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Background

Limited English Proficiency (LEP) parents encounter barriers to consistent asthma education. Latino community engagement and educational programs can be used to improve asthma self-management and outcomes.

Objective

To assess LEP parent asthma skills retention, quality of life, and other outcomes after a language concordant asthma education fair.

Methods

An asthma education fair was held in June 2012 at a Latino community center. LEP parents of children 1-12 years old participated in three skill stations: (a) medication recognition and administration, (b) peak flow use (if child ≥ 5 years), and (c) action plan comprehension.



Spacers, peak flow meters, and individualized action plans were distributed. A Spanish version of the pediatric asthma caregiver quality of life questionnaire (PACQLQ), a valid and reliable measurement tool, was administered. Baseline data were compared with follow-up data 3-months and 6-months after the educational intervention. Mean PACQLQ scores were analyzed with Wilcoxon signed rank test and nominal paired data with McNemar's test.

Results

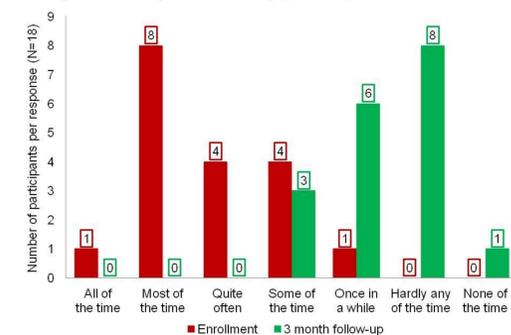
We analyzed data from 18 parents able to speak English well (22%), not well (28%), or not at all (50%). Fourteen (78%) parents had a child with asthma 5-12 years old.



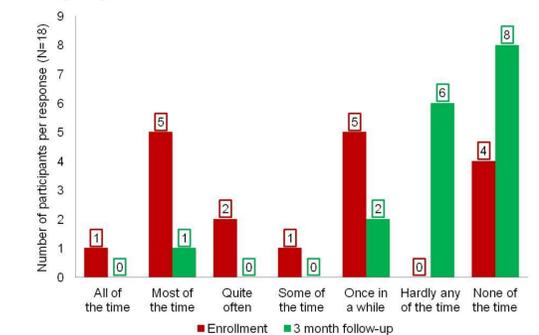
Results (Continued)

At enrollment, 28% had an asthma action plan written in Spanish. At 3 month follow-up, improved quality of life was reported (mean score 51 vs. 72, $p < 0.05$).

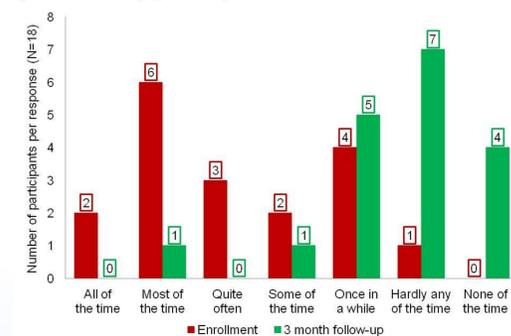
During the past week, how often did you feel helpless or frightened when your child experienced cough, wheeze, or breathlessness?



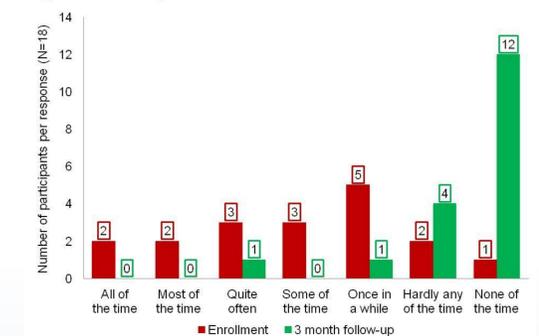
During the past week, how often did your child's asthma interfere with your job or work around the house?



During the past week, how often did you feel upset because of your child's cough, wheeze, or breathlessness?



During the past week, how often were you awakened during the night because of your child's asthma?



No significant differences were observed in medication recognition (22% vs. 39%), spacer use (83% vs. 89%), peak flow use (50% vs. 21%), or peak flow interpretation (0% vs. 14%). At 6 month follow-up, mean school days missed due to asthma decreased (4.1 vs. 0.4, $p < 0.05$). Mean clinic visits (1.4 vs. 0.7), emergency department visits (0.4 vs. 0.1), and hospitalizations (0.1 vs. 0), remained unchanged.

Conclusions

Implementation of a community-based center asthma education fair with individualized action plan comprehension can be of educational benefit to LEP parents. Quality of life improvements center on increasing emotional well-being and decreasing the frequency of activity disruptions. This may help lessen burdens associated with school absenteeism. Further study is needed to understand why some facets of asthma management were enhanced while others were not.

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