SPECIAL ARTICLE

Patient Centeredness in Medical Encounters Requiring an Interpreter

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PURPOSE: Patient-centered interviewing is associated with greater patient satisfaction and better medical outcomes than traditional encounters, but actively seeking patients' views of their illnesses and encouraging patients to express expectations, thoughts, and feelings is difficult in encounters that require an interpreter. We sought to examine physicians' use of the patient-centered approach with patients who required the assistance of an interpreter.

SUBJECTS AND METHODS: A cross-sectional sample of patients was videorecorded during visits with physicians at a multi-ethnic, university-affiliated, primary care clinic. Nineteen medical encounters of Spanish-speaking patients who required an interpreter and 19 matched English-speaking encounters were coded for frequency that patients mentioned symptoms, feelings, expectations, and thoughts (collectively called "offers"). Physicians' responses were coded as ignoring, closed, open, or facilitative of further discussion.

RESULTS: English-speaking patients made a mean ($\pm$ SD) of 20 ± 11 offers, compared with 7 ± 4 for Spanish-speaking patients ($P = 0.001$). Spanish-speaking patients also were less likely to receive facilitation from their physicians and were more likely to have their comments ignored ($P < 0.005$). English-speaking patients usually received an answer or acknowledgment to their questions even if the physicians did not encourage further discussion on the topic.

CONCLUSION: Spanish-speaking patients are at a double disadvantage in encounters with English-speaking physicians: these patients make fewer comments, and the ones they do make are more likely to be ignored. The communication difficulties may result in lower adherence rates and poorer medical outcomes among Spanish-speaking patients. **Am J Med. 2000; 108:470–474.** ©2000 by Excerpta Medica, Inc.

The quality of the physician-patient relationship affects the diagnosis, treatment, and recovery of patients (1–7). When patients are treated as partners in the medical dialogue, rather than as reporters of symptoms, they become more willing to ask questions or express concerns, and they are more likely to receive the kind of information about their treatment regimen that they find useful (8–10). In these exchanges, referred to as "patient-centered" encounters, physicians not only try to understand the symptoms but also seek to facilitate patients' expressions of their thoughts, feelings, and expectations (11–14). In addition to allowing the patient sufficient opportunity to express physical concerns, the clinician asks questions to encourage the patient's explanation for, or personal meaning of, the symptoms (13–15). Physicians benefit from patient-centered encounters as well. When physicians use open-ended questions and facilitate patient involvement, they are able to gain almost four times the amount of clinically relevant information compared with physicians who rely on closed-ended questioning (16).

The patient-centered approach has been linked to better medical outcomes. Patients are more likely to comply with physicians' recommendations, as measured by pill counts, and they are more satisfied with their encounters (5–7, 17–19). When patients are satisfied with their medical encounter, they are more compliant, more likely to keep follow-up appointments, and less likely to change physicians (18, 20, 21). In addition, patients rate effective communication by the physician as an important part of their satisfaction with the medical encounter (22, 23).

Despite the benefits, the use of patient-centered medical inquiry remains limited. Physicians primarily cite lack of time, which may be compounded in cross-language encounters that are likely to be slower and less precise because interpreters often convey the "gist" rather than a detailed translation of patients' comments (24). Adding an interpreter reduces the direct verbal communication and nonverbal reciprocity between the patient and physician; thus, the encounter is likely to be less personal, and rapport is more difficult to achieve (25).

We hypothesized that English-speaking physicians

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Supported by the National Institute of Mental Health (1 RO1 MH 47536) and the Regents of the University of California.

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Manuscript submitted September 22, 1998, and accepted in revised form October 18, 1999.

0002-9343/00/$–see front matter
PII S0002-9343(99)00445-3

would be less likely to provide patient-centered encounters to patients who required the use of an interpreter than to patients who spoke English. Additionally, owing to the time constraints in a cross-language encounter, non–English-speaking patients were expected to have less opportunity to present their concerns to the physician.

