting identification of domestic violence and referral for services. Data in DAIN were examined to determine the numbers and percentages of women who were assessed by public health nurses and also identified by the court system. Special efforts were made to identify situations where a woman was not identified as experiencing domestic violence by public health nurses but was recorded as receiving domestic violence services in the community.

## **Results**

### **Implementation of the Assessment Protocol**

The data obtained indicated that the enhanced assessment protocol was not systemically followed throughout the assessment period. In 1996, 225 of 442 (51%) visited had forms in their files indicating that an assessment had been completed. Of the 372 women who were visited in 1997, 183 (49%) had forms in their case files indicating that a domestic violence assessment had been done. Of the 224 women seen in 1998, 51 (23%) had forms in their case files indicating that a domestic violence assessment had been done.

### **Comparability of Experimental and Comparison Groups**

Information about the ages of women in the experimental and comparison groups was available for most women. Table 1 provides information about the means and age categories of women during the various years of the study. The mean ages for 1994 and 1996 (26.7 and 26.8 respectively) are not significantly different. Similarly, the ages of women assessed in the combined years 1997-98 did not differ significantly from women included in the baseline group in 1994. However, t-test analysis indicated that the women assessed in 1997 were significantly younger than women in 1994, and the women assessed in 1998 were on average significantly older than the 1994 baseline year. Additional analysis indicated that age of the woman was significantly related to only the referral to information variable. Chi-square or Fisher Exact Tests were completed across age groups and will be reported below.

### **Identification of Domestic Violence**

The data do not support the hypothesis that, when a domestic violence assessment protocol is used, a higher percentage of women will be identified as experiencing domestic violence (see Table 2). In 1994, about 6% of clients were identified as experiencing domestic violence, compared to 10% in the pilot year 1996; this difference just misses statistical significance ( $p=.06$ ). Of the women who were assessed in 1997 and 1998 combined using the new protocol, approximately 7% were identified as experiencing domestic violence (about 9% in 1997 and 0% in 1998), while about 6% in 1994 were identified. This difference was not statistically significant ( $p=.36$ ).

However, many of the women in 1996, 1997, and 1998 did not have documentation that they were assessed using the new protocol. About 5% of all women visited in 1996 were identified as experiencing domestic violence, which was very similar to the percentage of women who were identified in 1994 before the enhanced protocol was adopted. When all the women visited in 1997 and 1998 (both those who were assessed and those who were not assessed) were compared to the

1994 women, the percentages identified were actually less for 1997 and 1998 combined (2.8%) than they were for 1994 (5.6%). This result, in the opposite direction of the hypothesis, was statistically significant ( $p = .03$ ). Again, the fact that no one was identified as experiencing domestic violence in 1998 was different than any of the other years in the study.

**Table 2**  
Percentage of 1994 Public Health Clients Identified as Experiencing Domestic Violence  
Compared to Percentages Identified in 1996 and in 1997 and 1998

Year	n	freq.	%	Prob.
1994	486	27	5.6	
1996				
assessed only	225	23	9.0	.06
all home visits	442	23	5.2	.43
1997				
assessed only	183	17	9.3	.08
all home visits	372	17	4.6	.52
1998				
assessed only	51	0	0	.08
all home visits	224	0	0	.00
1997-98 combined				
assessed only	234	17	7.3	.36
all home visits	596	17	2.8	.03

### Referral to Information or Services

Significantly more 1996, 1997, and 1998 women were provided information about domestic violence resources than received information in 1994 (see Table 3). Only 1 woman (.2%) was documented as having received information about domestic violence in 1994, compared to 102 (40%) of the women assessed in 1996 and 87 of the women (37.2%) in 1997 and 1998. These differences were statistically significant when comparing the 1994 data with the data regarding all women seen in 1996, 1997, and 1998, as well as only those who had been assessed. These differences held up across all age groups except for those women over 35, which had very small numbers. When age was included in logistic regression with year of assessment, the year of assessment was still the only or most significant covariate in determining whether or not information was provided. Following the protocol recommendations, the public health nurses provided information to many women who did not identify themselves as experiencing domestic violence.

