Impact of English Proficiency on Care Experiences in a Pediatric Emergency Department

Kimberly C. Arthur, MPH; Rita Mangione-Smith, MD, MPH; Hendrika Meischke, PhD, MPH; Chuan Zhou, PhD; Bonnie Strelitz, MPH; Maria Acosta Garcia, BS; Julie C. Brown, MDCM, MPH

From the Seattle Children's Hospital and Seattle Children's Research Institute, Seattle, Wash (Ms Arthur, Dr Brown, Dr Zhou, Ms Strelitz, Ms Acosta Garcia, and Dr Mangione-Smith); Department of Pediatrics, University of Washington School of Medicine, Seattle, Wash (Dr Brown, Dr Zhou, and Dr Mangione-Smith); and Department of Health Services, University of Washington School of Public Health, Seattle, Wash (Dr Meischke and Dr Mangione-Smith)
The authors declare that they have no conflict of interest.
Address correspondence to Kimberly C. Arthur, MPH, Seattle Children's Hospital, Mailstop S-217, 4800 Sand Point Way NE, Seattle, WA 98105 (e-mail: kimberly.arthur@seattlechildrens.org).
Received for publication March 25, 2014; accepted June 28, 2014.

ABSTRACT

OBJECTIVE: To compare emergency department care experiences of Spanish-speaking, limited-English-proficient (SSLEP) and English-proficient (EP) parents and to assess how SSLEP care experiences vary by parent-perceived interpretation accuracy.

METHODS: The National Research Corporation Picker Institute's Family Experience Survey (FES) was administered from November 26, 2010, to July 17, 2011, to 478 EP and 152 SSLEP parents. Problem scores for 3 FES dimensions were calculated: information/education, partnership with clinicians, and access/coordination of care. Adjusted associations between language proficiency (SSLEP vs EP) and dimension problem scores were examined by multivariate Poisson regression. Unadjusted Poisson regression analysis was used to examine the association between perceived interpretation accuracy and FES problem scores for SSLEP parents who received interpretation.

RESULTS: SSLEP parents had a higher risk of reporting problems with access/coordination of care compared to EP parents (risk ratio 1.6, 95% confidence interval 1.2, 2.1). There were no differences in reported care experiences related to information/education or partnership with clinicians. Among SSLEP parents who received professional interpretation, those reporting poor accuracy had a higher risk of also reporting problems with information/education (risk ratio 2.1, 95% confidence interval 1.2, 3.6).

CONCLUSIONS: In a pediatric emergency department with around-the-clock access to professional interpretation, SSLEP parents report poorer experiences than EP parents with access/coordination of care, including perceived wait times. Their experiences with provision of information/education and partnership with clinicians approximate those of EP parents. However, SSLEP parents who perceive poor interpretation accuracy report more problems understanding information provided about their child's illness and care.

KEYWORDS: communication barriers; emergency medicine; interpreters; limited English proficiency; patient satisfaction

ACADEMIC PEDIATRICS 2015;15:218–224

WHAT'S NEW

Having around-the-clock availability of professional interpretation in pediatric emergency departments may mitigate some disparities in care experiences for Spanish-speaking, limited-English-proficient parents. However, parent-perceived inaccuracies in interpretation are associated with more reported problems understanding the information provided.

EARLY STUDIES OF the impact of language barriers on patient and family experiences found that patients who spoke a primary language other than English or were identified as having limited English proficiency (LEP) reported more problems than native English-speaking or English-proficient (EP) patients with care in the emergency department (ED) and in other settings.[1–5] One major contributing factor to lower satisfaction and comprehension was a lack of professional interpreters or language-concordant physicians.[6,7] More recent studies in general and pediatric EDs[8–11] and other settings[10–15] have shown increased LEP patient or parent satisfaction with the use of professional interpretation or language-concordant physicians. However, in recent population-based pediatric surveys, LEP parents continue to report more problems with health care and communication than EP parents.[16–18] It is unclear if LEP parents experience more problems than EP parents in the pediatric ED setting.

