

The Impact of Limited English Proficiency on Asthma Action Plan Use

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Background

Spanish speaking families in the U.S. with limited English proficiency (LEP) face health care disparities. For LEP caretakers of children with asthma, communication barriers contribute to disparate asthma care. Asthma action plans can improve clinical outcomes for children with asthma. A paucity of research focuses on how language proficiency affects asthma action plan use by LEP caretakers.

Objectives

The goal of this study is to identify the rate of asthma action plan use by Spanish speaking LEP caretakers and compare it to the rate of use by English proficient (EP) caretakers.

Methods

A cross-sectional survey study with prospective enrollment was carried out in an urban, academic, pediatric emergency department (PED). The annual census for PED visits is 35,000. An anonymous, self-administered survey was completed by adult caretakers of children (age 1-18 years) with asthma who were seeking care in the PED for an asthma related complaint. Using standard U.S. Census Bureau survey methods, LEP was defined as the ability to speak English less than "very well".

Methods Continued

Additional demographic data was obtained including relationship to child, race and ethnicity, health insurance type, level of education and type of primary care provider. A sample asthma action plan was attached to the survey for review. Surveys were available in English and Spanish. Categorical data was analyzed with a 2x2 contingency table using a Fisher's exact test and Odds ratios were calculated.

Results

107 subjects have been approached, enrolled and 107 surveys completed and analyzed. Surveys were completed by mothers in 87% of cases, fathers in 10% of cases and other caretakers in the remaining 3%. The median age of the caretaker's children was 4 years. A local asthma care provider was identified 91% of the time.

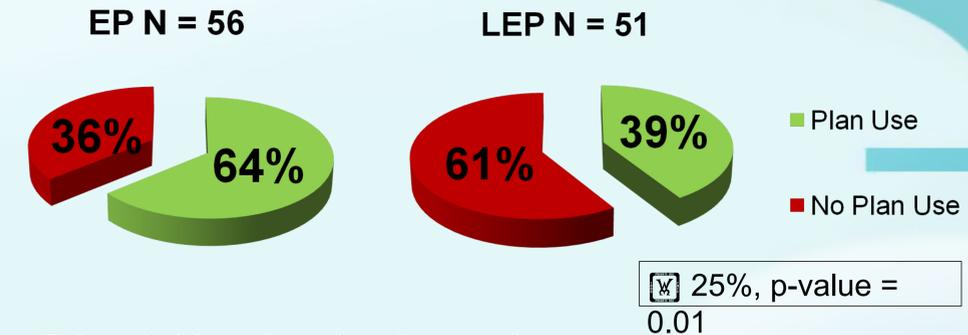
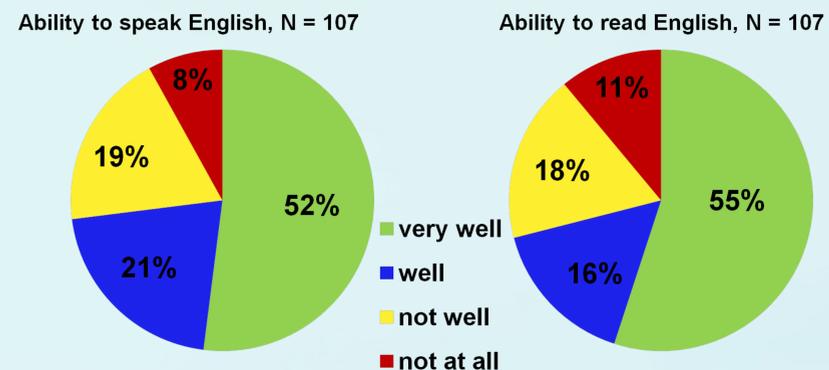


Table: Odds ratios of asthma action plan use

N	Survey variable	Odds Ratio (95% CI)
107	English proficient	2.8 (1.3-6.1)
107	Mother	2.2 (0.7-7.0)
107	Age > 2 years	1.6 (0.6-4.2)
104	≥ Associate degree	1.4 (0.6-3.0)
104	Private insurance	0.7 (0.3-1.8)
105	Latino ethnicity	0.5 (0.2-1.3)
85*	FQHC [^]	0.8 (0.3-2.0)

*Excludes patients followed in pulmonary clinic (N=11) and patients without PMD (N=11)

[^]Federally Qualified Health Center

Conclusion

Our findings suggest that disparate rates of asthma action plan use exist for caretakers with LEP. We feel that qualitative research methods would help yield important insights at the caretaker and provider level and provide a deeper understanding of the facilitators and barriers to effective asthma action plan use by this vulnerable population.