Nurses were also significantly more likely in 1996, 1997, and 1998 to provide information to

women who they had identified as experiencing domestic violence. Seventeen of 23 women (73%) in 1996 and 14 of the 17 women (82.4%) identified as experiencing domestic violence

**Table 3**  
Comparison of Percentage of 1994 Public Health Clients Provided Information about Domestic Violence to Percentages Provided Information in 1996 and in 1997 and 1998

Year	n	freq.	%	Prob.
1994	486	1	.2	
1996				
assessed only	225	102	40.0	.00*
all home visits	442	102	23.1	.00*
1997				
assessed only	183	78	42.6	.00*
all home visits	372	78	21.0	.00*
1998				
assessed only	51	9	17.6	.00*
all home visits	224	9	4.0	.00*
1997-98 combined				
assessed only	234	87	37.2	.00*
all home visits	596	87	14.6	.00*

**Table 4**  
Comparison of 1994 Public Health Clients Experiencing Domestic Violence who were Provided Information to those in 1996, 1997, and 1998

Year	n	freq.	%	Prob.
1994	27	1	3.7	
1996	23	17	74.0	.00*
1997	17	14	82.4	.00*
1998	0	0	--	--
1997-98 combined	17	14	82.4	.00*

\*statistically significant at the .01 level or higher

in 1997 and 1998 received information about domestic violence. Only 1 woman of the 27 (3.7%) identified in 1994 received domestic violence information. Table 4 summarizes these findings,

indicating that differences between the baseline year and all relevant comparison years are statistically significant.

Differences in providing information were apparent between 1996, 1997, and 1998. During 1996, 102 women (40% of those assessed and 23% of those who had home visits) received information. In 1997, 78 women (42.6% of those assessed and 21% of those who had home visits) received information. In 1998, only 9 women (17.6% of those assessed and 4% of those who had home visits) received information.

Few women were referred directly to domestic violence services during any of the years studied. Two women (.4%) were referred to services in 1994, 4 women (1.6% of those assessed) were referred in 1996, 4 women (2.2% of those assessed) were referred in 1997, and no women (0%) were referred in 1998. The only significant difference occurred as a higher percentage of assessed women were referred for service in 1997 than in 1994. All other comparisons were not statistically significant. Table 5 summarizes these findings.

**Table 5**  
Comparison of Percentage of 1994 Public Health Clients Directly Referred to Percentages Directly Referred in 1996, 1997, and 1998

Year	n	freq.	%	Prob.
1994	486	2	.4	
1996				
assessed only	225	4	1.6	.09
all home visits	442	4	.9	.25
1997				
assessed only	183	4	2.2	.05*
all home visits	372	4	1.1	.24
1998				
assessed only	51	0	0	.82
all home visits	224	0	0	.33
1997-98 combined				
assessed only	234	4	1.7	.09
all home visits	596	4	.7	.56

\*statistically significant at the .05 level or higher

The 1997 and 1998 women who were identified as experiencing violence were somewhat more likely to be directly referred to services than the identified 1994 women, but this difference fell just short of statistical significance ( $p = .06$ , see Table 6). One woman of the 27 (3.7%) identified in 1994 was referred, while 4 of 17 women (23.5%) in 1997 and 1998 were referred for services. Three of 23 identified women (13%) were directly referred in 1996.

**Table 6**

Comparison of 1994 Public Health Clients Experiencing Domestic Violence who were Directly Referred to those in 1996,1997, and 1998

Year	n	freq.	%	Prob.
1994	27	1	3.7	
1996	23	3	13.0	.20
1997	17	4	23.5	.06
1998	0	0	--	--
1997-98 combined	17	4	23.5	.06

\*statistically significant at the .01 level or higher

\*\*statistically significant at the .05 level or higher

#### Factors Affecting Identification and Referral

A number of factors affecting identification of domestic violence and referral to services were identified during this study. Ongoing meetings between the public health nurses and the evaluators helped to monitor use of the enhanced assessment protocol and provided important information about the assessment process. These meetings occurred about every three months during 1996 and 1997 and involved the evaluators sharing reports about the numbers of women screened, the number identified as experiencing domestic violence, risk factors identified, and types of interventions. Only one meeting of this nature occurred in 1998, which may be related to the significantly lower rate of implementation of the protocol and identification of domestic violence that occurred that year.

During the ongoing meetings with evaluators, nurses also shared their perceptions about the implementation of the assessment protocol. Nurses reported that it was often difficult to assess for violence in the home setting, as the woman's partner was present in many cases. They also

reported that there were times when they completed an assessment, but did not have a form to report the assessment and results, so that assessment would not be included in the study.

