

# Health Education & Behavior

<http://heb.sagepub.com>

---

## **Impact of Interpreters' Approach on Latinas' Use of Amniocentesis**

H. Mabel Preloran, C. H. Browner and Eli Lieber

*Health Educ Behav* 2005; 32; 599

DOI: 10.1177/1090198105278745

The online version of this article can be found at:  
<http://heb.sagepub.com/cgi/content/abstract/32/5/599>

---

Published by:

 SAGE Publications

<http://www.sagepublications.com>

On behalf of:



[Society for Public Health Education](#)

**Additional services and information for *Health Education & Behavior* can be found at:**

**Email Alerts:** <http://heb.sagepub.com/cgi/alerts>

**Subscriptions:** <http://heb.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

**Citations** (this article cites 5 articles hosted on the SAGE Journals Online and HighWire Press platforms):  
<http://heb.sagepub.com/cgi/content/refs/32/5/599>

# Impact of Interpreters' Approach on Latinas' Use of Amniocentesis

H. Mabel Preloran, PhD  
C. H. Browner, PhD, MPH  
Eli Lieber, PhD

Communication difficulties in multicultural clinical settings can be exacerbated by translators, but their actual impact on medical decisions has not been systematically evaluated. This study sought to determine the influence of translators participating in clinical encounters in which English-speaking clinicians offered amniocentesis to Spanish-speaking women by conducting systematic observations of 61 prenatal genetic consultations and recording translators' training and background characteristics and patients' amniocentesis decisions. Translators' behavioral styles were classified according to 10 inductively determined criteria. Translators' approaches were classified as Distant, Authoritative, or Missionary. Whereas the first category remained emotionally detached, the others sought to build rapport and trust with the patient. Quantitative analysis revealed statistically significant associations between translation styles that sought to engender trust and likelihood the pregnant woman agreed to amniocentesis. The authors conclude that translators' affective approaches can influence whether patients accept or decline amniocentesis.

**Keywords:** *cross-cultural communication; U.S. Latinas; medical interpretation; amniocentesis decisions*

Amniocentesis and other forms of prenatal genetic testing have become standard in most U.S. prenatal care. But such tests place a considerable burden of decision making on pregnant women: The genetic issues are complex, and the best course of action when there is cause for concern is not necessarily clear. The purpose of genetic counseling is to help pregnant women understand their own specific genetic issues and through "nondirective" genetic counseling reach decisions about the available options (National Society of Genetic Counselors, 2005).

---

H. Mabel Preloran, C. H. Browner, and Eli Lieber, Center for Culture and Health, Department of Psychiatry and Bio-Behavioral Sciences, University of California, Los Angeles.

*Address reprint requests to* H. Mabel Preloran, Center for Culture and Health, Department of Psychiatry and Bio-Behavioral Sciences, University of California, Los Angeles, 760 Westwood Plaza, Box 62, Los Angeles, CA 90024-1759; phone: (310) 794-6210; fax: (310) 794-6279; e-mail: hprelora@ucla.edu.

Funding for this research was generously provided in part by the National Center for Human Genome Research (1R01 HG00138401), the Russell Sage Foundation, UCMEXUS, the University of California, Los Angeles (UCLA) Center for the Study of Women, and the UCLA Center for Culture and Health. We extend heartfelt thanks to Maria Casado and Dora Trail, who provided invaluable assistance at all stages of the research, and to Monica Alvarado, Amelia Alvarez, Sibylle Caldwell, Carol Garcia, Linda M. Hunt, Zina Tatsugawa, and Ann Walker for insights, guidance, and support. Christina Palmer, Silvia Balzano, and Steve Lopez provided constructive comments on earlier drafts of the article, and Richard Rosenthal helped clarify the prose and the argument.

*Health Education & Behavior*; Vol. 32 (5): 599-612 (October 2005)  
DOI: 10.1177/1090198105278745  
© 2005 by SOPHE

Despite the importance of this process, little is known about the impact of genetic counseling on amniocentesis decisions (Harper & Clarke, 1997, pp. 189, 195). This gap in knowledge is largely attributable to the fact that the initial target population for fetal diagnosis was women at high risk for a birth anomaly because of age or personal or family medical history. When these women chose to bear a child, most were already informed about prenatal genetic services and generally predisposed to prenatal testing (Kolker & Burke, 1994; Rothman, 1987). However, routine alpha fetoprotein (AFP) and Triple Marker screening has significantly expanded the population of women offered genetic services to include many with no prior risk for a birth anomaly and little or no exposure to prenatal genetic testing (Cunningham & Tompkinson, 1999).

