

# Screening for Abuse in Spanish-speaking Women

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**Background:** Domestic violence is a major personal and public health concern affecting women of all walks of life. Physicians have reported the need for screening instruments to help recognize abuse; several have been validated in English. No screening tools thus far have been validated in other languages.

**Methods:** We translated a previously validated tool, the Woman Abuse Screening Tool (WAST), into Spanish. To assess for validity, we compared responses of Spanish-speaking abused and nonabused respondents drawn from a community health center and a battered women's shelter. There were 27 women in the abused group and 34 women in the nonabused comparison group.

**Results:** The scale was found to be reliable with a Cronbach  $\alpha$  of 0.91. The mean WAST Spanish scores were significantly different between the two groups, indicating this tool would be a valid screening instrument. A short form using the two most reliable questions was developed as a more rapid screening tool for office use, achieving a specificity of 94% and a sensitivity of 89%.

**Conclusions:** The Spanish version of the WAST successfully discriminated between Spanish-speaking nonabused and abused women. The short form might help physicians reliably screen for abuse in Spanish-speaking women. (J Am Board Fam Pract 2002;15:101–11.)

Intimate partner violence has been determined to be a major public health concern, contributing to poor physical and mental health in affected persons, primarily women.<sup>1–3</sup> Because of documented poor detection rates of domestic violence by physicians,<sup>4,5</sup> the medical community has focused increasing attention on recognizing and providing treatment for victims in various contexts, including emergency department<sup>6–9</sup> and outpatient practice settings.<sup>10–12</sup> Several instruments have been developed to increase physicians' ability to detect violence.<sup>11,13–16</sup> Four of these instruments have been validated in English.<sup>13–16</sup>

Studies suggest that partner violence occurs in women of all socioeconomic and educational attainment,<sup>17–19</sup> in all types of communities,<sup>20–22</sup> and among different ethnic groups<sup>22–26</sup> and nations.<sup>27–29</sup> Despite the knowledge that violence occurs in all communities, there is relatively little published research about domestic violence among

diverse ethnic groups and among economically disadvantaged communities.<sup>30</sup>

Some research is available on Hispanic women's experience of domestic violence. Torres' shelter-based study of Mexican-American women<sup>31</sup> found no difference in the types of abuse experienced compared with Anglo-American women, but Mexican-American women viewed certain types of emotional abuse as less abusive than did Anglo-American women. In addition, this study found that the Mexican-American women stayed in abusive relationships longer. Another study showed a trend toward abused Hispanic women reporting abuse less frequently to law enforcement agencies or seeking medical attention less often compared with abused Anglo-American women.<sup>25</sup> In several studies of rural Spanish-speaking women,<sup>32–34</sup> no statistically significant difference in types of abuse was found between Anglo-American and Hispanic respondents, although there was a slight trend toward more physical abuse among the Hispanic women.

Some authors have addressed cultural factors that might contribute to violence,<sup>35–37</sup> but few articles have addressed the unique problems of exposing violence among non-English speakers. Recent research conducted from the patient perspective has described factors making an abused woman more or less likely to disclose abuse to a health care professional.<sup>38–40</sup> Patients in these studies stated they would be more able to disclose abuse if asked directly and in a manner that com-

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municated respect, compassion, and belief. A qualitative study including abused Latino and Asian immigrant women reflected similar findings.<sup>41</sup>

The barriers experienced by both physicians and patients in addressing domestic violence are considerable, and questionnaires that can be used by health care providers for routine screening could help clinicians inquire more routinely about violence in their patients' lives. To date, efforts have focused on developing tools for English-speaking patients; to our knowledge, no one has validated instruments in languages other than English. We wanted to know whether translated versions of screening tools developed for and studied with English-speaking women will be useful for screening women from non-English-speaking or ethnic minority groups.

