Satisfaction with Methods of Spanish Interpretation in an Ambulatory Care Clinic

David Kuo, MD, Mark J. Fagan, MD

OBJECTIVE: **To describe the utilization of various methods of language interpretation by Spanish-speaking patients in an academic medical clinic and to determine patients' and physicians' satisfaction with these methods.**

METHODS: **Survey administered to medical residents and Spanish-speaking patients asking about their experience and satisfaction with various methods of language interpretation.**

MAIN RESULTS: **Both patients and residents had the highest level of satisfaction for professional interpreters (92.4% vs 96.1% reporting somewhat or very satisfactory, $p = .17$). In contrast, patients were significantly more satisfied than residents with using family members and friends (85.1% vs 60.8%, $p < .01$). Physicians and patients agreed that accuracy, accessibility, and respect for confidentiality were highly important characteristics of interpreters (>90% of both groups reporting somewhat or very important). However, patients were more concerned than residents about the ability of the interpreter to assist them after the physician visit (94% vs 45.1%, $p < 0.01$).**

CONCLUSIONS: **Using family members and friends as interpreters for Spanish-speaking patients should be more seriously considered; however, in order to optimize patient satisfaction, differences between patients and providers should be taken into account when using interpretation in medical settings.**

KEY WORDS: **interpretation; language; outpatient clinics; communication barriers; Hispanic Americans; patient satisfaction.**
J GEN INTERN MED 1999;14:547–550.

The Hispanic population is the fastest-growing ethnic minority in the United States. In 1990, 12.1 million persons aged 18 to 64 years living in the United Sates who spoke Spanish as a first language described themselves as speaking English "less than 'very well.'"[1]

A significant proportion of the patients who visit academic ambulatory care clinics in the United States are Spanish-speaking patients. A variety of methods of interpretation may be available in such settings, including interpretation by family members or friends, professional hospital interpreters, hospital employees who are not professional interpreters, telephone interpretation services, and bilingual physicians themselves.

Received from the Department of Medicine, Morristown Memorial Hospital, Morristown, NJ (DK), and the Division of General Internal Medicine, Rhode Island Hospital, Providence, RI (MJF).

Address correspondence and reprint requests to Dr. Kuo: Department of Medicine, Morristown Memorial Hospital, 100 Madison Ave., Morristown, NJ 07960.

Previous research has suggested that improving communication may improve the clinical outcome of patients who are not English speaking.[2–4] How best to provide cost-effective interpretation services that are satisfactory from the perspective of both patients and physicians is a major concern to many medical clinics faced with limited financial resources. However, the differences between patients and physicians with respect to their satisfaction with various methods of interpretation have not been previously described.

The objectives of this study were to describe patterns of utilization of various methods of interpretation in a hospital-based primary care clinic and to describe patients' and physicians' attitudes about various methods of interpretation of this setting.

METHODS

Setting

The Medical Primary Care Unit (MPCU) at Rhode Island Hospital receives 17,000 visits annually and is staffed predominantly by internal medicine residents. It provides longitudinal primary care to an ethnically diverse adult population including patients who have immigrated from Latin America and Southeast Asia. A significant proportion of the patients speak Spanish as their first language (31%), and many of these patients do not consider themselves functionally literate in English.

Methods of Interpretation

Five methods of interpretation are used at the MPCU: that is, interpretation by (1) family members and friends; (2) professional interpreters, with the equivalent of one full-time Spanish-speaking professional interpreter available to the MPCU during business hours; (3) telephone interpreters, who are off-site and facilitate dialogue between providers and patients via speakerphone, a service contracted through an outside company; (4) ad hoc interpreters, such as bilingual support staff, though fewer than 1 in 10 of our clinic nonphysician staff are fluent in Spanish; and (5) physicians or medical residents who are bilingual and may also serve as interpreters for other physicians.

Patient Recruitment

In order to recruit patients for this study, a research assistant who was a Spanish-speaking, U.S.-born female college student was stationed in the medical clinic during the hours of operation each weekday for a 6-week period.

As patients checked in for their clinic appointments, they were screened by the research assistant for participation in the study based on their response to the verbal question: "Do you speak English?" Patients who were determined to speak no or little English but predominantly Spanish were given further information about the study and the opportunity for participation. If they consented to participation, then the research assistant would verbally administer the survey to the patient. No attempt was made to further assess the patient's level of fluency in English.

