

How Asthma Affects Children Emotionally and Behaviorally



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References, Continued

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What is Asthma?

Asthma is a condition causing sensitivity to airways. The airway often become swollen, and at times is filled with mucus due to environmental factors. Those who encounter this sensitivity experience stronger reactions to basic irritations in the environment. When the airway is irritated, it narrows and swells making it difficult to breathe (8).

While asthma has the same effects, there are two different kinds: allergic and nonallergic. Nonallergic asthma can be induced by exercise and other environmental factors. This type of asthma has the greatest affect on children emotionally and behaviorally (8).

The prevalence of asthma cannot be overlooked. The number of children suffering from asthma has doubled, reaching 7 million over the last 8 years (8). Additionally, with the age of onset averaging between 10 and 13 years, some of the most impressionable years of a child's life can be affected (4).

Additional Resources

What is Asthma?, continued

Furthermore, gender seems to play a role in the condition. Girls are more likely to have asthma than boys due to hormonal changes and less lung function, as well as “gender-specific” environmental exposures, which are different for boys. These environmental exposures include perfume, hair coloring, and make up (4).

There has also been a connection between Asthma and their genetic make up. Roughly 40% of parents pass the condition on to their children. Asthma is also more likely to develop in individuals who have a tendency to suffer from allergies (8).

- Environmental Protection Agency Asthma Awareness: The Environmental Protection Agency (EPA) has created a website devoted to asthma symptoms, triggers, and plans to control asthma. The EPA created this site to raise awareness of asthma and to provide an informational reference page for those who suffer from it or those who would like to know more about it.
<http://www.epa.gov/asthma/index.html>
- Asthma and Allergy Foundation of America (AAFA): This interactive website encourages the viewer to join with them in the fight to improve the quality of life of people with asthma. The viewer can even sign up for the AAFA newsletter. There are chapters of the AAFA all over the United States to join, which provides additional information to people in a more personalized setting.
<http://aafa.org/index.cfm>
- Center for Disease Control and Prevention: This website is geared towards children with asthma. They provide “fun facts” on healthy lifestyle choices as well as common asthma triggers.
<http://www.cdc.gov/asthma/children.htm>
- Resources for the Interactive Asthma Action Plan (iAAP): The iAAP website provides PDF forms to make your own asthma action plan! There is a trigger control PDF listing different asthma triggers and ways to avoid them.
<http://www.asthma-iaap.com/resources.html>

Asthma Management Program Example

Asthma is an incurable condition so it is important for young children to be aware of what their body is trying to tell them before an attack ensues. Asthma management programs help them to regain control over their lives with a few, easy to remember steps.

1. Identify asthma symptoms: wheezing, coughing, difficulty breathing

2. Know what to do in the case of an attack (i.e. using medicine and seeking medical attention)

3. Recognize asthma triggers and how avoid them

4. Keep physically active in spite of physical restrictions

Symptoms

The primary symptoms of asthma include:

- Persistent wheezing around the age of one (6), frequent coughing, mainly at nighttime, feeling tightness in the chest, and shortness of breath (8).

Signs of a severe asthma attack include:

- The inability to speak, restlessness, confusion, sounds of grunting, exhaustion and blue skin tones (1).

There are many causes of asthma in children such as pollution and food allergies (1). Because of the many factors that trigger asthma symptoms and attacks, asthma can have emotional and behavioral effects on those children dealing with the condition. Feelings of **depression** or **loneliness** can occur in children who have asthma (4). They are also unable to establish independence from their parents, which negatively affects the socialization processes and inhibits maturing (4).

Behavioral and Emotional Effects

In addition to the common occurrence of depression and loneliness in asthmatic children, a child with asthma is likely to experience lower self-esteem due to an avoidance of sports activities (3). Because they may never participate in sports, they will not have the opportunity to set goals in this respect. If children with asthma inhibit themselves from forming sport related goals, they will never be able to reach these particular goals (3). For example, a child with asthma may want to one day hit a homerun in a baseball game or score goal in soccer, but will never try for fear of having an asthma attack.