The Woman Abuse Screening Tool (WAST)<sup>13</sup> is an English-language questionnaire originally based on literature review and discussions with family physicians. This eight-item questionnaire was administered, together with the Abuse Risk Inventory,<sup>42</sup> to a sample of abused English-speaking women and a comparison sample of nonabused English-speaking women. The WAST was found to be valid and correlated well with the Abuse Risk Inventory. One of the eight questions was eliminated at the conclusion of the study because of poor internal correlation with the WAST scale. Study participants were also asked to comment on their comfort level with the questions.

We evaluated the ability of a Spanish translation of the WAST to recognize women who suffer from domestic abuse.

## Methods

### Study Design

This study tested a Spanish version of the WAST (Figure 1) to assess its ability to discriminate between abused and nonabused women; women's comfort with the instrument was also evaluated. We selected a group of abused women from an urban women's shelter and from a farm worker outreach program at a rural community health center. We selected a comparison group of nonabused women through the same sites.

Interviewers at both sites received instruction in selecting participants and, for the comparison group of nonabused women, in reading a standard script that would encourage the woman not to

participate if she believed she was abused. Both groups of women were told that participation was optional, and they could decline to participate for any reason without needing to state the reason. Once a woman agreed to participate, the interviewers obtained informed consent and ensured anonymity. The interviewers then elicited demographic information from each participant, after which they administered the eight-item Spanish version of the WAST. The interviewers read the questions face-to-face with the participant in a manner similar to that which might be achieved in a clinical encounter.

After responding to the WAST questions, each woman was asked to complete a questionnaire indicating her level of comfort with each question of the WAST and her hypothetical comfort should these questions be asked by her physician. The interviewers offered assistance for those clients who could not complete these sections independently because of reading or comprehension difficulties. We then evaluated two pairs of WAST questions to produce a WAST short screening tool.

The Human Subjects Research Board at the University of Rochester and each study site approved the study design and instruments.

### Study Sample

The study was conducted with women from two different sites and populations. At the first site, a rural community health center, women were recruited who were mostly Mexican or Mexican-American migrant farm workers. At this site the outreach coordinator, who was a former farm worker and has served as the migrant outreach coordinator for the health center for more than 10 years, knew the community well. With her input we generated a list of clients with whom she had worked, separated into an abused group and a non-abused group. All women were approached to participate by one of two bilingual outreach workers (not the coordinator) and asked to volunteer for the study. Participants at this site were interviewed in private either at one of the two health center offices or in their homes or community.

The second site was an urban battered women's shelter in a midsize city in upstate New York. The Spanish-speaking coordinator at this site conducted all the interviews. She recruited Spanish-speaking abused women from the shelter client list (either former or current clients) and selected a compari-

# **Women Abuse Screening Tool** **Pruebas De La Violencia Contra La Mujer**

1. In general, how would you describe your relationship?  
*En general, como describiría usted su relación con su pareja?*

<input type="checkbox"/> A lot of tension	<input type="checkbox"/> Some Tension	<input type="checkbox"/> No tension
<input type="checkbox"/> <i>Mucha tensión</i>	<input type="checkbox"/> <i>Alguna tensión</i>	<input type="checkbox"/> <i>Sin tensión</i>
  
2. Do you and your partner work out arguments with:  
*Usted y su pareja resuelven sus discusiones (argumentos) con...*

<input type="checkbox"/> Great difficulty	<input type="checkbox"/> Some difficulty	<input type="checkbox"/> No difficulty
<input type="checkbox"/> <i>Mucha dificultad</i>	<input type="checkbox"/> <i>Alguna dificultad</i>	<input type="checkbox"/> <i>Sin dificultad</i>
  
3. Do arguments ever result in you feeling down or bad about yourself?  
*Al terminar las discusiones usted se siente decaída o mal con usted misma?*

<input type="checkbox"/> Often	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Never
<input type="checkbox"/> <i>Muchas veces</i>	<input type="checkbox"/> <i>A veces</i>	<input type="checkbox"/> <i>Nunca</i>
  
