Cultural Issues in Pediatric Asthma Care

Applying the PACE Program to Underserved Communities

(APPUC) Study

Institute for Health Policy Studies
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Regional Asthma Management and Prevention

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# Outline

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction: The Guideline Implementation Program</td>
<td>5</td>
</tr>
<tr>
<td>Rationale for the Program: The Physician Asthma Education Care (PACE) Program</td>
<td>6</td>
</tr>
<tr>
<td>Tips for Running the Program: Notes on running a physician education program</td>
<td>8</td>
</tr>
<tr>
<td>Part I: Cultural Issues in Pediatric Asthma Care</td>
<td>10</td>
</tr>
<tr>
<td>Part II: Developing Organizational Knowledge and Practices that are Culturally Competent</td>
<td>15</td>
</tr>
<tr>
<td>Part III: Developing Cultural Knowledge</td>
<td>20</td>
</tr>
<tr>
<td>Bibliography</td>
<td>34</td>
</tr>
<tr>
<td>Appendix I: About California</td>
<td>35</td>
</tr>
</tbody>
</table>
Introduction

To manage asthma, patients need to carry out medication plans, modify their home environment, and monitor asthma symptoms. The 2008 Guideline Implementation Panel (GIP) created six key GIP priority messages.

- **Message: Inhaled Corticosteroids**
  Inhaled corticosteroids are the most effective medications for long-term management of persistent asthma, and should be utilized by patients and clinicians as is recommended in the guidelines for control of asthma.

- **Message: Asthma Control**
  At planned follow-up visits, asthma patients should review the level of control with their health care provider based on multiple measures of current impairment and future risk in order to guide clinician decisions to either maintain or adjust therapy.

- **Message: Asthma Action Plan**
  All people who have asthma should receive a written asthma action plan to guide their self-management efforts.

- **Message: Follow-up Visits**
  Patients who have asthma should be scheduled for planned follow-up visits at periodic intervals in order to assess their asthma control and modify treatment if needed.

- **Message: Asthma Severity**
  All patients should have an initial severity assessment based on measures of current impairment and future risk in order to determine type and level of initial therapy needed.

- **Message: Allergen & Irritant Exposure Control**
  Clinicians should review each patient’s exposure to allergens and irritants and provide a multipronged strategy to reduce exposure to those allergens and irritants to which a patient is sensitive and exposed, i.e., that make the patient’s asthma worse.

For each component, provider-patient education is the final common pathway for patients to successfully manage their disease. The National Heart, Lung, and Blood Institute (NHLBI) guidelines recommend that clinicians educate patients about each of these essential skills and integrate and reinforce patient education into every step of clinical care.
From 2000-2002, the Physician Asthma Care Education (PACE) Program was developed to help improve primary care provider asthma education and counseling.

PACE is a physician training program and includes instruction on 10 specific communication techniques, a review of key asthma messages and a review of the National Heart, Lung, and Blood Institute (NHLBI) Asthma Guidelines. The program was successfully evaluated using a randomized controlled trial design in 10 regions in the United States. In this national trial, the PACE program was successful in improving physician counseling behavior, decreasing patient asthma symptoms and improving outcomes, including emergency department (ED) use for asthma (Cabana, 2006).

Interestingly, patients with limited means still benefited from provider-patient communication programs, despite the fact that other barriers may affect health care outcomes (e.g., poor continuity of care, poor housing conditions, family stress, etc.). A re-analysis of PACE data suggested that low-income families (household income <$20,000 and/or Medicaid insurance) benefit from this program. Of these families, children whose providers were randomized to the PACE program were significantly less likely to be seen at an ED (0.21 vs 1.44 visits/yr) or hospitalized (0.01 vs 0.03 visits/yr) for asthma care compared to children whose providers were not randomized to PACE (Brown, 2004).
However, modifications to the PACE program may be required to acknowledge the cultural and logistical differences in addressing the needs of the minority and underserved population. Although the basic principles of provider-patient communication are part of the program, the content may be needed to be modified to be applicable for physicians working with families from diverse backgrounds.

Any program needs to be culturally relevant for providers and patients. Cultural competency is the provider’s ability to work effectively in situations where the language, customs, beliefs or values of the provider differ from that of the patient. An awareness of these different beliefs among ethnic groups, along with an awareness that diversity also exists within ethnic groups, can improve communication.

