Confronting Asthma

in California's Latino Communities

Latino Issues Forum

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Introduction

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Today there are an estimated 1.8 million individuals who suffer from asthma in California. Over half a million of these individuals are children[1]. Asthma is a chronic disease that affects air flow to and from the lungs. Although it was at one time a somewhat rare disease, since 1979 asthma rates around the world have steadily been climbing, particularly among children. In the United States, between 1982 and 1992 asthma rates for children under 18 years old almost doubled[2]. Similarly, the asthma death rate among 5-24 year olds nearly doubled between 1980 and 1993[3]. This has occurred despite medical research which has developed treatment and preventive efforts that allow individuals with asthma to live relatively normal lives.

Although there is still a great deal of uncertainty as to why individuals develop asthma, it is clearly a growing problem that poses many social and fiscal costs both nationwide and in California. The prevalence of asthma costs the state of California millions of dollars each year, including the cost of medical care, as well as lost school and work hours. Medi-Cal costs alone for asthma-related hospitalizations in California were $136 million in 1995[4]. Considering the disproportionately high rates of asthma in children, it is evident that the state's asthma problem will continue to exist in the future. Furthermore, because the percentage of children with asthma is still growing, it is likely that California's asthma problem will only get worse before it gets better.

The purpose of this brief is to illustrate the unique problem of Latinos and asthma. Despite the dramatic increase in asthma cases and the growing costs of asthma, policy makers, health care providers, and schools have been slow to address asthma and the issues that exacerbate asthma, including allergies and pollution. While all of California's communities are affected by rising asthma rates, Latino children in particular are impacted by the growing asthma problem. Geographic concentration in areas with poor air quality, lack of access to quality health care, and communication barriers all exacerbate existing asthma conditions, and contribute to increased illnesses and hospitalizations from asthma. Considering that Latinos are currently the state's fastest growing ethnic group and that within the next forty years they will account for the majority of Californians, the potential impact of asthma on California is enormous.

Asthma in the United States at a Glance

- Approximately 15 million Americans, including five million children, suffer from asthma[5]
- Asthma is 26% more prevalent in African American children than in White children[6]
- The rate of asthma induced emergency room visits in the past year was nearly twice as high for Latinos (35%) as for Anglos (18%)[7]
- Allergies are an important contributing cause of asthma. Currently 50% of adults and 80% of children with asthma also have allergies[8]
- Asthma and Allergies are leading causes for school absences and account for 130 million missed school days each year[9]

Asthma and Latino Communities

Similar to other minority communities, in recent years Latinos have experienced a substantial increase in asthma rates. Currently in California there are over half a million Latinos, including approximately 200,000 Latino children, who suffer from asthma[14]. In California, where Latinos are the fastest growing ethnic group, looking at how asthma impacts this community is of utmost importance. Because Latinos are a relatively young population and make up approximately 40% of the state's children[15], Latino communities in particular are affected by rising asthma rates in young people.

Although it is still unclear why individuals initially develop asthma, there are many factors which trigger asthma and cause individuals to have difficulty breathing. These include: viral respiratory infections, exercise, allergic rhinitis, and exposure to allergens or to airway irritants such as tobacco smoke and other environmental pollutants. Latinos, like many other minority groups, are affected by several additional factors which compound the problem of asthma. These include: geographic concentration in areas with poor air quality, limited access to medical insurance, and lack of culturally and linguistically appropriate asthma education programs. All of these factors serve to exacerbate existing asthma problems and raise the chances of experiencing severe asthma symptoms.

Asthma in California at a Glance

- 1.8 million Californians, including over half a million children, suffer from asthma[10]
- Over half a million Latinos in California suffer from asthma[11]
- Medi-Cal costs alone for asthma-related hospitalizations in California, were $136 million in 1995 with an average cost of $9,275 per stay[12]
- Among children, asthma-related claims are four times more likely to involve inpatient hospitalizations than non-asthma-related claims[13]

Air Pollution and Asthma

Despite dramatic reductions in air pollution over the last thirty years, many Latinos continue to live in communities which fail to meet federal air quality standards. The National Coalition of Latino Health and Human Services Organizations, using Environmental Protection Agency (EPA) data, found that Latinos are more likely than Non-Latino Blacks or Non-Latino Whites to live in areas failing to meet air quality standards. Furthermore, the study found that 80% of Latinos live in communities that fail to meet one or more Clean Air Act ambient air quality standards[16]. While no comprehensive statewide survey has been done to look at this issue in California, a study in Los Angeles indicates that there are substantial differences between ethnic groups. It revealed that in the City of Los Angeles, an estimated 50% of Latinos and 71% of African Americans, reside in areas with the most polluted air, while only 34% of Whites live in highly polluted areas[17].