4. Do arguments ever result in hitting, kicking, or pushing?  
*Las discusiones terminan en golpes, patadas, o empujones?*

<input type="checkbox"/> Often	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Never
<input type="checkbox"/> <i>Muchas veces</i>	<input type="checkbox"/> <i>A veces</i>	<input type="checkbox"/> <i>Nunca</i>
  
5. Do you ever feel frightened by what your partner says or does?  
*Siente miedo de lo que su pareja diga o haga?*

<input type="checkbox"/> Often	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Never
<input type="checkbox"/> <i>Muchas veces</i>	<input type="checkbox"/> <i>A veces</i>	<input type="checkbox"/> <i>Nunca</i>
  
6. Has your partner ever abused you physically?  
*Su pareja ha abusado de usted físicamente?*

<input type="checkbox"/> Often	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Never
<input type="checkbox"/> <i>Muchas veces</i>	<input type="checkbox"/> <i>A veces</i>	<input type="checkbox"/> <i>Nunca</i>
  
7. Has your partner ever abused you emotionally?  
*Su pareja ha abusado de usted emocionalmente?*

<input type="checkbox"/> Often	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Never
<input type="checkbox"/> <i>Muchas veces</i>	<input type="checkbox"/> <i>A veces</i>	<input type="checkbox"/> <i>Nunca</i>
  
8. Has your partner ever abused you sexually?  
*Su pareja ha abusado de usted sexualmente?*

<input type="checkbox"/> Often	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Never
<input type="checkbox"/> <i>Muchas veces</i>	<input type="checkbox"/> <i>A veces</i>	<input type="checkbox"/> <i>Nunca</i>

**Figure 1. Women Abuse Screening Tool (Pruebas de la Violencia Contra la Mujer).**

son group of nonabused women from her community contacts and outreach activities. Women at this site were similarly asked to participate voluntarily, assured of anonymity, and given information on informed consent for review. Participants at this site were interviewed at the shelter or in the community with the exception of one interview, which was conducted by telephone because of scheduling difficulties.

As in the English validation study, we wanted to separate groups into abused or nonabused women. All participants were Spanish-speaking women 18

years old or older and had been in an intimate relationship within the last year. A few of the migrant farm worker women spoke Mixteco as a first language; these women were included in the study only if their ability to speak and understand spoken Spanish was sufficient for routine clinical interaction with other Spanish speakers. Women whose first language was English were excluded.

From September 1998 through February 1999, 65 eligible women were approached to participate at the two sites. Four women did not follow through and participate: 1 in the abused group

because her partner returned to pick her up, and 3 women in the nonabused comparison group who declined for unspecified reasons. After accounting for these exclusions, there were 61 women in the total study sample: 27 women were in the abused group, and 34 were in the nonabused comparison group. Thirty-three women participated through the community health center and 28 through the battered women's shelter program.

### **Study Instrument**

For this study we added an additional (eighth) question regarding sexual abuse to the WAST. This question has been added to the WAST in other ongoing studies with English-speaking and French-speaking populations. The principal investigator (CTF) made an initial translation of the WAST into Spanish, and the health center outreach coordinator made modifications as needed (Figure 1). A different bilingual outreach staff member who was not otherwise participating in the study performed back-translation to ensure accuracy.<sup>43,44</sup> We similarly translated and back-translated the instruments to assess the women's comfort level with the survey questions.

### **Data**

We collected demographic data on all participants as follows: participant's age, her partner's age, marital status, length of relationship, participant and her partner's employment status, household income, primary language, self-reported ability to speak English, place of origin, length of time in the United States, and the participant and her partner's level of educational attainment.

The WAST tool consisted of eight questions as previously described. The participant could give one of three possible answers to each question (Figure 1). For data analysis numeric scores ranging from 3 to 1 were assigned to the above answers.

The women completed numeric comfort ratings on each question as noted above, ranging from very uncomfortable (1) to very comfortable (4).