METHODS

Patients aged 18 to 64 years who were attending a university-affiliated multi-ethnic primary care clinic for the first time were approached and asked for permission to videotape their medical encounters. The clinic serves a low socioeconomic area with many immigrants from Mexico and Central America. Two groups of patients who saw English-speaking physicians were compared: 19 Spanish-speaking patients were matched to 19 English-speaking patients, based on sex and lack of accompanying family members or friends during the encounter. Men and women were equally represented in both groups. Interpreters (n = 7) were bilingual, bicultural primary care nurses at the clinic. The eight physicians in the study were first- to third-year primary care residents or attending physicians, none of whom were bilingual. Most physicians cared for both English- and Spanish-speaking patients. A bilingual research assistant explained the project to each patient, who was assured that the decision to participate would not affect care and that the videotape could be stopped at any time during the encounter. Written consent was obtained from participants. The protocol for this research was approved by the Human Subjects Committee of the University of California Irvine.

Each videotape was coded using Henbest and Stewart's Patient-Centeredness Measure (11). This measure assesses how a physician responds to a patient's verbal offers, and has high interrater and intrarater reliability and validity (11). A patient offer was defined as any topic or question introduced by the patient during the medical encounter that was not a direct answer to a physician's question. Patient offers were coded into six different categories. An offer was coded as a *symptom* if it was a description of physical evidence of illness, such as "It hurts here," or as an *expectation* if the statement indicated that the patient was looking forward to or anticipating something (eg, "I was hoping I could get my test back"). A *thought* was an idea about the illness, including possible causes or implications, such as "I think I got this cold when I went out in the rain." A *feeling* was coded if the patient expressed an emotional state or reaction such as fear (eg, "I'm afraid I might have cancer"). If a request had been previously stated by the patient, yet the physician had not responded to it and the patient repeated the offer, it was coded as a *prompt*. Finally, an offer that could not fit in any of the above categories was coded as a *non-specific cue*. Both questions and phrases were coded under the same rules.

Physician's responses to patient offers were coded on a 4-point scale from 0 to 3. The lowest score (coded 0) was assigned if the physician ignored the patient. For example, if a patient had made the offer, " Since my husband's heart attack, I have felt a tightening in my chest," the physician might answer by asking the patient her age and disregarding her concern. A closed response (coded 1) was one in which the physician responded with a closed question or a direct answer to a patient's question that inhibited further exploration of the patient's concerns. Using the same example, the physician might respond by saying, "That's normal." An open response (coded 2) included open-ended questions and answers that allowed the patient further exploration of symptoms, thoughts, feelings, or expectations. In the previous example, the physician might say, "Tell me more about that." Finally, the highest score (coded 3) was assigned to physician responses considered to be a specific facilitation of the patient's self-expression through confrontation, reflective statements, interpretation, or questions. Thus, the physician in our example might respond by saying, "Do you think his situation may have something to do with your symptoms?"

The history-taking session before the physical examination was coded by two bilingual raters, blinded to the study's hypotheses. Because cross-language encounters with an interpreter are slower, it takes more time for physicians to discuss the same amount with Spanish-speaking patients as with English-speaking ones. Consequently, the entire history-taking session for all patients was coded to ensure reliability and internal validity. The physician response points (ignore = 0 points, closed = 1 point, open = 2 points, and specific facilitation = 3 points) were totaled for each encounter and divided by the total number of patient offers made, yielding a patient-centeredness score. If an interpreter neglected to translate an offer (or, on rare occasion, responded to it), it was not coded as a physician response, even though the physician may not have been made aware of the offer. Although this coding could have given a physician a lower score, our objective was to capture what the patient perceived, as this would have implications for the patient's satisfaction and compliance. Thus, the resulting score could be affected by both the physician and interpreter.

To calculate the interrater reliability, Spearman's correlation coefficient was used to determine if the offers and responses in each encounter were evaluated similarly by each rater. The correlation coefficients were $r = 0.96$ for both patient offers and physician responses. The ratings from both coders were then averaged for computing the patient-centeredness scores.

