

Asthma Smarts Education: Increased Disease Knowledge and Reduced School Nurse Visits

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What Is the Purpose of This Study/Review?

- Evaluate the efficacy of school-based asthma education delivered by health care professional students and community-based instructors for students with asthma in grades three to five.

What Is the Problem?

- In the United States, 6.2 million children (≤ 18 years) have asthma.
- Among children ages 5 to 17, asthma is a leading cause of missed school days, causing 13.8 million missed days in 2013.
- From 2008 to 2013, annual asthma costs exceeded \$81.9 billion, including \$50.3 billion in medical costs, \$29 billion in asthma-related mortality, and \$3 billion from missed work and school.
- Asthma prevalence in Milwaukee Public Schools (MPS) is often 20% or higher in any given year.
- Lack of asthma knowledge can lead to exacerbations, emergency room visits, absenteeism, and decreased quality of life.

What Are the Findings?

- Asthma Smarts attendance decreased asthma-related school nurse visits for students with asthma in grades three to five.
- Pre surveys showed knowledge gaps in trigger identification and controller medication use with significant gains in knowledge post program participation.
- Education on relievers, symptoms and spacers resulted in significant knowledge gains.
- Medical and nursing student volunteers were effective instructors.
- Community partnerships yielded successful outcomes despite limited funding.

Who Should Care Most?

- Parents of children with asthma.
- Schools, including school nurses, teachers, administrators, and school health teams.
- Health care professionals and academics interested in linking public health and research.
- Proponents of innovative public health policies.
- Coalitions and alliances interested in collaborative community health work.



Recommendations for Action

- Engage professional students and community-based instructors to provide asthma education in schools.
- Engage health care professional students in real-world public health programming.
- Support community-based collaborations.