Increasing proportions of pregnant women in the United States come from ethnic minority backgrounds, speak little English, and are unfamiliar with the standards and practices of U.S. prenatal care. Research on the role of genetic counseling in such women's amniocentesis decisions has been rare (Rapp, 1999). For this multicultural population, many communication difficulties arise in clinical settings. These challenges are compounded by the often active role of the interpreters in the conversations that take place. As defined by the National Council on Interpreting in Health Care (2001), an interpreter "renders a message spoken in one language into a second language," in contrast with a translator, who translates written texts. Within this emerging specialization, there are sharp debates as to whether the appropriate role of the health care interpreter is simple linguistic conversion of a message or whether the goal is to convey meaning, including the emotional tone and affective content of the message (Beltran Avery, 2001). Moreover, the possible impact of health care interpreters on medical decisions, including decisions about fetal diagnosis, has not been systematically explored (Flores et al., 2003; Greb, 1998; Hornberger, Itakura, & Wilson, 1997). The issues raised by use of interpreters may be particularly vexing in decisions about fetal diagnosis where women must assimilate complex information and quickly decide on a course of action.

A prenatal genetic consultation that interpreters need to convey follows a fairly standard protocol that includes eliciting the woman and her partner's reproductive and family medical histories, describing the options for additional testing, reporting the mathematical probability of a fetal anomaly based on the screening test result and other known risk factors, outlining the risks of the amniocentesis procedure, and explaining the woman's right to accept or decline the test. The consultation may also include a discussion of the benefits of reassurance and preparedness that fetal diagnosis can provide and the woman's right to terminate the pregnancy if an anomaly is found. The extent to which in practice genetic counseling achieves the profession's stated goal of nondirectiveness has been studied and remains unclear (Michie & Marteau, 1996, p. 105; Williams, Alderson, & Farsides, 2002). Still, the counselor's manifest aim is to obtain objective and relevant facts about the case, to provide information, and to answer questions about the key issues—not to offer recommendations or personal opinions (Clarke, 1997; Fraser, 1974).

During the course of a study of amniocentesis decisions by Mexican-origin women (Browner, Preloran, & Cox, 1999), we noticed significant variation in how interpreters approached the task, along with significant variation in women's amniocentesis decisions. This led us to a hypothesis that the interpretation approach would affect the amniocentesis decisions of the women in our research population.

The larger study focused on women offered amniocentesis because they screened positive on maternal serum AFP or Triple Marker screening, which in California is mandated to be offered as part of the standard package of prenatal care. Our specific aims were to

investigate the effects of acculturation, the role of the male partner, and of the genetic consultation on these women's amniocentesis decisions.

Pregnant women in California who screen positive are referred for a genetic consultation and further testing at a state-approved Prenatal Diagnosis Center. Less than 10% of women who screen positive turn down the genetic consultation (Cunningham & Tompkinson, 1999). At its conclusion, women are offered a Level 2 ultrasound exam. If the ultrasound is inconclusive, the women are generally offered amniocentesis, of which more than 90% prove to be normal (Cunningham & Tompkinson, 1999). In the event an anomaly is detected, further counseling is offered, with the option of abortion through the 24th week of pregnancy.

## MATERIALS AND METHOD

The present study was designed to determine the influence of interpreters participating in clinical encounters where English-speaking clinicians offered amniocentesis to Spanish-speaking women. The data consist of systematic observations of the prenatal genetic consultations for 73 Mexican-origin women who were offered amniocentesis through an interpreter, information on translators' background characteristics, and patients' amniocentesis decisions.

Interpreters were recruited opportunistically at the 11 state-approved prenatal diagnosis centers where we also recruited patients. To be included in the study, the patient, the genetics counselor, and the interpreter had to consent to participation. In addition, participants had to agree to a semistructured interview, and interpreters must have been observed during at least two prenatal genetic consultations. All understood that we were conducting structured observations for research purposes. The research was carried out under the guidelines and approval of the University of California, Los Angeles (UCLA) Internal Review Board (IRB) and those of all cooperating institutions.

To conduct the observations, the principal investigator (PI), the co-principal investigator (co-PI), or one of our trained bilingual field assistants employed two paper-and-pencil instruments designed for this study to record data during a genetic consultation including the factual information provided, questions asked, and content and affect of interaction among participants (see Appendixes A and B). Seven pilot observations were conducted—three of which were observed simultaneously by the PI and co-PI. Coding for these interactions was compared and discussed during team meetings, and the wording of variables was adjusted as necessary to improve evaluation consistency. For the main study, ethnographers were assigned to conduct observations in a crossed manner—each assigned to observe multiple interpreters, and each interpreter was observed by at least two ethnographers (although simultaneously during only the three pilot observations)—to provide for convergent reliability in their evaluations.

