Teaching Spanish to Pediatric Emergency Physicians
Effects on Patient Satisfaction

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Background: Language barriers are known to negatively affect patient satisfaction.

Objective: To determine whether a course of instruction in medical Spanish for pediatric emergency department (ED) physicians is associated with an increase in satisfaction for Spanish-speaking-only families.

Design, Setting, Participants, and Intervention: Nine pediatric ED physicians completed a 10-week medical Spanish course. Mock clinical scenarios and testing were used to establish an improvement in each physician's ability to communicate with Spanish-speaking-only families. Before (preintervention period) and after (postintervention period) the course, Spanish-speaking-only families cared for by these physicians completed satisfaction questionnaires. Professional interpreters were equally available during both the preintervention and postintervention periods.

Main Outcome Measures: Responses to patient family satisfaction questionnaires.

Results: A total of 143 Spanish-speaking-only families completed satisfaction questionnaires. Preintervention (n=85) and postintervention (n=58) cohorts did not differ significantly in age, vital signs, length of ED visit, discharge diagnosis, or self-reported English proficiency. Physicians used a professional interpreter less often in the postintervention period (odds ratio [OR], 0.34; 95% confidence interval [CI], 0.16-0.71). Postintervention families were significantly more likely to strongly agree that “the physician was concerned about my child” (OR, 2.1; 95% CI, 1.0-4.2), “made me feel comfortable” (OR, 2.6; 95% CI, 1.1-4.4), “was respectful” (OR, 3.0; 95% CI, 1.4-6.5), and “listened to what I said” (OR, 2.9; 95% CI, 1.4-5.9).

Conclusions: A 10-week medical Spanish course for pediatric ED physicians was associated with decreased interpreter use and increased family satisfaction.

Arch Pediatr Adolesc Med. 2002;156:693-695

Language barriers between emergency department (ED) physicians and patient families are known to reduce patient compliance and quality of care.1-4 They may also lead to a higher rate of resource utilization and increased ED visit times.5-7 The extent to which formal foreign language instruction to providers can mitigate any of these effects is unknown. As important, the effects of such an intervention on patient and family satisfaction have not been prospectively studied.

Despite the widespread availability and use of professional interpreters in our ED, we hypothesized that an increase in physicians’ Spanish-language skills and cultural competency would be associated with an increase in satisfaction for Spanish-speaking-only families.

When compared with preintervention performance in mock scenarios, in the postintervention period, physicians scored higher on measures of data gathering without the use of an interpreter (mean scores, 17.2 vs 22.4; paired t test, P=.01). In addition, all but one of the physicians in the postintervention period expressed increased confidence in addressing various ED chief complaints in Spanish.

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A total of 143 Spanish-speaking-only families completed satisfaction questionnaires (85 preintervention and 58 postintervention). Preintervention and postintervention cohorts did not differ significantly in age, vital signs, insurance status, length of ED visit, discharge diagnosis, or self-described English proficiency (Table). Family response rate was 90% and did not vary between preintervention and postintervention periods. Each participating physician was represented in similar proportions in both periods (χ², P=.13). Physicians were less likely to use an interpreter in the postintervention period (55% vs 29%; odds ratio [OR], 0.34; 95% confidence interval [CI], 0.16-0.71).
SUBJECTS AND METHODS

This study was conducted in an urban, university-affiliated pediatric ED with an annual volume of approximately 40,000 patients, 10 full-time faculty, and 6 fellows. Although 39% of the population in our catchment area is of Latino origin, few of our medical personnel speak Spanish. Professional interpreters are available in the ED 18 hours each day. A telephone interpreter service is used for translation during the remaining 6 hours.

A 10-week medical Spanish course was offered to ED faculty. Nine physicians with moderate to poor Spanish proficiency chose to participate. The course was conducted for 2 hours weekly and taught by an instructor from a respected Spanish-language institution. The class emphasized medical history taking and Hispanic cultural beliefs.

The physicians’ medical Spanish proficiency was established through scripted clinical scenarios (available from the authors on request). Actors were recruited to portray Spanish-speaking only parents. Before and on completion of the course, each physician conducted 3 mock interviews. After each interview, the physician completed a written test to identify key elements of the history. After the course, physicians also completed questionnaires that addressed their confidence in evaluating a range of common ED chief complaints in Spanish.

In 1-month preintervention (February 11 to March 12, 2000) and postintervention (June 4 to July 8, 2000) periods, a previously validated family satisfaction questionnaire was adapted for pediatrics and translated into Spanish. During shifts on which participating physicians were present in the ED, consecutive Spanish-speaking-only families were identified at triage by a registered nurse, and a questionnaire was attached to their ED charts. The families completed their section of the questionnaire after discharge and left it in the examination room to be collected by the nurse.

In addition to the designation as “Spanish-speaking-only” at triage, the questionnaire asked families to rate their own level of English proficiency. To avoid confusion about who was the physician in charge, questions specified (in Spanish) the attending physician or fellow as “the doctor in the gray coat.”