For example, a patient’s own cultural interpretations of health and illness can affect their likelihood to accept or reject asthma educational messages. Differences in beliefs about asthma (e.g., medicinal use of foods and botanicals, ‘hot-cold’ theories of health and disease, etc.) among different ethnic groups have been described (George).

As part of the 2009 National Asthma Control Initiative (NACI) Program to promote the implementation of the NHLBI guidelines into everyday practice, we have developed an additional set of slides to discuss these cultural issues in pediatric asthma care.
Theoretical Basis of the Program:
Like the PACE program, this program encourages the application of Self-Regulation Theory. One principle of this theory, self-regulation, has been studied extensively as a way to improve learning. Research has shown that learning is enhanced by self-regulation, that is, the learner’s efforts to observe, evaluate, and react to his or her own responses to a problem.

When learners self-observe, develop strategies to reach goals, and evaluate the success of these strategies, they gain an increased sense of self-confidence (self-efficacy), greater intrinsic motivation, and higher academic achievement. The seminar uses a self-regulation format to present new materials to be learned and behaviors to be performed, an approach that appeals to clinicians. It is helpful to engage providers and ask how they have handled specific scenarios in the past, and how they might handle these scenarios in the future.

Clinicians make decisions and take action based on previous experiences. The consequences are achieved; behavior is reinforced. This increases the clinician’s motivation to use the behavior again. The motivation is experienced as an increased sense of self-efficacy and confidence that the behavior can be used again successfully to achieve similar or better results.

The seminar enables clinicians to use self-regulation to improve the delivery of asthma self-management education. It provides clinicians with education strategies and tools that can easily be introduced into their ongoing practice, requiring minimal increases in time but having maximum impact on the patient’s ability to retain and use treatment advice and education. Clinicians will also be taught to self-regulate their ability to use these tools successfully with patients.

Format
The program consists of three short segments that fit into a 2 hour program. Serving refreshments before the session can be a way to “break the ice.” The sessions fit well into a dinner program format. A formal break in the middle of the session is not recommended, as it will break the flow of the presentations.
**Faculty**
The seminar works best when there are two or more instructors: (1) a provider with expertise in practice management or health care organization planning (2) a speaker familiar with issues in asthma epidemiology and disparities and (3) a health educator or expert in cultural issues in asthma care. It helps if the speakers are well-known providers in the community.

It also helps to have a physician from the community to help host the event. He or she introduces each of the segments and helps facilitate any questions.

A practice run of the sessions is enormously helpful in ironing out problems before the start of the formal sessions.

**Size and Setting**
In terms of group size, eight to ten clinicians is ideal. A smaller group tends to limit the discussion, and in a larger group, some members may not get a chance to participate.

The sessions should be held in comfortable surroundings where audiovisual equipment is available. If you are supplementing the slides with video examples, you will need a video cassette player and television monitor. A microphone can be helpful, but we recommend that the speakers do not stand behind a podium. We were able to hold this program in a separate room in a large restaurant. A conference room or large meeting room is also suitable.

**Incentives**
It is important that you provide incentives for participation in the program. Stressing the potential effect on patient satisfaction and provider job satisfaction of the program’s recommendations may appeal to some. Better asthma care in the office can reduce referrals to specialists and emergency department visits. This is a special plus for those practicing in managed care. Also, when patients become better self-managers, the clinician saves time.

Educational materials for clinicians to give to patients are a major incentive for participation. With advanced planning, CME credit can be arranged for participants.
Part I:
Cultural Issues in Pediatric Asthma Care
This segment introduces the general concepts of cultural competency, disparities in health care and social determinants of health.

These are example slides from a program that was conducted in San Francisco and Oakland, CA.

There is limited information about cultural responses to ill health—differences in perception and interpretation of health and illness can contribute to patient-provider miscommunication.

These differences can also lead to poor patient adherence and poor patient outcomes.

These issues are even more critical to consider in an ethnically diverse state, such as California. In many ways, California is an early example of the changes occurring in the United States. One of 8 children in the United States lives in California.

Nearly 1/2 of children in California are Hispanic and/or have a foreign-born parent. Currently, one of 3 families speak a language other than English.

It is projected that by 2020, 76% of children in California will be from ‘ethnic or racial minority’ groups.
There are also disparities in asthma outcomes among different ethnic and racial groups. For example, this slide shows the differences in the prevalence of asthma. If you consider Emergency Department (ED) utilization a marker of quality of care and a potentially preventable outcome, there are disparities in outcomes.