We employed an inductive analytic approach (Patton, 2002). The narratives of the seven pilot observations were analyzed toward the identification of commonly occurring behavioral and interactive characteristics that could be used in a checklist form to record their being present or absent in future observations of similar interactions (see Appendix C). For the main study, 73 observations of genetic consultations using 1 of the 23 different interpreters were then scored according to the presence or absence of the 19 most commonly noted characteristics. These ratings were recorded *in vivo* (live during the observations) by each trained ethnographer.

Table 1. Selected Demographic Characteristics of Interpreters by Interpreter Approach

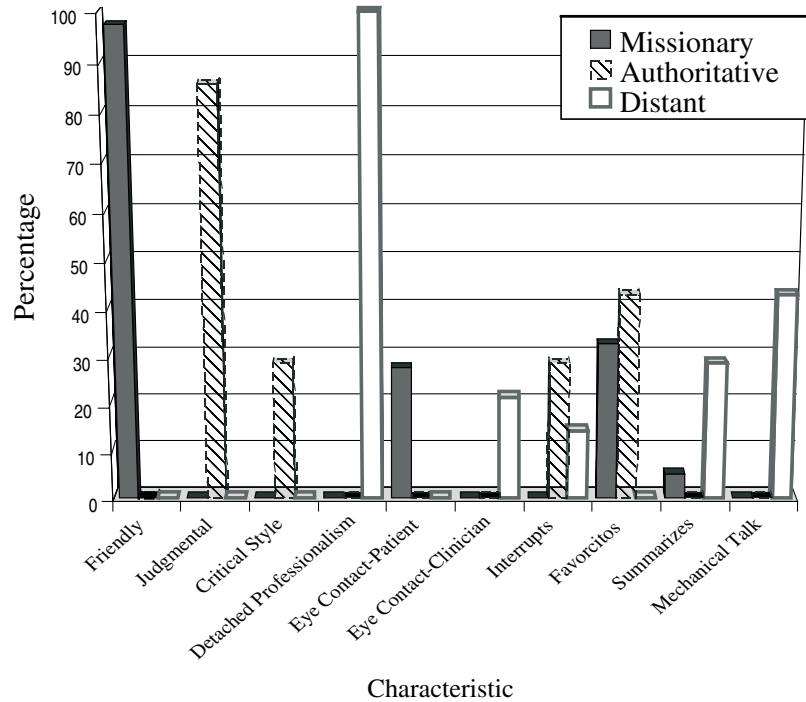
Variable	Interpreter Approach		
	Missionary ( <i>n</i> = 10)	Authoritative ( <i>n</i> = 6)	Distant ( <i>n</i> = 7)
Mean age (Range)	32 (23-64)	57 (44-66)	23 (19-35)
Job Status			
Regular	70%	83%	57%
Volunteer	30%	17%	43%
Job expectation			
Career advancement	30%	0	100%
Keep same job	60%	0	0
Retire or change jobs	10%	100%	0
Acculturation			
Immigrated as adult	20%	83%	0
Child of immigrants or immigrated as child	80%	17%	14%
Grandchild of immigrants	0	0	86%
Total number of observations	53	13	21
Number of observations with recorded amniocentesis decision	40	7	14

For the analyses presented here, 12 of 73 observations were not included for the following reasons: A family member served as interpreter ( $n = 6$ ), the interpreter was not available for the follow-up interview ( $n = 3$ ), the ethnographer assisted with interpretation ( $n = 2$ ), and missing interaction data ( $n = 1$ ).

Finally, following the observation period, the field notes and observational data pertaining to "Understanding" and "Rapport" that had been recorded for each interaction (see Appendix B) were reviewed by all members of the research team. Each interaction was then categorized on the basis of the global dynamic between the client and the interpreter. Three categories emerged, which we termed *Missionary*, *Authoritative*, and *Distant* (see Results section below). Mapping each of the 23 interpreters to their interactions revealed great consistency in the approach each one employed, and they were subsequently classified into one of the three categories. Any disagreements arising during this classification process were resolved by consensus among the fieldwork team.

## RESULTS

The level of analyses presented here is focused on the interaction between genetic counseling interpreters and patients during genetic consultations toward understanding interpreter influence on decisions about proceeding with amniocentesis. Of the 23 medical staff serving as interpreters, none had formal training in medical interpretation, and interpreting was not a formal part of any of their jobs. Rather, they were among the growing corps of receptionists, nurses, clerks, and other bilingual personnel in U.S. medical facilities called upon to provide interpretation as needed (see Table 1).