Although professional interpretation increases satisfaction in the LEP population in many settings, providing

interpreter services in the ED is challenging because visits are not planned. Professional in-person interpreters may not be immediately available, providers may attempt to communicate in the parent's language despite varying levels of proficiency,[19] and providers and parents may communicate via English-speaking relatives, including siblings and pediatric patients themselves.[20–22] Developing systems to provide high-quality interpretation services and care for Spanish speakers is important because they are the largest LEP population in the United States.[23]

Our primary outcome measures were problem scores calculated for 3 types of care experiences on the National Research Corporation Picker Institute's Family Experience Survey (FES): 1) information/education, 2) partnership with clinicians, and 3) access/coordination of care. We hypothesized that Spanish-speaking LEP parents or legal guardians of patients (hereafter referred to as SSLEP parents) would report more problems with care experiences than EP parents or legal guardians (hereafter referred to as EP parents) in a pediatric ED with access to professional telephone or in-person interpretation. Among SSLEP parents who received interpretation services, we hypothesized that those who reported inaccuracies of interpretation would also report more problems with care experiences.

METHODS

We conducted this prospective study of parent-reported care experiences in a freestanding children's hospital ED with 32,351 visits in the year before this study. Forty-one percent of these visits were made by non-Hispanic white patients, 23% by Hispanic patients, and the remainder by patients of other races and ethnicities. An in-person Spanish interpreter was requested for 10% of visits. We focused on experiences of SSLEP families because Spanish is the most frequently interpreted language, comprising 66% of all interpreted visits, which is 8-fold more frequent than the next most commonly interpreted language, Somali. This ED provides free, confidential, professional interpreter services 24 hours a day, 7 days a week. In-person interpreters sometimes stay in the room for the whole visit, but they may also alternate between rooms to serve multiple families. At the time of this study, hospital-employed in-person Spanish interpreters were available from 6 AM to 12:30 AM. All hospital-employed in-person interpreters have passed a state certification test.

When interpreters are not at the hospital, in-person interpreters may be requested from an agency. Telephone interpretation services are always available. Although our hospital did not yet have a formal policy about provider certification of language proficiency at the time of the study, providers were discouraged from communicating with a family in any language other than English without an interpreter unless they had voluntarily completed the Clinician Cultural and Linguistic Assessment, an externally administered test of proficiency in foreign languages for the medical setting.[24] No ED providers or staff had completed this assessment at the time of this study. The Seattle Children's Hospital institutional review board determined this study was in the exempt category of research.

PARTICIPANTS

English-speaking and Spanish-speaking parents of patients of all ages were invited to participate; their language proficiency was subsequently measured with a self-administered US Census question ("How well do you speak English?").[23] Patients without a parent or legal guardian present were not approached. The study excluded parents of children whose medical records indicated suspected or documented abuse or neglect, whose chief complaint was a psychiatric condition, who were categorized as level 1 triage as a result of a life-threatening condition, who died in the ED, or who were enrolled previously.

STUDY PROCEDURES

Parents were enrolled from November 26, 2010, to July 17, 2011, during 4-hour shifts. We oversampled Spanish-speaking parents by enrolling them for an additional half hour before and after each shift. To obtain a representative sample, we distributed shifts over 7 days of the week and 24 hours of the day proportionately with historical ED patient census. Using ED visit records for 2009, we determined the proportion of patients seen each month, day of the week, and 4-hour block of time within each day. We determined the total shifts required on the basis of estimated patient recruitment per shift. We then assigned shifts at different times of day in proportion to the historical census for those times of day during the corresponding month in 2009. All weekdays and weekend days were surveyed, with the specific day selected by convenience based on research staff availability.

The team of research associates included a state-certified bilingual English–Spanish medical interpreter and a native speaker with Clinician Cultural and Linguistic Assessment certification of Spanish proficiency. Research associates were instructed to invite all eligible families identified using an electronic patient tracking whiteboard to complete the survey in English or Spanish. Bilingual parents completed the survey in the language of their choice. To limit social desirability bias, the survey was anonymous and self-administered in most cases. Because of the potential for low literacy, all Spanish speakers were offered the option of having a research associate administer the survey orally and note their responses. English speakers were offered assistance when they were observed to have difficulties or delays.

SURVEY

Our survey included validated questions from 3 dimensions of the National Research Corporation Picker Institute's FES: information/education; partnership with clinicians; and access/coordination of care (Appendix 1).[25] We limited the survey to 3 dimensions to ensure it could be completed easily before discharge, and included all but 3 questions. We excluded 2 questions in the partnership with clinicians dimension that could be difficult to interpret as a result of important differences in