Physician Recruitment

We obtained from the Department of Medicine a list of internal medicine residents for 1996–97. Seventy-four residents were eligible to participate in the study. A copy of the survey instrument (described below) was distributed to the mailbox of each resident with a letter attached explaining the purpose of the study and instructions for completion. No attempt was made to match participating patients with their respective providers.

Survey Instrument

Based on a review of the literature regarding the use of medical interpreters in clinical settings, we designed a survey for patients using 26 4-point Likert-scale questions to determine how frequently the patients used various methods of interpretation, how satisfied they felt with each method they had used, if they ever felt interpreters should have been used but were not, if they ever received bad care because of the unavailability of an interpreter, how comfortable they thought they would feel discussing sensitive issues or embarrassing subjects using various interpretation methods, and what characteristics of interpreters they perceived to be important. We did not attempt to assess literacy; all patients received the survey verbally by the research assistant. The survey took approximately 5 minutes to complete.

To create a survey for the medical residents, we adapted the patients' survey using questions for the same subject areas. However, for questions pertaining to sensitive issues or embarrassing subjects, we asked the residents to project how they thought a hypothetical patient would feel with various interpretation methods. The written survey took approximately 3½ minutes to complete.

Analysis

All analyses were performed using Stata for Macintosh (Stata Corp, Tex). Wilcoxon Rank-Sum Tests were used to compare medical residents' and patients' responses by aggregating the top two response options on the Likert scale from the bottom two response options.

RESULTS

Respondent Characteristics

All 149 patients who participated in our study (response rate, 94%) were native speakers of Spanish, with 92.5% originating from the Dominican Republic, Puerto Rico, and Guatemala. The patients were predominantly female, with mean age of 52.6 years, and on average had resided in the United States for 14 years.

Fifty-one medical residents (69%) responded to our survey. None of them assessed themselves to be fluent in Spanish; fewer than 16% felt they were moderately proficient.

Frequency and Satisfaction

About 90% of medical residents (65% of patients) reported sometimes or frequently using family or friends to interpret. About 76% of medical residents (45% of patients) often used telephone interpreters; 75% (65%) often used professional interpreters; 23.5% (77%) often used hospital employees; and 11.8% (20.5%) often used bilingual physicians.

Residents and patients reported equally high levels of satisfaction for professional interpretation (Table 1). A higher percentage of patients compared with residents reported feeling somewhat or very satisfied with family members and friends and bilingual physicians, but a lower percentage of patients compared with residents felt somewhat or very satisfied with telephone interpreters. Neither group was very satisfied with the use of hospital employees who were not professional interpreters.

Table 1. Reported Level of Satisfaction for Interpretation Methods in the Medical Primary Care Unit*

Interpretation Method†	Residents, %	Patients, %	*p* Value
Patient's family member or friend (50/114)	62.0	85.1	<.01
Professional hospital interpreter (50/118)	98.0	92.4	.17
Hospital employee who is not a professional interpreter (39/30)	43.6	40.0	.05
Telephone interpreter (47/82)	74.5	53.3	<.01
Physician who is proficient in the patient's language (19/28)	47.4	75.0	<.01

**Percentage reporting "somewhat" or "very" satisfactory out of respondents having previously used that method.*
†*Total number of physician respondents per total number of patient respondents.*

Of the patients, 27.4% (vs 70% of the medical residents) reported that they sometimes or frequently thought that an interpreter should have been used during a visit but was not ($p < .001$).

Of the patients, 16.2% (vs 62% of the medical residents) reported that they sometimes or frequently thought bad care was delivered because an interpreter was inadequate or unavailable ($p < .001$).

Sensitive Issues

Patients were more comfortable than resident physicians thought they would be when using professional interpreters to discuss sensitive issues or embarrassing subjects. Greater levels of comfort were reported by patients who used family members and friends or the physician as interpreters. However, levels of patient comfort with using professional hospital interpreters, hospital employees, and telephone interpreters were not significantly different between the two groups.

Interpreter Characteristics

Medical residents and patients agreed that the most important characteristics for interpreters were availability, accuracy, and confidentiality (Table 2). Compared with patients, residents were significantly more likely to feel that availability and understanding of customs and beliefs were moderately or very important. In contrast, patients were significantly more likely to feel that personal familiarity, gender concordance, and the ability of the interpreter to assist after the visit were moderately or very important.

DISCUSSION

When health care providers and patients do not speak the same language, interpretation is a crucial part of communication. Ideally, multiple modalities for interpretation are available for patient visits when necessary. However, resources are limited for many academic medical clinics, so how best to appropriately allocate funds for interpretation services clearly warrants attention. By exploring patient and provider perceptions of and attitudes toward interpreter usage, we hope to provide some information to help managers and directors of academic medical clinics improve their services.