Student's *t* test was used to compare demographic variables. Analysis of the patients' offers and physicians' re-

Table 1. Demographic Characteristics of the Patients

Characteristic	Patients' Language	
	English (n = 19)	Spanish (n = 19)
	Number (Percent) or Mean ± SD	
Male sex	10 (53)	10 (53)
Age (years)	37 ± 9	36 ± 12
Years in school	12 ± 2	5 ± 4*
Employed	5 (21)	8 (42)
Ethnicity		
Non-Latino white	15 (79)	0
Chicano†	4 (21)	1 (5)
Mexican	0	17 (90)
Central American	0	1 (5)

* $P < 0.001$.
† Born in the United Sates of Mexican ancestry.

sponses were performed using one-way analysis of covariance (ANCOVA) with patients' level of education and physicians' identity forming the covariates. Significant ANCOVA findings were examined further using *t* tests: English- and Spanish-speaking patients were compared for each type of offer, and English-speaking Latinos were compared by language (English-speaking Latinos to Spanish-speaking Latinos) and by ethnicity (English-speaking Latinos to English-speaking non-Latinos) for number of offers and for patient-centeredness scores.

Statistical significance was set at 0.05. With 19 subjects per group, we had power of 0.80 to detect a large effect (0.4 SD units).

RESULTS

The demographic characteristics of the English- and Spanish-speaking groups were similar, except for years of schooling (Table 1). All physicians (except one from the Middle East) were born in the United States; four were Asian and three were non-Latino white. The patients were assigned to physicians arbitrarily as they appeared in the clinic, so physicians cared for Spanish-speakers and English-speakers by chance.

Table 2. Comparisons of Types of Offers Made to Physicians by English- and Spanish-speaking Patients

Type of Offers	English-speaking Patients (n = 19)	Spanish-speaking Patients (n = 19)	*P* Value
	Mean ± SD		
Symptoms	6.3 ± 4.1	4.1 ± 2.7	0.05
Expectations	0.8 ± 1.0	0 ± 0	0.01
Thoughts	2.7 ± 2.5	0.9 ± 1.1	0.01
Feelings	1.2 ± 1.7	0.2 ± 0.4	0.05
Prompts	0.4 ± 0.5	0.4 ± 0.7	0.90
Nonspecific cues	8.8 ± 5.4	2.0 ± 1.8	0.001

English- and Spanish-speaking patients differed significantly for five of the six categories of offers: symptoms, expectations, thoughts, feelings, and nonspecific cues (Table 2). English-speaking patients were more likely to use each type of offer than Spanish-speaking patients. In particular, English-speaking patients were more likely to use nonspecific cues, which tended to be comments associated with psychosocial issues, such as losing a job. Spanish-speaking patients reported more symptoms than any other type of offer, although the number of symptoms was still significantly fewer than that offered by English-speaking patients.

During encounters, English-speaking patients made almost three times as many offers to physicians as patients requiring an interpreter (Table 3) after adjusting for patients' level of education and identity of the physician. Because the English-speaking group was comprised of four Chicano patients and 15 non-Latino patients, we investigated whether the difference in the number of offers might be attributable to ethnicity rather than language. The two subgroups of English-speaking patients, Latino and non-Latino, made similar numbers of offers (Table 3). However, the English-speaking Latino group made significantly more offers than the Spanish-speaking Latinos (Table 3).

English-speaking patients were more likely to receive a response to their comments from the physician than were Spanish-speaking patients, as measured by the mean patient-centeredness scores (Table 3). There was no difference, however, when the English-speaking Latinos were

Table 3. Comparisons of Patient Offers and Physicians' Patient-Centeredness Scores by Language and Ethnicity

Measurement	All Patients			Latino Patients			English-speaking Patients		
	English-speaking (n = 19)	Spanish-speaking (n = 19)	*P* Value	English-speaking (n = 4)	Spanish-speaking (n = 19)	*P* Value	Non-Latino (n = 15)	Latino (n = 4)	*P* Value
	Mean ± SD			Mean ± SD			Mean ± SD		
Number of offers made	20 ± 11	7 ± 4	<0.001	22 ± 11	7 ± 4	0.05	19 ± 11	22 ± 12	0.69
Patient-centeredness scores	1.1 ± 0.3	0.6 ± 0.3	<0.001	1.1 ± 0.3	0.5 ± 0.3	0.005	1.1 ± 0.3	1.1 ± 0.3	0.76

compared with the other English-speaking patients. Physicians also demonstrated more patient centeredness toward the English-speaking Latinos than the Spanish-speaking Latinos.