**Figure 1.** Percentage of behavioral characteristics observed across interpreter-patient interactions by interpreter approach (*N* of observed interactions = 61).  
 NOTE: Statistically significant associations were found between interpreter approach and each characteristic presented here (chi-square analysis, *p* < .05).

Chi-square analysis revealed that 10 of the 19 most commonly occurring behavioral criteria were statistically significant in distinguishing interpreter approaches (see Figure 1). Given this study’s level of analysis, it is important to note that the data presented in Figure 1 represent observed behavior across all interpreter-patient interactions organized by interpreter approach. Thus, a characteristic distinguishing an interpreter approach should not necessarily be assumed to be present during *each* observation involving a particular interpreter using that approach. We next describe the sociodemographic and behavioral characteristics of the three interpreter approaches and then, for illustration, provide a prototypical example of each approach. Finally, we examine the association between interpreter approach and women’s amniocentesis decisions in the 61 cases.

### Missionary Interpretation Approach

*Missionary* was the label we borrowed from an interpreter who defined her job as a “mission” to ensure adequate health care for U.S. Latinos. The Missionary approach was the one most often seen among interpreters in our study. As Table 1 shows, all but one of the Missionaries was in their mid-20s or early 30s and born in the United States to immigrant parents. Most were a formal part of the clinic staff and worked stable, 8-hour shifts. All were satisfied with their jobs and said they found fulfillment in the opportunity to

serve Latinos, especially recent immigrants. Only one said she was actively looking for other work.

Figure 1 shows the statistically significant characteristics of a Missionary approach to interpretation. They include high levels of friendly engagement with patients during much of the consultation; making relatively frequent eye contact with patients; listening without interrupting; providing relatively frequent offers of assistance (e.g., with paperwork) (*favorcitos*); using a relaxed, warm tone; asking personal, rapport-building, nonjudgmental questions (e.g., “Did you know about this test when you were pregnant the last time?”); using gestures that provide emotional support (e.g., touching a patient’s hands if she shows distress); using a directive approach built on *personalismo* (e.g., “I wouldn’t offer you something I wouldn’t consider for myself.”); and moving smoothly in and out of the interpreter role.

Missionaries were consistently friendly and empathetic, and their interpretation approach went far beyond simply facilitating communication. An example of a typical Missionary approach was an interpreter walking a patient to the parking lot after her amniocentesis and offering to stay with her until she felt ready to drive. A more extreme example was the interpreter who collected donations from coworkers for a pregnant patient seeking help to travel to Mexico to bury her 2-year-old daughter.

#### *Example of a Missionary Approach to Interpretation*

Ana, 28, a full-time clerk is helping Rocio, a 45-year-old woman with a history of hereditary illness in her family (all proper names are pseudonyms). Although Rocio arrived at the clinic intending to have amniocentesis, during her stay, which lasted more than 5 hours, she changed her mind twice before finally consenting to the procedure.

While waiting for her amniocentesis, Rocio told the ethnographer that she felt no rapport with the monolingual English-speaking genetic counselor, who she found too skeptical of Rocio’s accounts of her family’s medical history, adding that the counselor’s words of comfort sounded false: “If everything is going to be OK, why would they send me to do that [amniocentesis]?” Instead, she preferred the directness of the interpreter, with whom she “could talk.” Asked whether this was because she and Ana shared a common language, Rocio said it went beyond that. Unlike the genetic counselor, Ana did not challenge Rocio’s explanation of the cause of the hereditary illness in her family, and when talking privately, told her openly that although things could go wrong (e.g., a miscarriage), she should agree to the amniocentesis if she wanted to be reassured. Rocio said that Ana’s “frankness” inspired her trust (“esa franqueza [de ella] me dio confianza”). She added that being so uncertain about what to do, she felt relieved and supported when Ana “pushed her a little” to agree to amniocentesis.

Throughout Rocio’s long stay at the clinic, we observed Ana not only helping her with interpretation but patiently listening to her, comforting her, and bringing her orange juice from time to time (an example of a *favorcito*), behaviors characteristic of a Missionary approach to interpretation.

#### **Authoritative Interpretation Approach**

The *Authoritative* label came from a field worker’s observation that genetic information was presented by some interpreters as gospel. “It’s like they believe they *own* the truth,” she said. Ages in this group ranged from mid-40s to mid-60s; all were born outside

the United States. Five were part of the staff and enjoyed stable work; the sixth was a volunteer. None expressed a desire to improve their job status, but all were dissatisfied with their work and felt overloaded and unappreciated by coworkers and clinicians. Five said they held higher status jobs in their native countries.

