Intimate partner violence (IPV) is a pervasive health problem for women that can cause serious injuries or death. It also results in significant inpatient and outpatient health costs, an economic burden to society, and devastating social and family intergenerational consequences. Detection of IPV by health care providers is a complex process involving multiple barriers. Several methods for detection or screening have been recommended, but there are few studies examining patients’ preferences for any of these detection methods.

We previously reviewed and evaluated published IPV screening instruments. The issue of detection, when clues for IPV are present, versus screening is complex. Several authorities have recently concluded that they could not recommend for or against screening all women for IPV because there were no outcome studies available that demonstrated improved outcomes as a result of screening. However, existing research also strongly supports the importance of IPV detection, and doing so in the context of excellent clinical communication and a positive clinician-patient relationship.

Nearly all of the research suggests that the best approach is to directly ask patients about the presence of IPV in a closed-ended questioning style, yielding a yes/no or similarly short answer response. The Woman Abuse Screening Tool (WAST), however, asks patients about violence in an indirect manner before asking directly about abuse. Similarly, abused women’s recommendations for communication with physicians included using active listening approaches; asking for questions and concerns; exploring verbal, behavioral, situational, and contextual clues; responding to their feelings and validating their experiences; examining them with sensitivity and dignity; and empowering them to be active participants in the decisions being made about their care (and their safety).

This study’s purpose was to investigate patients’ preferences for IPV assessment in a clinical setting in
which there are verbal and nonverbal clues that IPV might be possible. To this end, we elicited women patients’ preferences for assessment of IPV in a primary care clinic and examined whether these preferences were associated with a prior history of IPV. Because of the lower rate of disclosure found with written versus oral questioning, \(^{46}\) written questionnaires were not used.

**Methods**

**Participants**

After obtaining University Institutional Review Board approval, a convenience sample of women was recruited by a female medical student working as a research assistant in a family medicine residency clinic waiting room from June–July 2000 and March 2001. During the data collection periods, the research assistant approached all females over age 18 in the waiting area who were not in obvious physical discomfort. If more than one potential participant was in the waiting area when she was ready for the next participant, she selected the one seated closest to the door. The clinic, located in Southern Appalachia, serves a population of mostly Caucasian females, the majority of whom are of lower socioeconomic status and enrolled in Medicaid.

**Detection Approaches**

The Partner Violence Screen (PVS), a three-item questionnaire, was designed to address physical violence and patient perception of safety. The PVS detects between 65% and 71% of women with a history of IPV. \(^{32}\) Responses to the first question, “Have you been hit, kicked, punched, or otherwise physically hurt by someone in the past year?”, correlate substantially with scores on the full scale. \(^{32}\)

The Woman Abuse Screening Tool (WAST) has been recommended for use in primary care settings. \(^{28}\) This seven-question tool initiates the IPV inquiry with indirect questions about arguments and tension in a relationship before more-direct questions about fear and types of abuse. Reliability is 0.95, and 92% of abused women are correctly identified. \(^{33}\) A two-question version, the WAST-short, using the two most acceptable questions, has been demonstrated to perform as well as the long version. Comfort with the items has been assessed. \(^{33}\) In an effort to compare the broadest range of WAST question acceptability to the PVS and PC approaches, we used the two questions with the previously reported highest and lowest acceptability rather than the WAST-short.

In general, a patient-centered (PC) approach places substantial emphasis on eliciting the patients’ ideas, concerns, expectations, and personal experience regarding their problem. \(^{47}\) In the quest for understanding, active listening refers to the physician’s recognition and exploration of clues that imply, rather than explicitly state, some unspoken concern. \(^{48}\) In this study, a PC approach is one that notes and explores some verbal or nonverbal clue to the possibility of IPV, thereby encouraging the patient to more explicitly identify potential IPV. \(^{28}\) This approach has been postulated to be useful in IPV \(^{28}\) but has not been previously evaluated for this purpose.