The costs of having both a telephone interpretation service and professional on-site interpreters are substantial. At the rate of $2.20 per minute of usage, about $3,500 is spent per month or $42,000 per year on the telephone interpretation service under contract to the hospital, which is used predominantly by the MPCU. Likewise, one full-time interpreter for the MPCU costs approximately $25,000 per year.

One solution is to use family members or friends as interpreters. Although physicians-in-training are often reminded of the hazards of using family members and friends as interpreters because they are biased and untrained, our data showed patients had high levels of satisfaction and comfort with using family members and friends as interpreters. Patients from certain cultures may prefer their use over unfamiliar interpreters. Hispanic patients, for example, may value a close family network over individualism.[5] Family members and friends are a readily available and inexpensive source of information who can also assist the patient with tasks such as arranging transportation and follow-up visits.

There are some limitations to our study. First, our findings may not be generalizable to other outpatient clinics or other languages. Many clinics do not have access to as many interpreter options. Cultural differences as well as language proficiency may independently influence patients' expectations for satisfactory medical care and how they report them.[6,7] Second, we did not record data on physicians and patients who did not consent to participate, although they were small in number (constituting less than 10%). Reasons for patients' refusal to participate included not feeling well, not having time because their appointment time had been reached, and not wanting to participate without family members present.

We used Spearman Rank Correlation and Wilcoxon Rank-Sum Test to determine if patients' satisfaction and comfort levels were related to age or gender. Male patients seemed more satisfied than females with the use of family

Table 2. Estimated Importance of Interpreter Characteristics*

Characteristic	Residents, % (n = 51)	Patients, % (n = 149)	p Value
Availability	100	91.9	.04
Accuracy	100	99.3	.56
Confidentiality	96.1	89.9	.17
Understand patients' customs and beliefs	94.1	81.5	.04
Presence in room	74.5	78.9	.49
Helpful after doctor's visit	45.1	94.0	<.01
Personal familiarity	15.7	56.8	<.01
From same country	9.8	19.5	.11
Same gender	7.8	53.7	<.01

**Percentage reporting "sometimes" or "frequently".*

members and friends ($p = .022$), but otherwise age and gender did not affect the general satisfaction scores for the other methods of interpretation. Levels of comfort for sensitive issues were higher for older compared with younger patients for all methods of interpretation ($p < .05$) except for the bilingual physician. These differences in comfort may suggest that each interpretation method is not appropriate for all patients.

The Spanish-speaking patient population poses a challenge to many academic clinics like the MPCU at Rhode Island Hospital because of the relative scarcity of bilingual providers. Diminishing financial resources are likely to cause uncertainty at such sites as practice administrators consider whether formal on-site interpreter programs or telephone interpreters are sufficiently advantageous relative to other modalities to warrant their expense. Our study suggests that using family members and friends as interpreters should be more seriously considered despite differences in satisfaction with this modality between residents and patients.

The authors thank Steven Reinert, Alan Fask, Anne W. Moulton, and Elise M. Hubert for their assistance with this work. This work was supported by a research grant from the Department of Medicine of Rhode Island Hospital, where Dr. Kuo was a Fellow in General Internal Medicine, and the Health Research Services Administration.

REFERENCES

1. Statistical Abstract of the United States 1997. 117 ed. Washington, DC: US Bureau of the Census; 1997.
2. Woloshin S, Schwartz LM, Katz SJ, Welch HG. Is language a barrier to the use of preventive services? J Gen Intern Med. 1997;12(8):472–7.
3. Manson A. Language concordance as a determinant of patient compliance and emergency room use in patients with asthma. Med Care. 1988;26(12):1119–28.
4. Baker DW, Parker RM, Williams MV, Coates WC, Pitkin K. Use and effectiveness of interpreters in an emergency department. JAMA. 1996;275(10):783–8.
5. Delivering Preventive Health Care to Hispanics: A Manual to Providers. Washington, DC: The National Coalition of Hispanic Health and Human Services Organizations; 1990.
6. Hayes RP, Baker DW. Methodological problems in comparing English-speaking and Spanish-speaking patient's satisfaction with interpersonal aspects of care. Med Care. 1998;36(2):230–6.
7. Carrasquillo O, Orav EJ, Brennan TA, Burstin HR. Impact of language barriers on patient satisfaction in an emergency department. J Gen Intern Med. 1999;14:82–7.