Figure 1 shows that the Authoritative interpreter engages with patients in an openly authoritarian and judgmental manner during much of the consultation (e.g., often uses the word *must*); uses infrequent eye contact with both patient and clinician; sometimes interrupts the consultation; relatively frequently offers patients tangible help with some task; asks personal questions in a critical manner (e.g., “Your husband won’t be the one that will take care of the baby [if something goes wrong], right?”); makes directive seemingly defiant remarks (e.g., “If you want [the test], do it; after all, it’s your body.”); makes directive, authoritarian comments (e.g., “Don’t pay attention to what [your sister] says [about amniocentesis]. People don’t know. Doctors know, the genetic counselor knows.”); and, similar to the Missionary approach, moves smoothly in and out of the interpreter role, but in a more directive manner.

#### *Example of an Authoritative Interpretation Approach*

Susana, a 65-year-old receptionist, is translating for Lucia, a 22-year-old woman, pregnant for the first time. The genetic consultation lasts 40 minutes, and Lucia interacts for an additional 15 minutes with only the interpreter while searching for information about her medical insurance coverage.

Her sister has driven Lucia to the clinic and stays with her during the genetic consultation. The sister looks much older than Lucia and seems very protective; she holds Lucia’s hand, and on a couple of occasions, answers questions for her. Both agree that Lucia should have an ultrasound, but when the sister leaves for work before they can perform it, she makes it clear that she does not like the idea of an amniocentesis, at least “before having a second opinion.” When Lucia’s ultrasound proves inconclusive and she is offered amniocentesis, she tells the genetic counselor she wants “to think about it.” However, after briefly talking alone with Susana, the receptionist-interpreter, she agrees to have the test.

Asked by the ethnographer why she has decided to have the amniocentesis, instead of waiting as her sister urged, Lucia explains, “I am convinced that having it today is the best. I can’t imagine having this [decision] on my mind all weekend.” She adds that although she is worried about her sister’s reaction, she is comfortable with her decision,

When I came, I was not sure what to do [about amniocentesis]. Later, I thought I should follow my sister’s advice of not doing it until getting a second opinion. But the lady [the interpreter] told me so strongly that it was for my own good, that I felt like it was my mother talking [to me]. Now I believe the sooner the better.

We observed the interaction between Susana and Lucia during the genetic consultation and had a brief glimpse of their informal interaction. Susana acted somewhat impatient and interrupted Lucia twice when she tried to convey her fears about the test and again when she brought up her financial concerns about the extent of her insurance coverage and the possibility of losing more than a day’s work because of the procedure. We also observed Susana using a tone of voice that sounded judgmental, such as when she suggested that Lucia “as a mother [to be], should take responsibility” and not take the



amniocentesis offer “lightly.” She also went out of her way to help Lucia understand her insurance coverage (another example of a *favorcito*), characteristics reflecting an Authoritative approach to interpretation.

### **Distant Interpretation Approach**

We used a *Distant* label for interpreters who communicated information in a detached, mechanical, almost rote manner, devoid of emotional involvement. Seven interpreters used this approach and were the youngest in our sample. All were U.S. born, and five were the grandchildren of immigrants. In contrast with the other groups, the Distant interpreters were more likely to be volunteers. All reported plans to improve their job status: Some were taking college classes, whereas others focused on getting a stable job in the clinic where they worked. All were somewhat satisfied with their work situations and valued the opportunity it provided to be in a medical environment, but to some degree, they felt underappreciated by coworkers and clinicians.

Finally, Figure 1 shows the Distant interpreter as quite disengaged from patients during most or the entire encounter; making infrequent eye contact with patients, although some with clinicians; making infrequent interruptions, but providing relatively frequent summaries; and talking in a relatively mechanical manner—not asking personal questions or offering words or gestures of support but using a neutral approach built on some sense of “professionalism” (e.g., “It’s your decision; the counselor said you may call her if you have questions.”) in an effort to maintain the interpreter role.

#### *Example of a Distant Approach to Interpretation*

Irma, a 21-year-old nursing student—volunteering as a medical assistant—is helping Marta, a 30-year-old in her 23rd week of pregnancy. Marta’s situation on the day she receives genetic counseling is complicated by family problems. As our observation begins, Irma is mechanically translating a description of the amniocentesis procedure. She intermittently makes eye contact with the genetic counselor, but never with Marta.

Marta explains that she thinks she wants the amniocentesis but finds it difficult to decide because she is preoccupied with a long list of problems, which she proceeds to detail. The most pressing is the need to move from her home the very next day. Irma translates only by summarizing, “She’s concerned because she needs to move tomorrow.”