**Procedure**

Preferences for IPV assessment were evaluated using a stimulus video approach. This method has been successfully used to determine patient preferences for physician inquiry into sexual behavior, dealing with patients’ anger, addressing patients’ worry, and assessing the impact of physician sitting versus standing during a consultation. \(^{40-52}\)

After giving informed consent, participants viewed a 5-minute videotape depicting an encounter between a female physician and a female patient. The patient in the videotape displayed a facial bruise, described headache symptoms, and referred to a stressful situation at home. In addition to the physical clue of the bruise, the patient provided the following verbal clue that she is experiencing a problem, potentially IPV: “Well, things have been a lot more stressful lately. You know, the plant’s on shut-down, and Jimmy’s been off work, and [pause] well [pause] it’s a hard time. You know, sometimes I wonder if these headaches could be due to stress.” Another clue included the para-verbal clue with the pauses as she said “it’s a hard time.”

Participants then viewed three approaches to detection of possible abuse (Table 1): The first approach was a direct closed-ended approach using the Partner Violence Screen (PVS). \(^{32}\) The second was an initially less direct, closed-ended approach using two questions from the Woman Abuse Screening Tool (WAST). \(^{33}\) The third was a patient-centered approach, using active listening to explore the patient’s clues. As a means of reducing the effect of primacy and recency, the video presentation of each of the three approaches was systematically varied, so each approach was presented first, second, or third equally with differing antecedent approaches. Thus, there were six versions of the video presentations with their evaluation forms, as noted in Table 1.

**Measures**

Participants first completed questionnaires containing seven demographic factors and the question “Have you ever suffered domestic violence?” If they had suffered IPV, participants were asked whether they had disclosed this information to their physician.

Next, participants evaluated the three detection methods viewed in the video. The forms corresponded to the order of the three approaches that they had viewed on the video. For each question, the transcription of
the IPV assessment inquiry was written out beside the options A, B, and C (Table 1). First, they were asked to rank the three methods in order of preference. Second, they were asked if any of the methods should be avoided. Third, they were asked to rate each of the three methods of IPV assessment according to whether “I would like my doctor to respond this way,” “I would feel comfortable with this response,” “I would feel able to tell my doctor all about the problem I was having,” and “If I were being physically, emotionally, or sexually abused by my partner, this response would help me to tell my doctor.” Participants recorded their responses to these four items on 10-cm visual analog scales labelled “not at all” at one end and “very much” at the other.

Third, participants were also asked, “Using your own words, please state what the doctor should say to a woman in this situation.” Then, to give participants as much space as needed to record their written responses, they were given a blank sheet of paper with six empty lines. These responses were transcribed and coded by four of the authors.

Finally, all women in the second data collection period were asked to participate in an additional in-depth interview if they had time after they had completed the above procedure. These responses were transcribed and then coded by two of the authors. This section was added to the study as a modification to explore participants’ experiences with domestic violence when the numbers who had reported having suffered domestic violence were significantly higher than we expected in the first data collection period.

### Data Analysis

Characteristics of the sample were summarized using descriptive statistics. Reliability analyses, involving the computation of internal consistency estimates, were performed on the four visual analog items separately for the three assessment tools. To compare the two IPV experience groups on background variables, t tests (continuous variables) and chi-square analysis (categorical variables) were used. The Wilcoxon Signed Ranks test was used to compare the preference and avoidance rankings for the three screening methods. Finally, ANOVA (for continuous variables) and chi-square analysis (for categorical variables) were used to examine the associations between preferred assessment approach and demographic characteristics.

Qualitative methods analyzed the responses to the open-ended question asking participants what the doctor in the videotaped scenario should say. The communication themes that emerged from the data are shown in Table 2 and were used to code the responses to this question. Once all four coders agreed on these themes, the written responses of the participants were coded by each coder independently using this template. Where there was agreement of fewer than three of the four coders about which code to assign, consensus was obtained through discussion of all four coders. These data were used to see whether the women’s responses “in their own words” correlated with their choices of the three approaches, or if there were additional approaches a number of women preferred to the three being tested.
Qualitative methods were also used to code the responses of the participants for the 20 in-depth interviews. These interviews were transcribed, organized by the responses to the interview questions, and coded by two of the authors for themes related to domestic violence. These were used to determine whether the women’s experiences with IPV were accurately categorized by their endorsement of having suffered domestic violence or not.