The questionnaire completed by the public health nurses in August, 1997 provided additional information about the assessment process. The eleven nurses completing this form reported that 1) the form used for reporting the assessment process was easy to use, 2) the materials describing the assessment process were clear, 3) the training for doing the assessment was valuable, 4) the assessment reports were clear, and 5) the reports and discussion were valuable. They also reported that the DAIP staff provided support or information when needed and that doing the assessment helped them become more sensitive to domestic violence issues.

The open-ended responses to the August, 1997 questionnaire indicated that certain aspects of the training were valuable and that having information resources to give to women was important. Aspects of the process that could be improved included having simple reporting forms available and having sufficient time to assess. Recommendations for public health nurses implementing assessment in another setting included 1) the importance of an assessment protocol, 2) training to ask questions in a caring, non-judgmental manner, 3) having privacy and time to do assessments, and 4) knowing the resources for domestic violence that are available in a community.

The focus group discussion that occurred after the termination of the research study in February, 1999 confirmed previous information about the assessment process. Nurses reported that they might be assessing for domestic violence but not submitting a form and that assessment often occurs on a first visit, but not subsequent visits. Nurses said that the number of home visits was declining as nurses juggle community service, committee work, and individual care with home visits. Home visits may work better for assessing some women, but office visits for WIC may be better for others. Learnings from the project included that 1) it was important to ask the assessment questions, 2) assessing became more comfortable with time, 3) training was helpful, 4) knowing resources was important, and 5) all segments of the population should be screened.

Comparing information collected during the assessment process and the data available through DAIN (Domestic Abuse Intervention Network) provided additional insight into the assessment outcomes. This comparison indicated that of 234 women assessed in home visits during 1997 or 1998, 25 were in the DAIN system, indicating that they had received some domestic violence service. Of the 25 who had received services, only 7 (28%) had been identified in the assessment process as experiencing domestic violence. Of the 18 women who were not identified as experiencing domestic violence, 11 of them had received services when they were with the same partner as they were with when assessed. Of these 11 who received services while with the same partner, 5 women received services for domestic violence prior to being assessed as not experiencing domestic violence. Another comparison indicated that three women who were assessed as not experiencing domestic violence but were still provided information about domestic violence services did obtain services after receiving information.

## **Discussion**

### **Conclusions**

The hypothesis regarding increased rate of identification of domestic violence when an enhanced assessment protocol is used was not supported by the results of this study. While the rate of identification increased by about 50% when the protocol was more regularly used, this increase just missed being statistically significant at the level adopted for this study. Some factors related to this finding are discussed below.

The hypothesis related to increased referral was supported by data indicating that women were much more likely to be provided information about domestic violence when the enhanced assessment protocol was used. There was a relatively large percentage increase in the number of women referred directly to services when the enhanced assessment protocol was used, and these differences were statistically significant when comparing the 1994 (baseline) referral rate to the referral rate for those assessed in 1997. This finding supports the hypothesis that referral to services is increased when the assessment protocol is more regularly used.

Information collected related to the research question sheds light on important factors that influence identification of domestic violence and referral to information and services in a public health setting. Related to identification, the nurses indicated that it was sometimes difficult to assess women in their homes, as privacy was lacking and partners could be present. The data obtained from DAIN indicated that of the 25 women who were receiving domestic violence services from local agencies prior to being assessed by public health nurses, only 7 (28%) were identified as experiencing domestic violence during the home visits. This finding indicates that it may be difficult to identify women experiencing domestic violence in the public health home visit setting.

Other findings suggest that referral was enhanced by training for the enhanced protocol and the resources provided to the nurses. The training provided nurses with information about the various resources available for women experiencing domestic violence and their partners. Nurses were also provided with a list of resources related to domestic violence that could be given to women who might be experiencing domestic violence. One reason that relatively few women were referred directly to domestic violence services was that nurses had many other options of responses that they could make if they identified or suspected domestic violence; that is the nurses became more knowledgeable about domestic violence and could provide information and resources about domestic violence themselves rather than refer a woman to another service. However, the rate of documented implementation of the assessment protocol dropped significantly in 1998 when meetings between the nurses and evaluators were less frequent, suggesting that ongoing monitoring may be important.

### Limitations

This study is limited because it does not have an experimental design. The women seen in 1994 may have been different than those assessed in 1996 and 1997-98 on some dimensions other than those addressed in this study. Of necessity, the process of determining whether or not identification or referral occurred was different in the experimental and comparison (baseline) conditions. Further research is needed to determine whether or not the identification of domestic violence and the referrals provided lead to different outcomes, and in what types of situations .