While the evidence linking air pollution to the increased prevalence of new cases of asthma is still inconclusive, it is clear that air pollution triggers and exacerbates asthma attacks[18]. The California EPA has found that even low ambient levels of particulate matter and ozone in the atmosphere, are associated with acute exacerbation of asthma. Particulates, sulfur-dioxide (from coal fueled plants, petroleum refineries, paper manufacturing, industrial boilers, and diesel powered vehicles), and nitrogen dioxide (40% of which is produced from vehicles and 40% from power plants) have all been found to exacerbate asthma[19]. Ozone, the primary ingredient in smog, not only aggravates asthma, but also intensifies asthmatic reactions to other pollutants. This is of particular concern for children, who are exposed to more pollution per pound than adults. In addition, because children spend a great deal of time playing outdoors they are generally exposed to pollution more frequently.

Although air pollution has traditionally been viewed as an urban problem and has been associated with large cities like Los Angeles, the Central Valley and rural communities throughout the state now have some of the most polluted air in the nation. The Visalia-Tulare-Porterville area is ranked as having the worst particulate air pollution concentration and the highest particulate related death rate in California[20]. Further north, Fresno County has been dubbed the "Asthma Capitol of California" for having the third highest asthma death rate in the nation[21]. Aside from the increased pollution caused by the growing population of the Central Valley, farming practices are responsible for elevating levels of particulate matter, including: pollen, dust, agricultural sprays, and smoke from burning old fields. Furthermore, air patterns carry pollution from the San Francisco Bay and Los Angeles areas into Fresno, San Bernardino, Riverside, and other Central Valley and inland communities.

Lack of Access to Medical Insurance and its Impacts on Asthma

In addition to the problems caused by pollution, low rates of health insurance coverage contribute to the asthma problem in minority communities. For patients with asthma, lack of access to health insurance precludes individuals from receiving an early diagnosis and the routine care that is necessary to treat asthma effectively. In California, Latinos account for a disproportionate number of the state's individuals who lack health insurance. Currently 38%, or almost four million, of California's Latinos between the ages of 0-64 lack health insurance[22]. Latinos also make up 55% of California's more than three million chronically uninsured non-elderly individuals (individuals ages 0-64 who have not had any health insurance in the last five years). Despite programs to insure children, including Medi-Cal and Healthy Families, 29% of Latino children lack any kind of health insurance[23].

For individuals with asthma, early diagnoses and preventive care are extremely effective ways to alleviate asthma symptoms. Numerous studies have shown that for the majority of children, asthma can be controlled with proper medication and careful management[24]. Because each child's case is unique, it is important that parents work closely with physicians to develop an effective treatment plan for the individual child, including the most appropriate

medication, diet and exercise. However, lack of health insurance inhibits many asthma sufferers, particularly Latinos, from receiving this important preventive care. Since the cost of visiting a physician can be very prohibitive, many Latinos lacking health insurance put off seeking medical care unless an emergency arises. Waiting until emergencies arise not only means that patients will be confronted with the enormous costs associated with emergency room visits, but it also puts the patient's life in danger and can even lead to unnecessary deaths.

Lack of preventive care also increases the likelihood of misdiagnosis, particularly in children. Because children do not show the same symptoms as adults, physicians who are not specialists, or who are not seeing a child on a regular basis, are likely to treat symptoms as an infection or some other respiratory illness, without realizing that the underlying cause is asthma. Correct diagnosis and effective management of asthma in children, depends on having asthma and allergy specialists who recognize the uniqueness of childhood asthma[25].

Quality Insurance and Preventative Care

Unfortunately, even patients with medical insurance are not always allowed to see the appropriate specialists or do not receive the most effective asthma treatment. Currently, patients who are being mandated to switch from fee-for-service Medi-Cal to health plans participating in the Medi-Cal managed care movement may not have access to all quality medications used to treat asthma. These health plan's formularies are often more restrictive than Medi-Cal, leaving their asthma patients at a disadvantage. Formularies on these plans frequently contain many of the older medications, which may have unwanted side effects and can leave asthma sufferers feeling drowsy and groggy.

Access to quality asthma medications is extremely important. Yet, for the huge number of patients with allergy induced asthma it is important to have access to quality allergy medicines as well. This is particularly true for children. Certain asthma and allergy medications may affect a child's disposition and impair their ability to concentrate. Many of the antihistamines available to children act like sleeping pills, making children drowsy and inattentive[26]. These side effects can be detrimental to a child's ability to learn. For Latino children who are likely to already be at a socio-economic disadvantage, and often face linguistic challenges, these side effects can further impair their ability to learn.

