

Focusing on High-Needs Hispanic Populations with High Prevalence of Asthma

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ASTHMA IS A CHRONIC airway disease associated with inflammation and recurrent episodes of cough and wheezing. The Centers for Disease Control (CDC) report an overall asthma prevalence of 10% in American children.¹ Significant disparities in asthma burden have been linked to race, ethnicity, low health literacy levels, and poverty.

At this time, Hispanics comprise the largest ethnic minority in the United States, currently representing approximately 17% of the population.^{2,3} Estimates for continued growth are anticipated—shifting the percentage of the Hispanic population in the United States to 31% by 2060.³ Overall, Hispanic children have higher asthma hospitalization rates compared with Caucasian children.⁴ Efforts are being focused to identify successful strategies to improve asthma outcomes in children from groups, locations, and circumstances with high asthma prevalence.

In this issue of *Pediatric Allergy, Immunology, and Pulmonology*, Carrillo-Zuniga *et al.* discuss an integrative approach to improve asthma outcomes in Hispanic families utilizing a home-based educational intervention. Their program, funded by the Texas Asthma Control program (TACP), focused on families of children with asthma living in the Rio Grande Valley, along the Texas–Mexico border. The population in the Hidalgo County where this intervention was implemented is composed of 90.6% Hispanics with high rates of uninsured families, many with incomes below the poverty line. Utilizing a family-centered and home-based educational approach, improvements were seen in asthma knowledge, symptom control, and quality of life. Overnight hospitalization rates decreased by 5% and acute care visits by almost 20% over the course of the program. Trained community health workers (promotores de salud) participated in this program to deliver asthma and healthy homes education. As trusted members of the communities they serve, community health workers are well positioned to facilitate access to health services, as well as improve the quality and cultural competence of these services. As part of an asthma management team, they help to build individual and community capacity through health education and self-management training.

Asthma and recurrent wheezing in childhood have been associated with lower respiratory tract infection (LRTI) in infancy, particularly respiratory syncytial virus (RSV) bronchiolitis. Yet, it is difficult to predict accurately which of these infants will have future wheezing. Researchers have been exploring possible biomarkers, including the urine concentration of the Clara cell secretory protein to help shed light on the nature of asthma. In this issue of *Pediatric Allergy, Immunology, and Pulmonology*, Rosas-Salazar *et al.* in collaboration with Hartert at the Vanderbilt Center for Asthma and Environmental Health Sciences report on their prospective study of 133 infants who were followed longitudinally for wheezing after a documented LRTI. Urine levels of club cell 16-kDa secretory protein (CC16) were obtained at the time of the acute care visit. An inverse relationship between urine levels of CC16 at the time of LRTI and the odds of subsequent childhood wheezing episodes was identified, leading these researchers to suggest that urine CC16 levels may be a useful biomarker of the development of childhood wheezing illnesses after LRTI in infancy.

We welcome your comments on these and the other excellent articles featured in this issue of *Pediatric Allergy, Immunology, and Pulmonology*. In December, the Journal is publishing a special issue dedicated to cystic fibrosis, featuring Dr. Daniel Weiner as guest editor. Dr. Weiner is Co-Director of the Antonio J. and Janet Palumbo Cystic Fibrosis Center at the Children's Hospital at Pittsburgh. He has brought together a group of leading experts in cystic fibrosis who will be reviewing important topics from Diagnostics to Controversies in Lung Transplantation. We look forward to sharing their expertise with our readers.

References

1. www.cdc.gov/vitalsigns/asthma (accessed August 5, 2015).
2. www.cdc.gov/vitalsigns/hispanic-health/index.html (accessed August 5, 2015).
3. cdc.gov/minorityhealth/populations/REMP/Hispanic.html (accessed August 5, 2015).
4. www.epa.gov/epahome/sciencenb/asthma/HD_Hispanic_Asthma.pdf (accessed August 5, 2015).