



# Cultural and Linguistic Adaptation of the Asthma Beliefs and Practices Questionnaire for Latino Families

Angel Colón, MD., Glorisa Canino, PhD., Doryliz Vila, MS., Deborah Juarbe, MS.,  
Mayra Maestre, Marie Miranda, BBA.



## INTRODUCTION

The rates of asthma in the continental US are 30-100% higher in minority children than among Anglo children. The prevalence varies significantly across different Latino groups, with Puerto Ricans having the highest lifetime rates (20%) and Mexican Americans the lowest (4%) (Carter- Dokras et al., 993; Mendoza, 2000). A number of factors have been implicated in these higher rates of asthma among minorities, but a comprehensive answer to this question is elusive. Disparities may result from interactions among a hierarchy of factors operating at the genetic-biologic level, the environmental pollutant level, the individual/family level, community school level and at the health care system level. Similarly, the use of home remedies, vary across Latino groups (Pachter et al., 2002).

This pilot is focused on two of these levels, the individual and organizational. At the individual family level, we explored how cultural beliefs and practices about the nature of asthma can influence the types of services used, how symptoms are manifested, and what type of treatment is considered appropriate. There is evidence that family beliefs about the nature of asthma, shape patients' views about how to use services and what to expect of the medical encounter and are also likely to have a bearing on adherence and symptom reporting (Guarnaccia et al., 1985; Wasilewski et al., 1996; McQuaid et al., in press). At the organizational level, we will explore whether asthma providers from Puerto Rico know and are sensitive about their patients' folk beliefs and practices.

## Objectives

To explore through focus groups and ethnographic interviews the cultural beliefs and practices about asthma, as well as the home remedies used by island Latino youth and their caregivers for the treatment or prevention of pediatric asthma.

To examine the extent to which home remedies are used in combination or in substitution to standard medical therapy for the treatment and management of asthma by Latino youth and their caregivers

To adapt and evaluate the feasibility of a structured questionnaire designed to measure folk beliefs and home remedies for asthma among Latino youth and their caregivers.

## METHODS

Three focus groups were conducted in Puerto Rico using the same methods. In one of the focus groups the mothers of children from Dominican origin participated (5 participants) and in the other two focus groups the mothers of asthma children from Puerto Rican origin(15 participants). During the focus group and ethnographic interviews a combination of structured and semi structured assessments were made. During the first focus group session and the first part of the ethnographic interviews a series of open-ended questions were utilized to explore parents' knowledge and beliefs about asthma, its causes, the symptoms, how to best treat it, use of home remedies, and experience with providers' attitudes toward ethno-medical beliefs and practices. During the second part of the session the appropriateness and comprehension of each item of a structured instrument developed by Pachter and colleagues (2002) was discussed. The instrument consisted of 148 true-false items developed after several ethnographic interviews. Each item was discussed with the group to examine the cultural and linguistic appropriateness for this particular population (Puerto Rican and Dominican) as it had not been validated in these ethnic groups.

## Data analysis

The transcribed individual interviews and the focus groups were analyzed using grounded theory analysis (Glazer & Strauss, 1967). Different concerns, comments and suggestions were Marked and categorized to the different dimensions or topics.

## RESULTS

- All items were understood by more than 85% of respondents (Semantic equivalence)
- All items were rated as important by more than 85% of respondents (Content equivalence)
- Thirty items were included in the questionnaire based on respondents' recommendations:
  - 6 related to the causes of asthma (e.g. Running causes asthma)
  - 24 related to home remedies (e.g. Black coffee is good for the treatment of asthma)
- Several items were modified to improve the comprehension of items for Puerto Ricans and Dominicans (e.g. "votivas" was changed to "aromáticas")

## RESULTS (CONT.):

	Puerto Ricans	Dominicans
No. of children that have ever used home remedies	12/15= 80%	5/5= 100%
Number of children on standard treatment	9/15= 60%	3/5= 60%

•Differences were observed among Puerto Rican and Dominicans in the quantity and types of home remedies used. Dominicans were more likely to use more than one home remedy. Most Puerto Ricans reported only using a homemade "jarabe" that combines honey, aloe, and lemon.

## IN-DEPTH INTERVIEWS FINDINGS

- Participants demonstrated to be knowledgeable about...
  - asthma triggers
  - asthma symptoms
- Participants had difficulties explaining the causes of asthma.
- Most prevalent misconceptions were...
  1. A cold that is not treated causes asthma
  2. A change in climate or temperature causes asthma
  3. Living in a dirty house can cause asthma
  4. Pet's hair can cause asthma
  5. Strong emotions causes asthma