DISCUSSION

Primary care patients who spoke through an interpreter made markedly fewer comments of all types during medical encounters than did patients who spoke directly with their physicians. Due to the time consumed by the interpretation process, patients may have had fewer opportunities to raise concerns or to explain their symptoms. Because most affective communication is communicated through nonverbal channels, such as voice tone or eye contact (26), Spanish-speaking patients in cross-language encounters may not develop the same level of rapport with their physician as other patients, and they may hesitate disclosing personal concerns or opinions. Compared with English-speaking patients, clinicians were also less likely to encourage Spanish-speaking patients to provide personal commentary about their physical symptoms.

We found no evidence that Latino cultural norms about behavior during a medical encounter exacerbated the differences in the number of patient offers. In the Latino culture, refraining from questioning—referred to as *respeto*—is considered a sign of respect toward the physician (27, 28). The physician signals interest in opening a dialogue with the patient by actively soliciting his or her concerns (29–33). We explored the possibility that ethnicity accounted for the results by examining patient-centeredness scores and the number of offers made by English-speaking Latinos and comparing them with other English-speaking patients and with the Spanish-speaking Latino patients. The two subgroups of English-speaking patients, whether Latino or non-Latino, showed no differences in number of offers or patient-centeredness scores. On the other hand, English-speaking Latinos made significantly more offers than Spanish-speaking Latinos and received more facilitation by physicians for the comments they made. This suggests that language, rather than dissimilar ethnic backgrounds, precipitated the differences in offers made by patients and facilitation provided by physicians.

The presence of nurse-interpreters also complicated the communication. However, bilingual research assistants rated the physicians' and patients' comments using a video recording of the medical encounter. The number of offers, therefore, could not be affected by the quality of the translation. On the other hand, a patient-centeredness score could be affected if a nurse failed to interpret a patient's mention of a symptom.

There may be several reasons why physicians may be less motivated to solicit patient concerns in cross-language situations. Due to the time involved in waiting for translated comments, physicians may emphasize critical information that is needed to make a diagnosis or a clinical decision in a timely manner. By discouraging the type of commentary that flows from facilitative queries, the physician reduces the amount of potentially confusing material. Additionally, some physicians may have discovered that simple, direct inquiries increase their likelihood of getting accurate interpretations and responses. The patient and interpreter may respond to subtle differences in the physician's manner of inquiry by offering the type of information that they perceive to be desired by the physician, in accord with patients' cultural expectations about the manner in which they should speak with physicians.

Although we adjusted for patient's education, physician recognition of a patient's educational level may have influenced the response to patient comments. Physicians give more information to highly educated patients, while they give more emotional support to patients with a lower level of education (34). We did not find that Spanish-speaking patients, who were generally less well educated, received more emotional support.

As our health delivery system moves to a managed care environment and the call for patient-centered care becomes more prevalent (35), the difficulty of caring for non–English-speaking patients may become a problem for physicians. Clinicians may be concerned about an economic penalty if their cross-language encounters become too time consuming (36), yet non-English speakers' lack of understanding about their condition or medication instructions (37) may lead to additional appointments to resolve consequences of noncompliance. Moreover, patients in cross-language encounters are likely to find their providers less friendly and less respectful than do patients without a language barrier (38), most likely reducing the desire of these patients to seek out the same doctors to establish trusting, professional relationships. Patients in cross-language encounters are more likely to make emergency room visits than are patients in same-language encounters (39). Although the lack of insurance among immigrant patients may contribute to the high use of emergency rooms and the lack of primary care, our results indicate that other reasons may also contribute. Non–English-speaking patients may prefer waiting until a problem becomes severe rather than trying to explain subtle physiological changes or symptoms to someone who speaks another language.

Ideally, patients would be cared for by physicians who speak their language. When this is not possible, both the physician and nurse-interpreter should be aware that non–English-speaking patients have communication barriers beyond just difficulties with translation. Both the physician and patient may change their behavior in subtle ways that may complicate the development of trust, in-

crease the likelihood of the physician misunderstanding any complexity associated with the patient's symptoms, and decrease the probability that the patient will adhere to the physician's recommendations.

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