**Results**

**Characteristics of Participants**

Of the 99 women approached, 97 (98%) agreed to participate in the study. Of the two women who refused to participate, one had children with her, and the other had a partner who refused to leave her side for the study. These 97 women were representative of the clinic population based on age, race, and education and economic characteristics.

With respect to IPV, 38 participants (39%) answered “yes” to the question, “Have you ever suffered domestic violence?” Those who reported IPV had significantly more children and were more likely to be divorced or separated than those not reporting IPV (Table 3). Thirteen of the 38 women (34.2%) who had experienced IPV said they had reported it to a physician.

**Preferences for Domestic Violence Detection Approaches and Association With IPV Status**

The PC approach was the most preferred IPV assessment method, followed by the WAST items (Table 4). The PVS was significantly less preferred than the PC approach ($z=-4.12, P<.001$) and WAST ($z=-5.01, P<.001$). Repeating the analysis separately for patients with domestic violence or without domestic violence showed the same preference pattern.

The four 10-cm visual analog scale scores for each of the three IPV assessment approaches were highly correlated. Internal consistency estimates for the three approaches were 0.87 for the PC approach questions, 0.95 for the PVS questions, and 0.93 for the WAST questions. Because of the high internal consistency, a total scale score for each assessment approach was calculated as the sum of the four visual analog scale scores. The score for each approach thus represents patient preference for that approach using a combination of subjects’ perception of comfort and effectiveness. The total scale scores

<table>
<thead>
<tr>
<th>Table 2 Coding Categories for Participant Responses to “State What the Doctor Should Say to the Woman in This Video”</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Patient-centered responses (rapport, facilitation, active listening, verbal and nonverbal clues in the video), patient perspective (asks about ideas, concerns, expectations), common ground (brainstorming)</td>
</tr>
<tr>
<td>2. Directly asks about the abuse/hitting/punching/hurting</td>
</tr>
<tr>
<td>3. Asks about relationship with husband, how husband may be doing, safety in relationship</td>
</tr>
<tr>
<td>4. Advises against mentioning abuse, hitting, punching</td>
</tr>
<tr>
<td>5. Diagnostic questions about headache, own health issues, not related to intimate partner violence</td>
</tr>
<tr>
<td>6. Therapeutic/provides counseling</td>
</tr>
<tr>
<td>7. Confidentiality suggestions</td>
</tr>
<tr>
<td>8. Don’t know</td>
</tr>
<tr>
<td>9. Missing data</td>
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</tbody>
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<tr>
<th>Table 3 Background Characteristics by IPV Status</th>
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<tbody>
<tr>
<td><strong>No History of IPV</strong> (n=59)</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Number of children</td>
</tr>
<tr>
<td>Race (% Caucasian)</td>
</tr>
<tr>
<td>Marital status (% married)</td>
</tr>
<tr>
<td>Education (% high school diploma or less)</td>
</tr>
<tr>
<td>Annual income (% &lt; $20,000)</td>
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</tbody>
</table>

Note: Values represent mean (range) except where indicated.

IPV—intimate partner violence

NS—not significant

<table>
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<tr>
<th>Table 4 Comparison of Preferences for Screening Methods</th>
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<tbody>
<tr>
<td><strong>PC Approach</strong></td>
</tr>
<tr>
<td>SD</td>
</tr>
<tr>
<td>Ranked First</td>
</tr>
<tr>
<td>Ranked Second</td>
</tr>
<tr>
<td>Ranked Third</td>
</tr>
</tbody>
</table>

SD—standard deviation

PC—patient-centered

PVS—Partner Violence Screen

WAST—Woman Abuse Screening Tool

Note: PVS significantly different (P<.001) from PC and WAST
also yielded significant differences between the PVS Total Scale Score and both the WAST \( (t = 7.2, P < .001) \) and the PC Total Scale Scores \( (t = 6.51, P < .001) \). The total scale scores did not differ significantly between the WAST and PC Total Scale Scores.

Almost half of the women recommended that clinicians avoid the PVS (Figure 1). The recommendation was even stronger if the woman had suffered domestic violence. None of the women with a history of IPV recommended that the PC questions be avoided.