## **Part Two: Identification and Referral for Employee Assistance Counselors**

### **Background**

Violence against women by their male partners may significantly impair a woman's ability to perform effectively in a job setting, in addition to disrupting many other aspects of her life. However, it may be very difficult to identify domestic violence in a work setting because of the hidden nature of the problem and the possible reluctance of a woman to disclose this type of problem to co-workers. Because they become involved in situations where employees are

experiencing a variety of problems, employee assistance program (EAP) counselors are in a position to identify domestic violence and to take appropriate steps to intervene with this problem.

Unfortunately, EAP counselors often lack training and experience in assessing for domestic violence and making referrals in situations where violence is identified. This study evaluated the efforts of a domestic violence advocacy organization (the Domestic Abuse Intervention Project) to improve the response of EAP counselors to domestic violence. This project provided domestic violence training to EAP counselors, developed a domestic violence response protocol, and monitored its use by EAP counselors with their clients.

### **Hypotheses and Research Question**

Hypothesis 1b. Enhanced assessment for Employee Assistance Counselors will increase the percent of women being identified as experiencing domestic violence.

Hypothesis 2b. Enhanced assessment for Employee Assistance Counselors will increase the percent of women being referred.

Research Question. What factors influence the identification of domestic violence and referral to information or services by Employee Assistance Counselors?

### **Method**

#### **Population and Sample**

The case records of women who were seen by counselors as part of an employee assistance program offered by Lutheran Social Services called *LifeWorks Employee Resource* provided the study population. The study took place in a small city in the Upper Midwest. The range of industries served by *LifeWorks* includes government services, school districts, health care, manufacturing, banking and investments, consulting firms for marketing, engineering, architecture, synods of the Lutheran Church, food distribution, high tech industry, and human services. Approximately, 55% of the employees covered are blue collar workers. Counseling services are provided by professional masters level counselors and include assessment, referral and brief counseling. Client problem assessments focus on personal problems which have a direct, indirect or potential effect on work performance or personal well-being (Correspondence, T. Ollhoff, 1998).

The sample included 152 women seen in 1994, 199 women in 1997, and 238 women in 1998. Of the 199 women seen in 1997, 150 (75%) had forms in their case files indicating that a domestic violence assessment had been done. Of the 238 women seen in 1997, 137 (58%) had forms in their case files indicating that a domestic violence assessment had been completed. It is possible that additional assessments were completed, but that the data transfer forms were not completed or were, for some reason, not in the proper file.

The only demographic information consistently available from the employee assistance case files was age of the woman. Ages were somewhat different across the three years studied and are summarized in Table 7. Information on the ages of the women's partners was also available for

about 43% of the cases. The relation of this data to the hypotheses will be reported in the results section below.

**Table 7**

Ages of 1994, 1997 and 1998 Female EAP Clients

Age Groupings	1994 (N=152)	1997 (N=150)	1998 (N=137)	1997-98 (N=287)
Under 25	13%	10%	10%	10%
26-30	11%	12%	11%	11%
31-35	21%	17%	12%	15%
36-40	21%	24%	12%	20%
41-45	16%	15%	24%	19%
46-50	9%	10%	14%	12%
over 50	9%	12%	15%	13%
mean age	36.8	38.2	39.7	38.9

Design

The enhanced domestic violence assessment procedures were evaluated by using a non-equivalent comparison group design to determine whether the enhanced assessment procedures resulted in higher rates of identification and referral by employee assistance counselors. Data collected from case files during the baseline year (1994) prior to the initiation of the enhanced domestic violence assessment were compared to case file information from 1997 and 1998 when the enhanced assessment had been implemented.

Factors influencing identification and referral (related to the research question) were examined in several ways. Evaluators met with the EAP counselors regularly early in the project to discuss issues related to the screening and assessment process. The counselors completed a brief questionnaire related to screening and assessment activities in September, 1997 and participated in a focus group discussion of the entire process in March, 1999, which concluded with a brief questionnaire. Additionally, data collected from the current study were cross-referenced with information in the Domestic Abuse Information Network (DAIN), which provided information about women who had been identified by the criminal justice or criminal court system as having experienced domestic violence.

## Operational Definitions

Enhanced Assessment Protocol. The protocol involved three steps: screening, assessment, and intervention. Enhanced assessment was operationally defined as the use of the screening and assessment components of the protocol, which was developed in 1995, piloted in 1996, and fully implemented in 1997 and 1998. In 1994, women were asked to identify problem areas using a list that included “abuse” and “spouse”. Notes and comments entered into the file were reviewed to determine if there was any indication of domestic violence.