Hispanic children are less likely to have asthma; however, Emergency Department utilization is not proportionate to asthma prevalence.

For African-Americans there is also a disproportionate share of the asthma burden. Asthma prevalence is 30% higher than whites.

In addition, the rates of ED visits, hospitalizations and mortality are two to three times higher among African-Americans than other race/ethnicity groups.

This slide compares Native Americans with whites, Hispanics, African-Americans and Asian-Americans in California.

Native Americans have the highest rate of asthma compared to all groups.
This slide shows asthma outcomes, such as symptom severity and hospitalizations in California, in terms of household income.

There are disparities in outcome based on income.

Patients with lower income levels tend to have more severe asthma symptoms and a higher likelihood of hospitalizations.

The concept of social determinants of health suggests that social factors affect individual and community health directly. This effect can be through an independent influence or an interaction with other determinants.

For example, in relation to the development of obesity, social determinants can include access to health foods in neighborhood groceries and stores, or the availability of a safe environment to exercise.

This slide includes definitions of culture, cultural and linguistic competence in health, CLAS standards and social determinants of health.
Cultural competency requires:

1. Knowledge of other cultures and acceptance of cultural differences.
Part II: Developing Organizational Knowledge and Practices that are Culturally Competent
This segment focuses on what clinics and organizations can do to develop knowledge and practices that are culturally competent.

CLAS refers to ‘Culturally and Linguistically Appropriate Services.’

There are standards for what constitutes culturally and linguistically appropriate service and care that have been developed by the US Department of Health and Human Services. These standards are directed towards health care organizations.

If your clinic receives federal funds, the CLAS standards #4 to #7 apply.

Here are the details of CLAS standards #4 to #7...

Ask:

What are some examples that your clinic or organization does well?

What are some examples of things your clinic or organization can still do?
At the institutional level, there are four different ways of developing cultural competency.

First, an organization needs to set a standard for cultural and linguistic competence.

There has to be a structure and process to address language barriers (e.g., access to interpreter services, procedures for communicating instructions, etc.).

Organizations can encourage professional growth. In addition, organizations can strive to ensure staff diversity to reflect the populations that they serve.

The educational materials should also be appropriate to the populations that an organization serves.

For example, display posters representing a variety of cultures, races and ethnicities.

Use educational materials that match literacy, cultural appropriateness and language needs.

Ask: What are some other examples that you think are effective?

Culturally competent communication can help understand and assess the different social determinants of health.

In addition to appropriate content, identification of precipitating factors and assessment of co-morbid conditions; a culturally competent assessment can help gain a fuller picture of the factors that impact asthma outcomes.
Another successful approach is integrating community health workers (CHW) into your practice to help patients navigate the local health care system.

CHWs are trained peers of the patients they serve. They act as a ‘bridge’ between services and can support families with home management of asthma symptoms and connections to resources and services.

This slide is an example of resources and community contacts that can be included in the presentation.

Back-up Slide:
Details of all CLAS Standards
Part III: Developing Cultural Knowledge
This segment focuses on how individual providers can utilize an approach to developing cultural knowledge and skills in practicing cultural competency.

We’ll start with a case study...

The reason Carlos is in the office today is because of arthritis, which was diagnosed in infancy. His mother usually works during the cold weather. During those times, he has frequent coughing and wheezing, which sometimes led to a visit to the doctor’s office or ED. Attacks are usually easily controlled by 2 or 3 "bronchodilators". He has been hospitalised once for arthritis (5 years ago).
Part III: Slide 4

Developing Cultural Knowledge:
Case Study cont.

Lost TCP diagnosed Center for Health as well.

Part III: Slide 5

Developing Cultural Knowledge:
Case Study cont.

In an attempt to assist the mother’s understanding of wellness, you take a health behavior inventory. You note what

Part III: Slide 6

Developing Cultural Knowledge:
Case Study cont.

This can be caused by cold air or rapid changes in temperature, such as, or stress, sudden.

The first thing most overlooked before he loss of “spirit” is that the business their active and “Get your book fired.”
This case illustrates some key points:

- Cultural beliefs and practices form part of an individual’s approach to illness.
- Individual patients combine personal, cultural and biomedical beliefs and practices.
- Ethno-cultural beliefs and practices are based on coherent and internally logical belief systems.
- Clinicians can and should try to combine biomedical and ethno-medical beliefs and practices in order to make our care fit within the patient’s life and worldview.
Here are a few key points regarding culturally sensitive health care.