As in the Brown et al study,<sup>13</sup> we wanted to assess the reliability of two questions as a shorter screening tool. We examined two different sets of questions: first, the two questions that were most comfortable for women to answer; and second, the two questions that had the highest correlation with the complete WAST scale.

We evaluated the same two scoring rules tested in the English study. In the first method, a score of 1 was assigned to all positive responses (eg, some or a lot of tension) with negative responses assigned a score of 0, giving overall scores ranging from 0 to 2 on the WAST short form. Scores of 2 were considered to be positive for the purposes of screening. The second scoring rule assigned a score of 1 to the most extreme response with 0 assigned to other responses. These scores also ranged from 0 to 2, and scores of 1 or 2 were considered positive for abuse.

### **Data Analysis**

Data were managed using an Excel (Microsoft, Wash) spreadsheet, which we loaded into the SAS system (SAS, Inc., North Carolina) for statistical analysis. For demographic comparisons we used chi-square analysis. We scored the WAST using the scoring rules above, taking a total of both the overall eight-question scale as well as the first seven questions, to compare with the English validation study. The means were compared using the *t* test to assess significance. We averaged the comfort level ratings for each WAST question in each group for both the research setting and the hypothetical health care setting. We used *t* tests to assess for group difference.

## **Results**

### **Study Participants**

The study samples recruited at the different sites were significantly different in several areas. (Table 1) The health center women were more likely than shelter women to be married (57.5% vs 35.7%). Health center women were also more likely to be living with or planning to live with their male partners (90.3% vs 40.7%), and the woman's partner was more likely to be employed (90.9% vs 66.7%). Nearly two thirds (63.4%) of the community health center population was of Mexican origin compared with the shelter population, where only 7.0% of participants originated from Mexico; 14.3% originated from elsewhere in Latin America, and 64.3% originated from Puerto Rico. Data for the urban participants from the shelter sample reflect US census data for Rochester indicating that 72% of Hispanics in the area originate from Puerto Rico.<sup>45</sup> On average, women and their partners from the health center sample were less formally edu-

**Table 1. Sample Characteristics of Study Participants: Site Comparisons.**

Variable	Health Center (n = 33)	Women's Shelter (n = 28)	P Value
Age (years)	28.9	31.6	.30
Partner's age (years)	32.9	35.9	.29
Marital status (%)			.03
Married	57.5	35.7	
Separated or divorced	18.0	7.1	
Single	24.2	57.1	
Time married or in current relationship (y)	6.3	6.0	.88
Living situation (%)			.001
Living alone or plans to	9.7	59.2	
Living with male partner or plans to	90.3	40.7	
Employed (%)	54.8	39.3	.23
Partner employed (%)	90.9	66.7	.02
Income (\$)	14,289	12,475	.50
Primary language (%)			.35
Spanish	97.0	100.0	
Mixteco	3.0	0.0	
Speaks English (%)	45.0	93	
Place of origin (%)			.001
Texas	21.2	0.0	
Mexico	63.4	7.0	
Puerto Rico	9.1	64.3	
Other, Latin America	3.0	14.3	
Other, United States	3.0	14.3	
Time in United States (%)			.02
Less than 1 year	24.2	11.1	
1–5 years	45.5	22.2	
Greater than 5 years	30.3	66.7	
Education (%)			.005
Some primary (up to 6th grade)	37.5	3.6	
Some secondary (7th–12th grade)	40.6	46.4	
High-school diploma or GED	6.3	17.9	
Post-secondary education	15.6	32.1	
Partner education (%)			.02
Some primary (up to 6th grade)	50.0	11.1	
Some secondary (7th–12th grade)	28.1	59.3	
High-school diploma or GED	9.4	14.8	
Post-secondary education	9.4	14.8	

cated and had been in the United States for less time than the women and partners in the shelter sample.