Screening and Risk Assessment. After a review of the literature, two questions were decided upon as the screening questions used to initiate the enhanced assessment. Discussion with advocates, previously battered women and counselors both verified and piloted these questions. The screening questions were: “Have you ever been afraid of being hurt by your partner?” and “Have you ever been hit, slapped, pushed or choked by your partner?”

If a woman responded “yes” to either of these questions, employee assistance counselors conducted a risk assessment by asking 20 questions designed to assess for danger of the situation (See Table 3 related to hypothesis 5 for risk factor questions). These questions were developed by Elliott and Shepard (1995) from a review of the literature, particularly the work of Campbell (1995) and Shepard (1992), and from practitioner’s experiences.

Identification of Domestic Violence. A woman was identified as having experienced domestic violence in 1994 if she marked that she had a problem with “abuse” and with her “spouse” and if a review of her file indicated that domestic abuse was a problem in her relationship. Because no systematic assessment for domestic violence occurred in 1994, the files did not often provide clear indication of the presence of domestic violence. Therefore, if spouse and abuse were indicated by the woman as a presenting problem and if any notes or comments in the file indicated the possible presence of domestic violence, domestic violence was deemed to be identified in that file.

For 1997 and 1998, a woman was identified as having experienced domestic violence if she answered “yes” to at least one of the two questions about having been afraid of being hurt by her partner or having been hit, slapped, pushed, or choked by her partner. The percent of women identified as experiencing domestic violence by employee assistance counselors was determined for all women seen in 1994 and for those women that were screened using the protocol in 1997 and 1998.

Domestic Violence Referrals. For 1997 and 1998, a woman was identified as being referred to domestic abuse services if the protocol form indicated that she was 1) directly referred to shelter or safe housing or 2) provided information about a range domestic abuse services that she could use and how to contact them. Referral directly to services or referral to information about services were among a number of responses that counselors could make to the identification to domestic violence (see appendix).

A woman was identified as being referred to domestic abuse services in 1994 if the case notes indicated a referral to any domestic abuse service listed on the forms used during 1997 or thereafter. Being provided information about domestic violence services was likewise indicated by mention in case notes that this information (again similar to that listed on the 1997 forms) was provided. The percent of women referred by employee assistance counselors was determined for all women seen in 1994 and for those women that were screened using the protocol in 1997 and 1998.

## Data Analysis

The percentages of women who were identified as experiencing domestic violence and the percentages of those provided information or direct referrals to services were determined for each year (1994, 1997 and 1998) and compared using the Chi Square or Fisher's Exact Test. Additionally, percentages from 1994 (baseline year) were compared to percentages from the enhanced assessment years (1997 and 1998) combined. T-tests were used to analyze whether or not clients' ages and partners' ages were comparable for the experimental and comparison groups. If ages were significantly different between different years, t-test analysis was incorporated to determine if age was related to any of the dependent variables.

Frequencies and percentages were calculated for closed-ended responses to the questionnaire completed by the employee assistance counselors in September, 1997. Open-ended responses to that questionnaire and the discussion in the focus group held in February, 1999 were analyzed qualitatively to identify important themes related to factors affecting identification of domestic violence and referral for services. Data in DAIN were examined to determine the numbers and percentages of women who were assessed by EAP counselors and also were provided domestic violence services locally. Special efforts were made to identify situations where a woman was not identified as experiencing domestic violence by EAP counselors but was recorded as receiving domestic violence services in the community.

## Results

### Implementation of Assessment Protocol

The data obtained indicated that the enhanced assessment protocol was generally followed during 1997 and 1998. Of the 199 women who saw an EAP counselor in 1997, 150 (75%) had forms in their case files indicating that a domestic violence assessment had been done. Of the 238 women seen in 1998, 137 (58%) had forms in their case files indicating that a domestic violence assessment had been done.

### Comparability of Groups

To determine the comparability of the comparison and experimental groups, the average age of the women assessed during the various years was computed (see Table 7) and compared using t-tests. The average age of women assessed in 1994 was 36.8, 38.2 in 1997, 39.7 in 1998, and 38.9 for combined 1997-98 (see Table 7). The mean age of women in the 1994 baseline comparison group was significantly less than women in the 1997-98 experimental group ( $t=2.16$ ;  $df=415$ ;  $p=.03$ ). The mean age for partners for whom age was available was 40.5 ( $n=27$ ) in 1994 and 40.8 ( $n=161$ ) in 1997-98; this difference is not statistically significant.

