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Childhood Asthma: A Problem in North Carolina

In the United States an estimated 4 million children have had an asthma attack in the past year (American Lung Association [ALA], 2003). In the state of North Carolina asthma has proved to be among the most frequent causes of hospitalization for children (North Carolina State Center for Health Statistics [SCHS], 1999). Raising awareness in our community about asthma, specifically childhood asthma, will help many citizens.

The ALA defines asthma as "...an inflammatory condition of the bronchial airways" (2003). The inflammatory condition causes chest tightness, coughing and wheezing. This inflammation can be produced by allergenic triggers, respiratory infections, and airborne irritants. According to a study by Kurukulaaratchy, Matthews & Arshad inheritance appears to be a primary cause of childhood asthma (2004). Children with asthma also tend to have significant allergies (ALA, 2003).

At the age of 10 I was diagnosed with asthma and have been under prescribed medication ever since. Before I was diagnosed, I had severe pneumonia and frequent lung problems throughout my childhood. I have been lucky in my ability to control my asthma, but many other people do not have this luxury. A recent study has shown that children of minorities in the Medicaid system receive lax care and are more likely to need

hospitalization (Shields, A.E., Comstock, C. & Weiss, K.B., 2004). This variation in care is unacceptable and needs to be furthered researched and hopefully remedied.

An important issue on everyone's mind these days is money. In the year 1998 the state of North Carolina spent \$23,245,239 covering Medicaid claims for asthma (SCHS, 1999). More recent research shows even more surprising statistics. A survey by the University of North Carolina at Chapel Hill showed that smoking and exposure to smoking among children is the cause of 15% of asthma cases and results in approximately \$1.34 million in additional medical costs (*Respiratory Therapeutics Week*, 2004). By raising awareness of the causes of asthma, the state of North Carolina can save in medical costs while also increasing the quality of life of its children.

The quality of life for children with asthma is lower than children with healthy lungs. According to a survey from the National Association of School Nurses and published by *Respiratory Therapeutics Week*, asthma disrupts school routines more than any other chronic condition (2003). Another fact revealed by this study is the lack of knowledge school faculty has of the causes of an asthma attack. Communication is needed to educate school faculty about the causes of asthma attacks.

A majority of children with asthma suffer from exercise-induced bronchoconstriction which generally limits the child's activity level (Pianosi, P.T., & Davis, H.S., 2004). The study by Pianosi and Davis suggests that "lower maximum aerobic power in asthmatic children is related more to how capable they perceive themselves than to asthma severity" (2004). Raising awareness of this fact could possible induce children with asthma to participate in more activities.

It is useful to post information about childhood asthma on the web because many people have misperceptions about the condition. School faculty is unaware of the causes of an asthma attack. The children themselves do not know the level to which they can participate in exercise as suggested by the study by Pianosi and Davis. Not only does the public hold misconceptions about the condition of asthma, but they are unaware of the racial discrimination involved in treatment of children with asthma.

Information about childhood asthma in the state of North Carolina is especially relevant. North Carolinians would be my target audience because I am a student at UNC and my Web site will be based out of the UNC server. I believe raising the issue of money would interest many from the state of North Carolina because of the budget issues involved in the state government.