Only two participants failed to respond at all, and another three indicated that they “did not know” when asked to write what the physician should say to the woman in the video. More than two thirds gave responses that were PC. Twenty percent of participants gave responses that combined two or three different approaches. All of them recommended a PC response as one of the approaches. More than half of the responses that were similar to the PVS or WAST indicated combined approaches. PC suggestions were given significantly more often than PVS, WAST, and diagnostic questioning \( (P < .000) \). There was no significant correspondence between the coded statements and the ranking of approaches. There were no significant differences among women’s preferences for the preferred approach to detection by any demographic characteristics, including age, marital status, education, income, and race.

**Results of the Interviews**

Of the 23 women approached for in-depth interviews, 20 (87%) agreed to participate. Of the three who declined to participate in the in-depth interview, one had experienced abuse and two had not. Their demographics were similar to those of the other subjects; they cited time constraints as the reason for not wanting to participate in the interview.

Through the 20 in-depth interviews conducted to further investigate participants’ reports of domestic violence, we obtained further evidence that all of the women who had reported domestic violence (7/20) had personally experienced physical (7/7) and/or sexual (5/7) violence at the hands of one or more intimate partners. Of the 13 who had initially denied having suffered IPV, none disclosed experiencing IPV during the in-depth interview, although all but two (11/13) reported having close contact with someone who had suffered IPV.

**Discussion**

This study demonstrates that women prefer that their physician use a PC approach or the WAST when asking about IPV. These results were the same whether we used quantitative or qualitative methodologies. Despite previously published recommendations for direct questioning, almost half of patients recommended avoiding the direct closed-ended questions of the PVS, with the strongest recommendation coming from those who had actually suffered domestic violence.\(^1\)\(^2\)\(^6\)\(^3\)\(^2\)\(^8\)\(^4\)\(^2\) This finding is particularly salient given that the lead question of the PVS, “Have you been hit, kicked, or punched by someone in the past year?” has been recommended in the literature for 20 years and is widely used in other IPV detection approaches such as the Adult Abuse Screen (AAS).\(^1\)\(^2\)\(^6\)\(^3\)\(^2\)\(^8\)\(^4\)\(^2\) The comfort and suitability of the PC approach and WAST questions were not affected by age or any demographics or by a history of domestic violence.

Use of the patient-centered approach, however, is contingent on the patient providing clues to the possible presence of the problem and on the clinician recognizing and responding accordingly. In one study, physicians responded to patients’ clues only 21%–38% of the time.\(^5\)\(^3\)\(^4\)\(^2\) In the absence of clues being provided and recognized, a detection strategy to assess IPV in clinical settings is still needed. Patients preferred even the least acceptable WAST question over the PVS. It
Limitations and Recommendations
for Future Research

A limitation of the present study is that the participants were a convenience sample from a single clinic population in the Southern Appalachia area. This clinic serves predominantly white patients. While subjects’ demographics were similar to that of our regional population, generalizability to other populations is uncertain. Additional research is needed to replicate this study with more-diverse populations.

The results of the current study also suggest other areas for future research. One such study might examine the effectiveness of a PC approach when clues to IPV are present, supplemented by another detection approach when physical, verbal, nonverbal, or contextual clues are not evident. Other studies might examine use of ubiquity or transition statements about IPV prior to use of the detection method and the role this plays in detection. Additionally, future studies might explore whether or not a direct closed-ended approach with more sensitive phrasing might make a difference in participant responses. Further evaluation of specific questions, such as “Have you suffered domestic violence?” as detection items might provide more data on the issue of evaluating the direct closed-ended response. It would also be useful to know if screening for IPV on a case-by-case basis is more effective or acceptable to women than universal screening. Further, work is needed comparing a video approach to IPV detection to written or verbal approaches.

Conclusions

Based on our results, physicians and patients would be best served using a PC approach or the Woman Abuse Screening Tool to detect IPV in the clinical setting. In contrast, direct questions such as those that make up the PVS would best be avoided. Such preferences for IPV assessment appear to be unaffected by demographic characteristics, including a history of IPV, and should be considered in both detection and screening. Thus, if a patient presents clues and the physician is responsive to those clues, the patient-centered approach is preferred. The Woman Abuse Screening Tool should be selected if patients do not present clues.

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