Additional analysis was conducted to see if client age was related to any of the dependent variables. The average age of the female clients was not significantly different based on whether or not women had been 1) identified as a victim of domestic violence, 2) referred to information, or 3) referred to service. These t-test analyses led to a conclusion that client age was not related to any of the three dependent variables.

## Identification

The data suggest that, when an enhanced screening and assessment protocol is used, a higher percentage of women were identified as experiencing domestic violence. When clients were screened in 1997 and 1998, significantly higher rates of identification occurred compared to rates in 1994 (See Table 8). In 1994 when the protocol was not used, only about 7% of female clients were identified as experiencing domestic violence. In 1997 and 1998 when the protocol was being used, approximately 20% of employee assistance female clients reported that they had experienced domestic abuse. In 1997, 6 of the 27 women identified as having experienced domestic violence indicated that the problem was resolved because the abuse was no longer occurring in their current relationship. In 1998, 7 of the 29 women also reported that this was the case. Therefore, the data suggest that about 15% of the women that were screened for domestic violence were currently experiencing domestic abuse.

**Table 8**

Percentage of 1994 EAP Clients Identified as Experiencing Domestic Violence Compared to Percentages Identified in 1997 and 1998

Year	n	freq.	%	Prob.
1994	152	10	6.6	
1997				
assessed only	140	27	19.3	.00*
all EAP clients	199	27	13.6	.03**
1998				
assessed only	137	29	21.2	.00*
all EAP clients	238	29	12.2	.07
1997-98 combined				
assessed only	277	56	20.2	.00*
all EAP clients	437	56	12.8	.04**

\*statistically significant at the .01 level or higher

\*\*statistically significant at the .05 level or higher

## Referral

The data provided some support for the hypothesis that the protocol would result in higher rates of referrals to domestic violence resources. Screened clients were more likely to be provided information about domestic violence resources (See Table 9). Four clients (2.6%) were documented to have received information about domestic violence services in 1994, while about 8% of assessed clients and 5% of all EAP clients were provided information about domestic violence services in 1997-98 when the protocol was used. Assessed clients were significantly more likely to receive information about domestic violence. When comparing all female EAP clients for 1997-98 to 1994 female EAP clients, no significant differences were found on being provided information.

**Table 9**

Comparison of Percentage of 1994 EAP Clients Provided Information about Domestic Violence to Percentages Provided Information in 1997 and 1998

Year	n	freq.	%	Prob.
1994	152	4	2.6	
1997				
assessed only	140	13	9.3	.02**
all EAP clients	199	13	6.5	.09
1998				
assessed only	137	9	6.6	.11
all EAP clients	238	9	3.8	.53
1997-98 combined				
assessed only	277	22	7.9	.03*
all EAP clients	437	22	5.0	.21

In 1994, 40% of the ten female clients identified as having experienced domestic violence received information (see Table 4). Among those clients who had ever experienced domestic violence in their current relationship in 1997-98, 37% received information about services; among clients who reported unresolved domestic violence, 48% received relevant information. These differences were not statistically significant.

**Table 10**

Comparison of 1994 EAP Clients Experiencing Domestic Violence who were Provided Information to those in 1997 and 1998

Year	n	freq.	%	Prob.
1994	10	4	40.0	
1997	27	13	48.1	.65
1998	29	8	27.6	.46
1997-98 combined	59	21	37.5	.88

Relatively few clients were referred directly to services in any of the years included in the study (see Table 11). Four of 152 clients (2.6%) were documented as being referred to services in 1994, and only 2 clients (less than 1% of those screened) were referred to services in 1997-98 when the protocol was used. This difference is not statistically significant when comparing 1994 referrals to clients who were assessed and referred in 1997-98. A higher percentage of women were referred to services in 1994 when compared to the percentage of all female EAP clients who were seen by counselors in 1997-98.