Seeing Marta’s indecision, the counselor leaves her alone to think things over. While waiting, Marta tells the ethnographer that she wants the amniocentesis but is not sure she can do it today, as the counselor has urged. Asked her opinion of the genetic consultation so far, Marta expresses dissatisfaction. She says she finds it difficult to communicate with the counselor “because she is in a hurry and doesn’t speak Spanish” and that the interpreter was “not very helpful” either when Marta told her about her living situation. She said that being preoccupied with immediate problems made it difficult to decide about amniocentesis. She added,

But the doctor [as she referred to the genetic counselor] didn’t say anything. . . . And when she left, I asked [the interpreter], “What do you think?” And she said nothing. . . . I asked, “And what happens if I have to pack for the move? You said I can’t lift heavy things [right after the amniocentesis], what can I do?” And all she said was, “I don’t know, I don’t know, you can talk with the counselor later.” Well, I know I can talk with the counselor later, but I was trying to talk to her [the interpreter] now!

Table 2. Decisions About Amniocentesis Categorized by Interpreter Approach

Number Observations	Interpretation Approach	Amniocentesis Acceptance
40	Missionary	75%
7	Authoritative	57%
14	Neutral-distant	21%

NOTE:  $\chi^2 = 12.5, p = .002$  between interpreter type and amniocentesis decision. (For pairwise comparisons between groups, patients with missionary interpreters accepted amniocentesis testing significantly more often than those with neutral-distant interpreters [ $z = 2.57, p = .0104$ ].)

Just then, Irma looks in the door. Marta jumps to her feet, saying, "It's taking too long and my boys are [home] alone. . . I can't wait any longer." Irma responds flatly that there are two patients ahead of her. Frustrated, Marta answers, "But they told me she will see me before them," to which Irma mechanically responds, "I don't know," and walks away. At Marta's request, the ethnographer leaves to see what she can learn about her situation and returns to find Marta gone—and never to return.

During our observation of the interaction between Irma, Marta, and the genetic counselor, we also saw Irma acting impatiently and avoiding making eye contact with Marta. We also observed that when Marta asked Irma to speed up her wait, the latter left the room rapidly, without offering additional help. Irma's approach was to be virtually uninvolved when she repeatedly met Marta's questions and requests with "I don't know," all characteristics of a Distant approach.

Table 2 shows the statistical relationship between the interpreter approach and women's amniocentesis decisions. Women assigned interpreters who used a Missionary approach were by far the most likely to agree to amniocentesis, followed by the Authoritatives, and finally, the Distant.

### IMPLICATIONS FOR PRACTITIONERS

Within the context of a larger study on amniocentesis decisions by Mexican-origin women, we sought to understand the influence of interpreters in the subset of clinical encounters where they were employed. Despite widespread beliefs in the existence of discernible differences in interpretation approach, there are no systematic studies of the phenomenon (Beltran Avery, 2001). Because of the small size of our interpreter sample, generalizations should be made with caution. However, our field sites were in no way unique, and these results may apply to other settings that use nonprofessional health care interpreters.

The interpreters in our study were performing a task for which they were neither hired nor trained. And given the economic realities of health care delivery in the United States today, nonprofessional interpreters are virtually certain to remain a fact of life. We cannot state unequivocally that any one of these approaches is better or worse than the rest. Moreover, the women in our study varied with regard to interpretation approach they preferred. Some felt comforted and reassured by the paternalistic "authoritative" approach, which was familiar to them from their home country and might have offered relief from the uncertainty they felt about the correct course to choose. Others liked the egalitarian warmth of the "missionary"-type interpreters, who appeared to offer a genuine, personal

connection, along with the prescriptive advice such relationships tend to entail. Least preferred was the impersonal “neutral” approach, which, as one participant said, left her feeling that she was “talking to the wall.”

What is clear is that these interpreters appear to have had far more influence over patients’ amniocentesis decisions than might have been supposed. We hope those who provide medical interpretation will use our results to gain a fuller understanding of their own influence and that those developing genetic counseling protocols in settings that require medical interpretation take this factor into consideration and become more explicit in their expectations.

## CONCLUSIONS

In the coming decades, understandings about the genetic bases of human disease will grow exponentially—far faster than the ability to treat or prevent many, if not most, of the conditions in question. Therefore, the agonizing burden of decisions about genetic testing and abortion will continue to fall on pregnant women, a burden that weighs all the more heavily on those who rely on interpreters to comprehend the complex issues involved. Interpreters, no less than clinicians, should remain vigilant against wittingly or unwittingly abusing the power they hold in such situations and instead seek every means possible to enhance women’s ability to make informed reproductive decisions.