The aggregate samples for abused and non-abused comparison women were significantly different only in the partner's education, with partners of the nonabused women attaining a slightly higher education level on average ( $P = .05$ ). When average household income was compared, there was no statistically significant difference between the two groups; when household income was divided into

thirds, however, we noted a slight trend toward nonabused comparison women's households earning more money, but this difference did not prove statistically significant. Otherwise, the samples were very similar (Table 2).

#### ***Validation of the Spanish Version of the WAST***

The Spanish WAST instrument was found to be highly reliable with a Cronbach  $\alpha$  level of 0.91. Questions 1 (relationship tension) and 8 (sexual abuse) correlated least with the scale, and questions



**Table 2. Sample Characteristics of Abused Women and Nonabused Comparison Women.**

Variable	Abused Women (n = 27)	Comparison Women (n = 34)	P Value
Age (years)			.22
Mean	32	28.7	
Range	19–62	18–60	
Partner's age (years)			.45
Mean	35	33	
Range	22–59	19–73	
Marital status (%)			.3
Married	51.8	44.1	
Separated or divorced	18.5	8.8	
Single	29.6	47.1	
Time married or in current relationship (years)	7.6	5.1	.24
Living situation			.65
Living alone or plans to	36	30	
Living with male partner or plans to	64	70	
Employed (%)	56	41	.25
Partner employed (%)	77	82	.60
Annual household income (%)			.18
Less than \$10,000	40	25	
\$10,000–\$15,000	44	38	
More than \$15,000	16	37	
Primary language (%)			.26
Spanish	96	100	
Mixteco	4	0	
Speaks English (%)	59	74	.23
Place of origin (%)			.29
Texas	11	12	
Mexico	48	29	
Puerto Rico	22	44	
Other, Latin America	11	6	
Other, United States	7	9	
Time in United States (%)			.16
Less than 1 year	15	21	
1–5 years	48	24	
More than 5 years	37	55	
Education (%)			.50
Some primary (up to 6th grade)	26	18	
Some secondary (7th–12th grade)	44	42	
High-school diploma or GED	15	9	
Post-secondary education	15	30	
Partner education (%)			.05
Some primary (up to 6th grade)	44	22	
Some secondary (7th–12th grade)	41	44	
High-school diploma or GED	0	22	
Post-secondary education	11	13	

5 (fear of partner) and 7 (emotional abuse by partner) correlated most highly.

All WAST item scores were significantly different between the abused women and the nonabused comparison women (Table 3). The mean overall

WAST score of items 1 through 7 was 16 in the abused group and 9.2 in the comparison group, compared with scores obtained in the English validation study of 18 in the abused group and 8.8 in the nonabused group.<sup>13</sup>

**Table 3. Women Abuse Screening Tool (WAST) Spanish Item Responses (in Percentages) and Overall Test Scores.**

WAST Item*	Abused Women (n = 27)	Nonabused Comparison Women (n = 34)
1. In general, how would you describe your relationship?		
A lot of tension	37.0	11.8
Some tension	55.6	38.2
No tension	7.4	50.0
2. Do you and your partner work out arguments with. . .		
Great difficulty	40.7	8.8
Some difficulty	55.6	29.4
No difficulty	3.7	61.8
3. Do arguments ever result in you feeling down or bad about yourself?		
Often	51.9	5.9
Sometimes	44.4	52.9
Never	3.7	41.2
4. Do arguments ever result in hitting, kicking, or pushing?		
Often	25.9	2.9
Sometimes	51.9	8.8
Never	22.2	88.2
5. Do you ever feel frightened by what your partner says or does?		
Often	44.4	0.0
Sometimes	44.4	14.7
Never	11.1	85.3
6. Has your partner ever abused you physically?		
Often	18.5	0.0
Sometimes	66.7	8.8
Never	14.8	91.2
7. Has your partner ever abused you emotionally?		
Often	55.6	0.0
Sometimes	33.3	11.8
Never	11.1	88.2
8. Has your partner ever abused you sexually?		
Often	7.4	0.0
Sometimes	29.6	2.9
Never	63.0	97.0
Overall WAST score <sup>†</sup>		
Mean	17.4	10.3
Range	9–23	8–15
WAST score for items 1–7 <sup>‡</sup>		
Mean	16	9.2
Range	8–21	7–14

\*Responses to WAST items were all significantly different between abused and nonabused women. Chi-square estimates for items 1–7 were significant at  $P = .001$  and for item 8 at  $P = .003$ .