While many health plans limit their patients access to specialists and certain medications as a way to cut costs, it is likely that in the long run this is actually costing more than it is saving. For example, an asthma patient who is misdiagnosed, or who is given ineffective medication, will never really be able to manage their health problem. Instead, it is likely that this patient will have to repeatedly seek out medical care for a problem that can actually be controlled, thus increasing costs to the health provider.

Families, Doctors and Schools

While asthma has been on the rise in all age groups, as mentioned earlier, the most dramatic increase in asthma rates has been in children. Although access to quality health care is a vital part of addressing childhood asthma, the American Academy of Allergy, Asthma and Immunology has said that, "for the asthmatic child to function normally, the child, family, physician, and school personnel must work together to prevent and/or control asthma." [27] This kind of communication is important for several reasons. First, it is important that teachers and other school employees have a clear understanding of the medical needs of individual children as they relate to asthma. This includes making sure asthmatic children take needed medication, knowing what kind of exercise an individual child can and should participate in, knowing what triggers a particular students asthma, and most importantly how to respond if a child has an asthma attack. Second, it is important that this communication exists so that teachers have realistic expectations based on an understanding of what the asthmatic child is experiencing. Teachers should be aware that children may have more difficulty concentrating if they are experiencing allergies or have recently had an asthma attack, or that medication may have side effects which inhibit a child's ability to concentrate.

Unfortunately, communication between schools, families, and physicians does not always occur. This is particularly true when parents are non-English or limited-English speakers and the teacher is not bilingual. In these situations it is not uncommon for parents to avoid meeting with teachers who they fear will not be able to understand them. Furthermore, when language barriers prevent parents from speaking directly with teachers, parents do not develop the trust that comes with talking to someone directly. As a result parents are less likely to confront teachers about their child's health problems.

Given the financial strain of California's public schools it is not uncommon for schools to share a rotating nurse or to have no nurse at all. As a result, many teachers and school employees themselves do not have easy access to information about asthma. This means that not only do many teachers lack the information necessary to deal with an asthmatic child, but that they have a limited ability to help parents develop a school plan that addresses the asthmatic child's needs.

The dearth of information about asthma in California schools is illustrated by a recent court case filed in San Francisco. On March 15, 1999 a family filed a federal discrimination suit against a Bay Area school who denied their four year old son Jeremy Alvarez admission because he suffered from asthma. Jeremy, who has suffered from allergy induced asthma since he was a baby, needs to have an inhaler at school in case he has an asthma attack. However, the Montessori school which he was to attend, had adopted a strict no medication policy. Although federal and state laws allow child care providers to administer inhalers to children, school officials told Jeremy's parents that they would not administer the boys inhaler or allow him to do so. If he had an asthma attack, the parents would have to bring the boy his inhaler[28].

According to the lawsuit filed, this school has had problems with asthmatic children before and on one occasion even shut a child (who was suffering from an asthma attack, and had not been given medication) in a janitor's closet with hot water running, under the misguided belief that the steam would help relieve his asthma[29]. While this is only one isolated case it illustrates the incredible lack of information in schools about childhood health problems like asthma.

An important dimension of this problem to consider is that for many low income and underinsured communities, schools are the only institution with which parents have regular contact. As a result many parents depend on schools for information about their child's well being, particularly parents who lack health insurance. While schools are clearly under a tremendous amount of financial strain, it is important that they be able to provide parents with basic information about their children's health. Although schools may feel that it is not their responsibility to provide families with health education, it is actually in their best interest to be able to direct parents to sources of information. School funding is still dependent on student attendance. When children miss school because of asthma and related illnesses, schools lose money. As mentioned earlier, asthma has become the number one reason for school absences in California. By providing quality multilingual health education to students and families, not only are schools fulfilling their responsibility to educate, but they are also working to increase attendance and ensure their own funding.

Conclusions

Asthma is not a problem unique to Latinos. However, Latinos are more likely, as a group to be exposed to environmental factors which trigger asthma and less likely to have access to the medical attention necessary to treat asthma. Furthermore, social, cultural, and language barriers have limited communication between families, schools, and doctors. California is currently undergoing a period of rapid change. By the year 2005 it is estimated that one in three Californians will be Latino, and that by 2040 Latinos will represent over half of the state's population[30]. Health education programs must be expanded to target Latino and other minority and low income communities who are most affected by asthma. The following recommendations are intended to guide policy makers towards better solutions for addressing California's growing asthma problem. We look forward to working with diverse communities throughout California on this issue and welcome thoughts and suggestions on this report.