## APPENDIX A

### Prenatal Genetic Counseling Observation Instrument

Informant ID # \_\_\_\_\_ Date of Consultation: \_\_\_\_-\_\_\_\_-\_\_\_\_

Site:

Tick One:      1 woman      2 man      3 couple

#### A. Reproductive history

A.20 Experience with amniocentesis

\_\_\_\_ 0 no  
\_\_\_\_ 1 yes

A.21 Children born with defects?

\_\_\_\_ 0 no  
\_\_\_\_ 1 yes; what? \_\_\_\_\_

A.22 Children died?

\_\_\_\_ 0 no  
\_\_\_\_ 1 yes; of what? \_\_\_\_\_

A.23 Family with disabilities/defects?

\_\_\_\_ 0 no  
\_\_\_\_ 1 yes: who, what? \_\_\_\_\_

#### W. Interaction with medical personnel

W.21 Verbal indications that the counselor seeks to encourage an amniocentesis:

\_\_\_\_ 0 “It’s logical”  
\_\_\_\_ 1 “It reassures you”  
\_\_\_\_ 2 “It’s your decision . . . but”

- 3 other \_\_\_\_\_; \_\_\_\_\_  
 4 neutral
- W.22 Physical indications that the counselor seeks to encourage an amniocentesis:  
 0 smile  
 1 tone of voice; if so, describe \_\_\_\_\_  
 2 other \_\_\_\_\_; \_\_\_\_\_  
 3 neutral
- W.23 Verbal indications that the counselor seeks to discourage an amniocentesis:  
 0 \_\_\_\_\_  
 1 neutral
- W.24 Physical indications that the counselor seeks to discourage an amniocentesis:  
 0 \_\_\_\_\_  
 1 neutral
- W.25 Counselor allowed time for integration of information?  
 0 no  
 1 yes

*X. Participation in the decision making*

- X.1 Woman asks the counselor questions  
 0 not at all  
 1 a little  
 2 somewhat  
 3 a lot  
 What questions? \_\_\_\_\_
- X.2 Woman appears to be actively participating in the consultation  
 0 not at all  
 1 a little  
 2 somewhat  
 3 a lot  
 If yes, describe: \_\_\_\_\_
- X.3 Man asks the counselor questions  
 0 not at all  
 1 a little  
 2 somewhat  
 3 a lot  
 What questions? \_\_\_\_\_
- X.4 Man appears to be actively participating in the consultation  
 0 not at all  
 1 a little  
 2 somewhat  
 3 a lot  
 If yes, describe: \_\_\_\_\_
- X.5 Decision is made on the spot  
 0 no  
 1 yes  
 Notes: \_\_\_\_\_
- X.7 Decision  
 0 refuse  
 1 accept  
 2 undecided (need to follow up on this information)

*Y. Familiarity with/knowledge about genetic counseling*

Y.1 Do you know why you came?

- \_\_\_\_ 0 no  
\_\_\_\_ 1 yes

Words used by patient: \_\_\_\_\_

Words used by The counselor: \_\_\_\_\_

*Z. Signs of interest in accepting or declining amniocentesis*

Man: \_\_\_\_\_

Woman: \_\_\_\_\_

*ZZ. Influence on each other's decision*

ZZ.1 Man tries to influence woman

- \_\_\_\_ 0 no  
\_\_\_\_ 1 tried but did not convince her  
\_\_\_\_ 2 succeeded in convincing her

ZZ.2 Woman tries to influence man

- \_\_\_\_ 0 no  
\_\_\_\_ 1 tried but did not convince him  
\_\_\_\_ 2 succeeded in convincing him

Counselor ID code:

Interpreter ID code:

*Other notes:*

\_\_\_\_\_

**APPENDIX B**  
**Additional Observation Guidelines for**  
**Prenatal Genetic Consultations Involving Interpreters**

*A. Understanding*

A1: Did patient ask questions and/or make comments about the information she was receiving?

Yes No Somewhat

Explain:

A2: Did clinicians accurately answer questions without misinterpretation introduced by interpreter?

No questions Yes No Somewhat

Explain:

*B. Rapport*

B1: Describe the broad dynamics of the genetic consultation:

B2: On what bases do you make this assessment?