<sup>†</sup>Overall mean WAST score was significantly different between the two samples ( $t = 10$ ,  $df = 59$ ,  $P < .001$ ).

<sup>‡</sup>Mean WAST score for items 1–7 was also significantly different between the two samples ( $t = 9.9$ ,  $df = 59$ ,  $P < .001$ ).

### ***Comparison of Abused Women from the Battered Women's Shelter and the Community Health Center***

Subgroup analysis of the abused women indicated a greater average abuse score among the battered women's shelter participants compared with community health center participants. The 11 abused

women at the shelter had a mean total WAST score of 19.3 (range 12–21) compared with 16.2 (range 8–21) for the 16 abused women from the community health center. Abused shelter women scored an average of 2.4 per question compared with abused health center women, who scored an average of 2.0

per question, a statistically significant difference ( $P = .015$ ). In addition, on questions 5 and 7, which correlated most with the overall scale, abused shelter women averaged 2.7 and 2.9, respectively, compared with 2.1 and 2.1, respectively, among the abused community health center women.

### ***Comfort Level with Spanish Version of WAST Items***

Compared with nonabused women, the abused women had significantly lower comfort ratings with each WAST item, in both the research context and the hypothetical medical encounter. The abused women were least comfortable with question 6 (physical abuse by partner) and 7 (emotional abuse by partner). The average ratings by the abused women for the hypothetical medical encounter ranged from 1.9 to 2.4, indicating at least some level of comfort with the tool by most abused women when administered by their physician.

### ***Selection of WAST Spanish Short Form Items***

Classification of abused women and nonabused women using questions 1 and 2 (the two questions that were most comfortable to answer in the English validation study) was most successful when using the first scoring method. This method correctly classified 68% of nonabused women (specificity) and 93% of abused women (sensitivity). The second scoring methods correctly classified 79% of nonabused women and 44% of abused women.

For the second short form we chose questions 5 (fear of partner) and 7 (emotional abuse by partner), which were most highly correlated with the overall WAST scale. On average, however, the comfort level with these questions for women was lower. Using these two questions and the first scoring method achieved a specificity of 94% for both community health center and women's shelter nonabused women and a sensitivity of 89% (81% for community health center women and 100% for shelter women). Using the second scoring method correctly classified 100% of the nonabused women but detected only 59% of the abused women in the study.

## **Discussion**

The Spanish version of the WAST was found to be reliable and was able to discriminate between abused and nonabused women who participated in the study.

The short form, using the two most reliable questions, achieved a specificity of 94% and a sensitivity of 89% in our sample. The results from the analysis of the short form, however, differed from those achieved with the English instrument. The less-threatening questions in this study were less specific and less reliable than questions that might be considered more threatening. The more reliable questions were able to achieve a better specificity, but at the sacrifice of several percentage points of sensitivity.

In light of recent studies indicating that battered women would prefer clinicians to ask directly about abuse,<sup>38-41</sup> it seems reasonable to ask any of the questions from the WAST as long as respect, belief, confidentiality, and empathy are communicated by the clinician. From a clinical point of view, we recommend asking one of the less-threatening questions that had higher reliability (eg, question 2: "Do you and your partner work out arguments with. . . ?") and proceed with questions 5 and 7. If there are notably positive responses, then the interviewer can proceed with administering the full eight-item WAST to elucidate further the abuse history.