Policy Recommendations

Expanding Access to Health Information

- Department of Health Services (DHS) should conduct an audit of health information given to Non-English speaking asthma patients. Many parents of asthmatic children are limited-English speakers. It is important that they have access to quality health information in their native language. DHS should do an audit to see what kind of information is currently available to non-English speaking asthma patients so information that is culturally appropriate can be developed where most needed.

- Schools should allocate at least one teacher in-service day annually to focus on pediatric health issues including asthma. It is important that teachers learn about childhood diseases like asthma so that when medical emergencies arise they are able to respond quickly and avoid unnecessary accidents and/or deaths. By being informed, teachers will also be more capable of directing parents with asthmatic children to other information resources.

- Schools should have asthma and other health education materials available for all parents and families, including non-English speakers. While many schools do not see family health education as being their responsibility, doing so would directly benefit them. High absence rates as a result of asthma and other illnesses cut directly into school funding. Providing parents with preventive health education materials will help reduce absences and will directly increase school funding.

- Develop a statewide asthma education campaign. The incredibly low insurance rates among Latino and other minority communities indicates that a substantial part of the state's population is not receiving important information on asthma and other pediatric health issues. Providing accurate asthma information to all California residents is necessary to lower the incidence of asthma related hospitalizations and emergency room visits.

Working Together to Understand and Address Asthma:

- The California Environmental Protection Agency (Cal EPA), DHS, and California State Air Resources Board should institute and undertake collaborative efforts to work on environmental health problems. Although all of these groups address different aspects of the growing asthma problem the lack of collaboration has meant that information that is collected is not shared and that asthma and other environmental health problems have not been addressed in a comprehensive manner.

- Cal EPA, DHS, and California State Air Resources Board should conduct comprehensive research on California's asthma clusters. Although it is clear that asthma rates in California are growing, little has been done to examine areas with high asthma rates and to develop strategies which address the unique conditions that impact asthma clusters. Comprehensive research on these asthma centers is necessary in order to develop effective strategies for addressing asthma at sub-regional levels. Part of this research should include Town Hall meetings and other community forums where people living in areas

with high asthma rates will have an opportunity to discuss their problems with EPA, DHS, and Air Resources Officials. Finally, and most importantly, information from this research and these meetings should be made widely available to the public at no cost.

- **Develop a network of educators, community based organizations, researchers, and health care providers to share information and best practices.** Although there are currently many programs which target the problem of pediatric asthma, the lack of communication among groups has meant that successful programs and best practices have not been shared and expanded to their fullest potential. It is important that all of these groups work together and independently to develop the best practice guidelines to prevent, respond to, and treat asthma.

Providing Greater Access to Quality Health Care:

- **The state must direct more money to schools to be used to hire health workers.** Reduced funding for schools has meant that schools have had to drastically reduce, or even eliminate, school nurses. This has meant that schools have been left with few or no health workers to deal with asthma and/or other health problems and emergencies.

- **DHS should conduct a comparative audit between the Medi-cal fee-for-service formulary and the forumalaries available from the health plans participating in the Medi-cal managed care movement.** The primary focus of this audit should be on the medications available to treat asthma and allergies, especially for children. Since the majority of pediatric asthma may be impacted by allergies, it is critical to look at the medications used to treat both of these health problems, particularly since many of the older medications can impact a child's ability to learn and perform in school. This review should be made available free of charge, and in multiple languages, to the general public so that patients with asthma can discuss all of their options with their health care provider. This audit should also give positive recognition to health plans who have included non-sedative medications on their formularies as a way to encourage other health plans to do the same.

- **Expand Medi-Cal and Medi-Cal Managed Care Formularies to include the most up to date and effective medications.** Many of the asthma drugs on Medi-Cal and Medi-Cal Managed Care Formularies are outdated and ineffective. DHS should make sure that all eligible members have access to the best available medications, regardless of which source provides the health care. Through proper treatment asthma can be controlled. Ensuring access to quality medications will not only help to control asthma, but will also lead to an overall economic savings for the state of California and will allow patients with asthma to have a better quality of life.

- **Publicly funded local health organizations should promote the utilization of evidence-based asthma guidelines, and educate their beneficiaries to the triggers and allergens which contribute to the severity of this debilitating disease.** While many organizations have developed asthma guidelines, these guidelines have not been adopted by many of the publicly funded local health organizations. These organizations must adopt guidelines for dealing with asthma to insure that asthma patients receive the best possible treatment and information.

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Notes