\_\_\_\_\_

## APPENDIX C

### Most Frequently Observed Interpreter Behaviors

Observation ID: _____	Mark each behavior observed
1. Engages with patient in <i>friendly</i> manner <sup>a</sup>	
2. Engages with patient in <i>judgmental</i> manner <sup>a</sup>	
3. Frequent <i>eye contact</i> with patient	
4. Infrequent <i>eye contact</i> with patient, more frequent with <i>clinician</i> <sup>a</sup>	
5. Listens without interrupting	
6. <i>Interrupts</i> patient often <sup>a</sup>	
7. Does not interrupt patient but <i>summarizes</i> interpretation <sup>a</sup>	
8. Offers help ( <i>favoritos</i> ) (e.g., making a phone call) <sup>a</sup>	
9. Uses relaxed and warm tone	
10. Talks fast and looks irritated or annoyed	
11. <i>Talks mechanically</i> <sup>a</sup>	
12. Asks casually informal questions (e.g., Do you live nearby?)	
13. Asks personal questions in a challenging or <i>critical manner</i> (e.g., “Your husband won’t be the one that will take care of the baby [if something goes wrong], right?”) <sup>a</sup>	
14. Gives emotional support (e.g., touches patient’s hands when she manifests distress)	
15. Gives support in a defiant manner (e.g., “If you want [the test] do it; after all, it’s your body.”)	
16. Makes directive, “ <i>personalistic</i> ” comments (e.g., “I wouldn’t offer you something I wouldn’t consider for myself.”)	
17. Makes directive, authoritarian comments (e.g., “Don’t pay attention to what [your sister] says [about amniocentesis]; people don’t know. Doctors know, the genetic counselor knows.”)	
18. Makes distant or <i>detached</i> comments (“It’s your decision; the counselor said you may call her if you have questions.”) <sup>a</sup>	
19. Goes in and out of interpreter role (when alone with patient acts like genetic counselor).	

a. Varied significantly among groups.

## References

- Beltran Avery, M. P. (2001). The role of the health care interpreter: An evolving dialogue. *The National Council on Interpreting in Health Care Working Papers Series*, April. Retrieved from <http://www.ncihc.org/workingpapers.htm>
- Browner, C. H., Preloran, H. M., & Cox, S. J. (1999). Ethnicity, bioethics, and prenatal diagnosis: The amniocentesis decisions of Mexican-origin women and their partners. *American Journal of Public Health, 89*, 1658-1666.
- Clarke, A. (1997). Prenatal genetic screening: Paradigms and perspectives. In P. S. Harper & A. J. Clarke (Eds.), *Genetics, society and clinical practice* (pp. 119-140). Oxford, UK: BIOS.
- Cunningham, G. C., & Tompkinson, D. G. (1999). Cost and effectiveness of the California prenatal screening program. *Genetic Medicine, 1*, 199-206.
- Flores, G., Laws, M. B., Mayo, S. J., Zuckerman, B., Abreu, M., Medina, L., et al. (2003). Errors in medical interpretation and their potential clinical consequences in pediatric encounters. *Pediatrics, 111*, 6-14.
- Fraser, F. C. (1974). Genetic counselling. *American Journal of Medical Genetics, 26*, 636-659.
- Greb, A. (1998). Multiculturalism and the practice of genetic counseling. In D. Baker, J. Schuette, & W. Uhlmann (Eds.), *A guide to genetic counseling* (pp. 171-198). New York: John Wiley.
- Harper, P. S., & Clarke, A. J. (1997). *Genetics, society, and clinical practice*. Oxford, UK: BIOS.

- Hornberger, J., Itakura, H., & Wilson, S. R. (1997). Bridging language and cultural barriers between physicians and patients. *Public Health Reports*, *112*, 410-417.
- Kolker, A., & Burke, M. B. (1994). *Prenatal testing: A sociological perspective*. Westport, CT: Bergin & Garvey.
- Michie, S., & Marteau, T. (1996). Genetic counselling: Some issues of theory and practice. In T. Marteau & M. Richards (Eds.), *The troubled helix: Social and psychological implications of the new human genetics* (pp. 104-122). Cambridge, UK: Cambridge University Press.
- National Council on Interpreting in Health Care. (2001). The terminology of health care interpreting: A glossary of terms. *The National Council on Interpreting in Health Care Working Papers Series*, October. Retrieved from <http://www.ncihc.org/workingpapers.htm>
- National Society of Genetic Counselors, Inc. (2005). Retrieved from <http://www.nsgc.org/index.asp>
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Rapp, R. (1999). *Testing women, testing the fetus: The social impact of amniocentesis in America*. New York: Routledge.
- Rothman, B. K. (1987). *The tentative pregnancy: Prenatal diagnosis and the future of motherhood*. New York: Viking.
- Williams, C., Alderson, P., & Farsides, B. (2002). Is non-directiveness possible within the context of antenatal screening and testing? *Social Science & Medicine*, *54*, 339-347.