- Respects the beliefs, attitudes and lifestyles of patients.
- Acknowledges that health and illness are in part molded by variables such as cultural values, ethnic orientation, religious beliefs and linguistic considerations.
- Acknowledges that in addition to the physiological aspects of disease, the culturally constructed meaning of illness is a valid clinical concern.
- Sensitive to intra-group variation in beliefs and practices.

There is variation in asthma beliefs and practices within groups.

- The slide highlights the results of a community cross-sectional survey of asthma beliefs and treatments.
- There was overall consistency intra-culturally and to a lesser extent inter-culturally.
- However, use caution with over-inclusive terms such as 'Latino' as there is variation among different ethnic groups with regards to health beliefs.

This table shows a comparison of the different beliefs regarding causes of asthma for four different groups.
Although there is some overlap, in many cases there are group differences.

This slide shows the most common actions that parents pursue during an asthma exacerbation.

This slide shows the frequency of use of home based treatments, the types of treatments and the perceived effectiveness of such treatments. These are ethno-medical remedies described by Puerto Rican Latinos. The specific remedies may not be the same in other communities. What is important is not the specific remedies but a generalized approach to discussing cultural remedies and incorporating that knowledge into our clinical care.
Azabache is a type of stone, believed to have a protective nature against evil.

One common home-based treatment is ‘Siete Jarabes’ or the Seven Syrups.

A bottle of ‘Siete Jarabes’ or the Seven Syrups
Here are the components of Siete Jarabes. In general, none of the components are harmful.

Here is an example of Jarabe maguey.

Here are the components of Jarabe maguey.
A key component in the asthma visit is obtaining a health beliefs history.

One approach in obtaining a health beliefs history is to start with general questions. For example, “What do you think is wrong with your child?”
Further questions focus on what parents and families do when a child is sick and has an illness.

Here are specific questions that can be used in determining an asthma health beliefs history. These questions start with very general questions then move into specific questions that ask how a parent or family treats asthma.

- Ask about home remedies
Another key piece of information is asking about an alternative therapy history.

Preface this conversation with a sentence that normalizes these actions. For example, "It is common for families to treat asthma with effective remedies not prescribed by a physician..."

If possible, it may be helpful to include or incorporate non-harmful remedies in the treatment plan.

Consider the example of the seven syrups... all the components are non-harmful.
Here are the key points:

- Cultural beliefs and practices regarding asthma seem to reflect the traditional Latino ethno-medical belief system.
- Cultural beliefs and practices are almost always combined with biomedical beliefs and practices.
- Remedies and therapies may not be biomedically effective, but when viewed from within the cultural belief system, may be considered effective.

Patients have explanatory models of illness that are influenced by culture.

It can be challenging when the provider is not familiar with the patient’s background.

Differing perceptions about illness affect treatment.

The Awareness-Assessment-Negotiation technique describes specific steps that are useful in practicing cultural competency.

- Become aware of the commonly held ethno-medical beliefs of the group in your community.
- Assess the likelihood that a particular patient may act on these beliefs during a particular illness episode.
- Negotiate between the biomedical and ethno-medical belief systems.
It is also important to be aware of non-verbal communication skills.

- Learn about your patient's cultural norms regarding personal distance, gestures, eye contact and posturing.
- Speak directly to your patients and don’t interpret lack of eye contact as lack of interest.
- Be aware that use of an interpreter can change the dynamics of the provider-patient relationship and affect the sharing of sensitive personal information.
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The Bay Area is an outstanding environment to understand how to develop culturally sensitive messages about asthma care. California is one of the most multicultural states in the nation and represents a window to the future.

One out of every 8 children in the United States lives in California. As a result, the health of children in California represents an important indicator of the health of children in the United States.

In addition, nearly half of the children in California are Hispanic and/or have a foreign-born parent. Within California, the 9.7 million children represent 27% of the population.

Approximately one-third of the population of California are Latino; 10% Asian-American and 6% are African-American. Over 40% of children in California grow up in a bilingual or multilingual home. Due to past immigration from other nations, more than one-in-four of California’s current residents were born outside of the United States. About half of foreign-born Californians are from Latin America, while another third are from Asia.