Using a 5-point Likert scale, caregivers were asked to describe their agreement with the following: “the physician was concerned about my child,” “the physician made me feel comfortable,” “the physician was respectful,” and “the physician listened to what I said.” For both periods, only families who were cared for by physicians participating in the course were included in the analysis. For each Spanish-speaking-only visit, the participating physician completed a questionnaire addressing professional interpreter use.

The study was approved by the hospital’s institutional review board.

Families in the postintervention period were more likely to strongly agree that “the physician was concerned about my child” (OR, 2.1; 95% CI, 1.0-4.2), “the physician made me feel comfortable” (OR, 2.6; 95% CI, 1.1-4.4), “the physician was respectful” (OR, 3.0; 95% CI, 1.4-6.5), and “the physician listened to what I said” (OR, 2.9; 95% CI, 1.4-5.9) (Figure).

COMMENT

In our pediatric ED, a 10-week medical Spanish course for physicians was associated with increased family satisfaction and a concomitant decreased reliance on professional interpreters.

Our physicians acquired an ability to obtain an uncomplicated medical history (eg, ear pain, sore throat, lacerations, vomiting, and diarrhea), conduct an unassisted physical examination, and give common discharge instructions without the help of an interpreter. Clearly, professional medical interpreters perform a vital service in our ED, and all of our physicians agreed that they would continue to use an interpreter for more
Language barriers are known to negatively affect patient satisfaction. In our pediatric ED, a 10-week medical Spanish course for physicians was associated with increased family satisfaction and a concomitant decreased reliance on professional interpreters. Because of the significant effects on family satisfaction observed in our study, medical Spanish courses should be considered as part of pediatric, general emergency medicine, and pediatric emergency medicine training in areas where the local patient population is largely Hispanic.

complex encounters. However, our results suggest that Spanish instruction for physicians allows this limited resource to be more efficiently allocated. Despite the necessity of interpreters for complicated cases, our study supports previous reports correlating interpreter use negatively with patient satisfaction (when compared with direct communication in the preferred language).6

We prospectively recorded an improvement in family satisfaction with the physician. Of course, we presume that improved, direct communication is the most likely explanation. However, satisfaction is but one element in the definition of quality care. We are optimistic that this increase in satisfaction also affected compliance, likelihood of follow-up, and overall disease management, but further study of long-term outcomes would be necessary to establish such a relationship.

This study had several methodologic limitations. The questionnaire was in written form; thus, illiterate families were excluded. We suspect that the benefits of provider Spanish competence would be even more pronounced for poorly educated families, but this effect is not reflected in our results. In addition, the translation from English to Spanish and pediatric adaptation of our questionnaire may have compromised its previously published validity.

Although our physician participants had no definite knowledge of whether all of the patient family questionnaires were included in our sample, and did not often see the patients’ charts until after the patient was discharged from the ED, they were aware that patient satisfaction would be one of the outcome measures of our study. Therefore, it is conceivable that a Hawthorne effect altered their approach to Spanish-speaking-only families in the postintervention period. However, to the extent that these differences included improved communication and cultural sensitivity, they should be counted as an affirmation of the effectiveness of our intervention, rather than as a confounder. In addition, our physicians were aware of the study in the preintervention period, and one must suppose that the Hawthorne effect applied to those interactions as well, thus preserving the internal validity of our findings.

Enrollment in our course was strongly encouraged but ultimately voluntary. Therefore, it is likely that the physicians completing the course represented a subset of motivated clinicians with a preexisting interest (if not competence) in providing culturally sensitive care. Although this small sample size of providers does not invalidate our main findings regarding an improvement in family satisfaction, it may restrict the generalizability of this study to other groups of practitioners.

We did not measure family satisfaction during the 10-week course. It is possible that, in the process of acquiring cultural and linguistic competence, a brief period existed when a combination of decreased interpreter use and inadequate language skills actually reduced family satisfaction. However, easy access to interpreters throughout this period minimized any such effect.

The total cost of the course (excluding the opportunity cost of physician time) was $2000 for 9 physicians. The cost-benefit ratio of these classes will vary with the volume of Spanish-speaking-only patients. Further investigation may quantify the financial benefits of this and other interventions, such as recruitment of Hispanic physicians, telephone language lines, lay interpreters, etc. Nevertheless, because of the significant effects on family satisfaction observed in our study, medical Spanish courses should be considered as part of pediatric, general emergency medicine, and pediatric emergency medicine training in areas where the local patient population is largely Hispanic.

Accepted for publication March 27, 2002.

This study was supported by a grant from the Children’s Memorial Hospital Child Advocacy Committee, Chicago, Ill.

This study was presented as a poster at the Pediatric Academic Society Meeting, Baltimore, Md, April 28, 2001. We thank Genie Roosevelt, MD, MPH, for aid with statistical analysis.

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REFERENCES