Assessment of comfort level is another issue to consider. In this and the previous study<sup>13</sup> women were asked to comment on their comfort level with the questions. We assumed that a woman's self-reported comfort with a question relates to her willingness to answer candidly, although we have no evidence that there is a direct correlation. In fact, a woman's ability or willingness to answer any given question, regardless of her level of discomfort, might be determined by her comfort level with the particular clinician asking the question. In turn, the woman's comfort level with the clinician could even relate to her perception of the clinician's comfort asking the question. This issue might merit further study.

### ***Strengths and Limitations***

This study drew one half of its sample from a community health center population, which poses both strengths and weaknesses. One difficulty was finding women who were not abused to participate in the study. Several women in the nonabused comparison groups answered one or more WAST items weakly or strongly positive and thus might have been experiencing lower levels of abuse. Although misclassification is an important source of bias in



any study, in our study, misclassifying women would have resulted in decreased instrument specificity and sensitivity. Considering possible misclassification, that the WAST Spanish questionnaire was still able to discriminate between the groups might also be considered a strength.

In addition, our data show that the abused women in the community sample might be or perceive themselves to be less severely abused compared with abused women from the battered women's shelter. It is not clear from our data whether the actual level of abuse experienced by the women differs among the groups or whether the perception or definitions of abusive behavior might have changed after participation in the shelter services. Nevertheless, even with lower average scores on the WAST, that the community women in the abused group could still be singled out with the WAST lends strength to the finding of discriminant validity.

This study used selected extremes of abuse to evaluate the ability of the WAST Spanish test to discriminate between abused and nonabused women. It is likely that in a community or in a primary care setting the sensitivity of the instrument might be somewhat less than that found in our study. Our study does show this loss of sensitivity in the community sample. The subset analysis of the WAST short form using questions 5 and 7, scored with the first method, found a lower sensitivity of 81% in the community health center women compared with 100% sensitivity for shelter women.

A strength of our study was interviewing Spanish-speaking women from different geographic areas in each group. Although persons of Mexican origin assisted with the Spanish translation of the tool, our translation did not appear to be a barrier for women of different geographic origins. In particular, the interviewer at the shelter, whose sample was largely Puerto Rican, reported no problems with language, word choice, or general comprehension.

Important limitations include the small sample size and the possibility of interviewer bias during both the recruitment and interviewing process, as none of the interviewers at either site were blinded to the abuse status of the participant. Lower income Hispanic women were slightly overrepresented in our study compared with national data. 1990 census data indicate that 53.7% of Hispanic

households earn less than \$15,000 per year<sup>45</sup>; in our sample 84% of abused women's households and 63% of nonabused comparison women's households earned less than \$15,000. This difference might limit the applicability of our findings to all Spanish-speaking women.

Another concern about our study design is the inherent difficulty of using the Likert response format with low-literacy populations.<sup>46</sup> Our sample on average consisted of women of lower income and lower educational attainment, and although we did not make a formal assessment of literacy, it was likely an issue for some participants. Our study did not make use of alternative techniques, such as color or visual analog scales, on the comfort level instruments. Rather, interviewers were available to help when needed. It is not clear in which direction using the interviewers this way could bias the results, but possible bias should be considered in future research efforts with low-literacy groups.

Even considering the limitations of the study, we believe these findings represent important information about revealing abuse among Spanish-speaking women. The statistically significant differences among the Spanish WAST responses between the abused and nonabused comparison groups are evidence that this tool is helpful among Spanish-speaking women.

More important than a cutoff score of either the full instrument or the abbreviated version is the clinician's ability to inquire sensitively about the possibility of abuse in all female patients regardless of linguistic or cultural background. Even when using numeric scores, the physician's clinical judgment in responding to verbal and nonverbal cues remains paramount in recognizing a patient who has been abused.

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#### Correction

In the Table of Contents of the January–February 2002 issue, the title of the editorial by Thomas S. Nesbitt should read: “Obstetrics in Family Medicine—Can It Survive?” rather than “Title to come.” The *Journal* regrets the error.