**Table 11**

Comparison of Percentage of 1994 EAP Clients Directly Referred to Percentages Directly Referred in 1997 and 1998

Year	n	freq.	%	Prob.
1994	152	4	2.6	
1997				
assessed only	140	2	1.4	.38
all EAP clients	199	2	1.0	.24
1998				
assessed only	137	0	0	.08
all EAP clients	238	0	0	.01*
1997-98 combined				
assessed only	277	2	.7	.12
all EAP clients	437	2	.5	.02**

\*statistically significant at the .01 level or higher

\*\*statistically significant at the .05 level or higher

When considering only women who were identified as victims of domestic violence, 40% of those identified in 1994 were referred directly to services, but only about 4% were referred to services in 1997-98. While the number of referrals is small (six during the three years), these differences are statistically significant. See Table 12.

**Table 12**

Comparison of 1994 EAP Clients Experiencing Domestic Violence who were Directly Referred to those in 1997 and 1998

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Year	n	freq.	%	Prob.
1994	7	3	42.9	
1997	27	2	7.4	.03**
1998	29	0	0	.00*
1997-98 combined	54	2	3.6	.00*

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\*statistically significant at the .01 level or higher

\*\*statistically significant at the .05 level or higher

#### Factors Affecting Identification and Referral

A number of factors affecting identification of domestic violence and referral to services were identified during this study. Ongoing meetings between the EAP counselors and the evaluators provided important information about the assessment process. Counselors reported that an important reminder to completing the domestic violence assessment was the presence of the reporting form in the client's file folder. Some counselors also reported some initial discomfort asking about domestic violence, but that the assessment became more routine as time progressed.

The questionnaire completed by the EAP counselors in September, 1997 provided additional information about the assessment process. The six counselors completing this form reported that 1) the form used for reporting the assessment process was easy to use, 2) the materials describing the assessment process were clear, 3) the training for doing the assessment was valuable, 4) the assessment reports were clear, and 5) the reports and discussion were valuable. They also

reported that the DAIP staff provided support or information when needed. Responses were mixed on whether doing the screening/assessments helped them to become more sensitive to domestic violence.

The open-ended responses to the September, 1997 questionnaire indicated that having a protocol with specific questions to ask and having information resources to give to women were very important. Aspects of the process that could be improved included having simple reporting forms available and being able to discuss specific cases with DAIP staff occasionally. Recommendations for EAP counselors implementing assessment in another setting included 1) training in use of the assessment protocol, 2) ongoing connection with DAIP staff to ask questions, 3) having proper forms available on a consistent basis, and 4) consistently documenting the assessments that are made.

The focus group discussion that occurred after the termination of the research study in March, 1999 confirmed previous information about the assessment process. The counselors reported that they might be assessing for domestic violence but that the form documenting the assessment may not have been filled out or not have been transferred to the proper file for inclusion in the study. Counselors reported that the important learnings from the project included that 1) it was important to ask the assessment questions, 2) assessing became more comfortable with time, 3) training was helpful, 4) knowing domestic violence resources was important, and 5) all segments of the population should be screened.

Comparing information collected during the assessment process and the data available through DAIN indicated that there was limited overlap in the women seen by EAP counselors and the women who were documented having contact in the court system. Only six women of 277 assessed by EAP counselors were included in DAIN records. Of these six, four (67%) had been identified as experiencing domestic violence by EAP counselors and an additional woman was in the DAIN system with an unknown partner after the visit to the EAP counselor. The sixth woman was in the DAIN system with a different partner than had been identified during the assessment by the EAP counselor.

## **Discussion**

### **Conclusions**

This study provides documentation that women who seek help from EAP counselors may be experiencing domestic violence (as many as 15%), while others may be experiencing the negative effects of past abuse. Previous research (although sparse) has found that domestic violence does negatively affect the work performance of battered women. This is clearly an issue that employee assistance programs should be giving greater attention.

The study provides support for the use of a domestic violence protocol to improve rates of identification of domestic violence among EAP female clients. Only about 7% of female clients were identified as victims of domestic violence in 1994 before the assessment protocol was used,

whereas 15-20% of female clients were identified in 1997 and 1998 when the protocol was used. Identifying these additional clients allows EAP counselors the opportunity to recognize and address a serious issue.

This study also provides some support for the hypothesis that counselors will be more likely to refer clients to information and services for domestic violence. Counselors were more likely to provide clients information about services for domestic violence when the assessment protocol was used in 1997 and 1998, as contrasted to 1994 before use of the protocol was begun. Very few counselors referred women directly to services during any year of the study, although, contrary to expectation, more women were referred to services in 1994 than in subsequent years. After training, the EAP counselors had more information and resources about domestic violence and may have provided some services to women themselves rather than to refer them to outside services directly.