This low self-esteem has a negative impact in peer relationships. Once again by missing out on sports related activities, children with asthma miss the opportunity to build relationships with their peers in sports activities (3). By joining a sports team some children make lifelong friendships; however, by not being able to join a team, children with asthma may never form these friendships.

Strategies that Help

Two helpful strategies to understanding children with asthma include:

1. Remember the symptoms of asthma
2. Have a specific plan for each

Useful programs to manage asthma:

- Asthma Action Plan (7)
- Self-management programs like Open Airways (5)
- Asthma Camps specifically tailored to children with asthma and focusing on their exercising abilities (3).

By managing asthma, the children who live with asthma no longer have to be excluded from the group and they gain freedom from their condition.

Knowing specific triggers of a particular child's asthma and how to properly administer their own medicine when necessary allows the child to participate in activities without fear of an asthma attack.

Case Study Continued

Lucy is a 10-year-old girl who suffers from asthma. Lucy is leading a sedentary lifestyle due to fear of triggering an asthma attack. In school, Lucy refrains from participating in physical activities and sits out from playful activities at recess time. Because Lucy's teachers do not know much about Lucy's asthma attack triggers or how to properly administer medicine if Lucy has an attack, they continue to allow her to sit out of physical play.

For a 10-year-old, living a life without physical activity can be harmful. Lucy sits and watches the other children run and play while she wishes she could do the same. Recently, Lucy, her parents, and teachers have taken an asthma action plan course to improve Lucy's condition. Through this course they have learned how to recognize the symptoms of an asthma attack, as well as the triggers causing Lucy's asthma to act up. Through this course, Lucy's teachers are now able to administer medicine and even call for help if it is needed.

Now Lucy is able to participate in physical activities during school hours without fear of having an attack or even worse. Not only do her teachers feel more comfortable having Lucy participate in physical activities, but they encourage her to do so.

Behavioral and Emotional Effects, Continued

A second behavioral effect of asthma includes a drop in school attendance rates. Children with asthma typically miss more school days due to doctors' appointments, trips to the emergency room, symptoms of asthma, and environmental triggers. A study found that about 40% of those students absent from school, at any given time, had been diagnosed with asthma. Furthermore, when these same children were attending school, 40% were being woken up after falling asleep in class (10).

Children with asthma have different exercise behaviors than those without. Children with asthma are more sedentary than those without asthma (2). They are more likely to sit out of sports activities due to shortness of breath, coughing and wheezing (2). Notably, most children (and parents) are simply misinformed about the dangers of exercise and asthma; therefore, not participating in exercise is unnecessary (3).

Common Misconceptions

Perhaps the most common misconception about asthma and children with asthma is the amount and types of exercise where they can participate safely. Most children with asthma do not exercise as much as children without asthma due to misinformed parents (5). It has been reported that exercise increases the lung's capacity, and is a proven way to manage asthma (2). By enrolling parents and children in programs focusing on asthma management techniques (5), children with asthma are able to participate in activities they previously avoided.

Asthma camps are another way for children with asthma to get the exercise they need. These camps employ respiratory professionals to ensure a safe experience and allow children with asthma to participate in sports they may have been afraid to participate in previously. By teaching asthma management, such as triggers of asthma and how to use an inhaler correctly, these camps are promoting self-worth and self-esteem (3).

Case Study

Hartford, Connecticut's school district was comprised of 24,000, low-income students during the 2004-2005 school year. Among these students, about 41% had asthma and this was the cause of most absences in school (7).

The high number of absences among children with asthma led the school district to implement the Childhood School Initiative project. A focus of this project was to put asthma action plans into effect for each child with asthma. This plan would be made custom for each child and contained information on medication options and how to care for that particular child. An asthma incident information form (AIIF) was filled out for every child's action plan, rated on its usefulness. Eighty-five percent of the time the action plans proved to be useful in the occurrence of an asthma attack (7).