Employee assistance programs provide an excellent opportunity to identify and intervene in domestic violence. The results reported above indicate that it is possible to increase the rate of identification of women experiencing domestic violence if an assessment protocol is used, and information can be more regularly provided to these women. Additionally, relatively few of the women assessed are identified in the court system and the network of domestic violence services. Employee assistance programs may therefore represent a unique opportunity to prevent domestic violence among the population of women who seek services from these programs.

#### Limitations

This study is limited because it does not have an experimental design. The women seen in 1994 may have been different than those assessed in 1997-98 on some dimensions other than those addressed in this study. Of necessity, the process of determining whether or not identification or referral occurred was different in the experimental and comparison (baseline) conditions. Further research is needed to determine whether or not the identification of domestic violence and the referrals provided lead to different outcomes, and in what types of situations .

### **Part Three: Discussion of Hypothesis 1 Identification and Hypothesis 2 Referral**

#### **Identification of domestic violence with an enhanced assessment protocol**

The results of this study indicated that using an enhanced assessment protocol can increase the percent of women that are identified as experiencing domestic violence, but that this increase was not statistically significant in all settings. EAP counselors tripled the percentage of women identified as experiencing domestic violence in an office setting when a women, who had voluntarily come to the counselor for some kind of assistance, was assessed in private. Public health nurses identified up to 50% more women using an enhanced assessment protocol, but this increase was not statistically significant. Nurses assessed women in their homes when visiting women as part of a maternal and child health care program.

Very different percentages of identification occurred in the two settings. EAP counselors identified about 20% of assessed women as having experienced domestic violence, and public health nurses identified about 8% of women overall. Comparison to civil and criminal justice data on women who were receiving services for domestic violence indicated that EAP counselors had identified almost all of the women who were receiving services, but that only about 28% of those who were receiving services were identified in the public health setting. The privacy of the assessment setting, the type of professional, the nature of the professional/client relationship, the reason for client contact, the effectiveness of the assessment protocol for specific types of clients, and the percentage of women who have actually experienced domestic violence may all be factors leading to different rates of identification.

### **Referral to Domestic Violence Services**

There was strong support for the hypothesis that referral to domestic violence services can be increased using an enhanced assessment protocol. Both the EAP counselors and the public health nurses were documented as increasing referral to information about domestic violence services for their clients. Knowing about these services and having resources to give to clients were important factors in this increase. The results indicated that it can be important to provide information about domestic violence services even if a woman is not identified as experiencing domestic violence, as some public health clients who were not identified, but who received information, subsequently sought domestic violence services.

The hypothesis that referral to services would increase when the enhanced assessment protocol was used received some support among public health nurses, but very few women were directly referred to domestic violence services in either setting. Overall, only 1-2% of assessed women were directly referred to services and about 8% of identified women were referred directly to services. There was indication that the rate of referral for public health nurses was higher in the one year (1997) that the assessment protocol was most regularly used. For EAP counselors, a higher percentage of identified women were actually referred directly to services in 1994 than in 1997-98 when an enhanced assessment protocol was used. One reason for the low overall rate of referral to services may be that professionals using the enhanced assessment have many alternative ways to respond to domestic violence, so that giving information about services or providing more information about domestic violence in general may obviate the need to refer immediately to another agency. Professionals may also value client self-determination in providing information about services and then leaving the decision to seek these services to the woman herself.

### **Factors Influencing Identification and Referral**

A number of factors were identified as important in implementing an effective enhanced assessment protocol. Both public health nurses and EAP counselors emphasized the importance of training in implementing a protocol. Having a clear process in place for assessment and developing consistent, specific questions to ask were important components of the training. Both nurses and counselors reported that assessing became easier over time. Many of them also reported that a side benefit of the training and ongoing assessment was that they became more sensitive to domestic violence issues.

It was apparent, however, that implementing and documenting completion of the enhanced assessment protocol was difficult. Overall, about 73% of EAP clients and 50% of women who received home visits from public health nurses were documented as having received an enhanced assessment. Based on interaction with these professionals, it is likely that assessment actually occurred for a higher percentage of women, but that the documentation of assessment did not always make it to the evaluators. Nevertheless, the rate of documented assessment was lower than anticipated. Results indicated that having specific forms for assessment consistently in files facilitates assessment occurring. Also, monitoring the rate of implementing the assessment protocol may be important, as the percentage of women documented as being assessed decreased as evaluators met with nurses and counselors less frequently to monitor results.