Effect of a school-based asthma clinic on asthma outcomes.

The prevalence of childhood asthma has increased from 8.7% to 9.6% over 2001–2009, and is highest among poor children (13.5%) and non-Hispanic black children (17.0%). Additionally, 32.5% have emergency department (ED) visits, 8% require hospitalization and only 34.2% of asthmatics report having a written asthma action plan. Approximately one-third of children take asthma controller medications. With appropriate medical care, use of inhaled corticosteroids, and environmental modifications, most patients can obtain asthma control. Children with uncontrolled asthma also have frequent school absences and difficulty maintaining optimal school performance with an average of 4.5 days lost from school annually due to asthma which totals over 13.8 million days per year. To address these issues, Ellis and coworkers from the St. Louis developed the “Healthy Kids Express Asthma (HKEA)” program with the goal of improving asthma control in children attending schools with the highest asthma prevalence in the greater St. Louis metropolitan area. In a recent publication, Ellis and coworkers reported their assessment of the effectiveness of the HKEA program.

Who or What was Proposed to be Studied?
During a three school-year period from 2008–2011, 1076 participants ages 5–15 years were recruited in the HKEA program.

How was the Study Done?
Via a retrospective quality assurance study, participants showed a reduction in ED visits (from 36.9% to 14.2%) and hospitalizations (from 7.1% to 5.0%) from the year prior to beginning the program to the third year of the program. Absenteeism was significantly improved from 59.1% to 27.1% and staff and student knowledge of asthma improved significantly after completing asthma education programs. Over 90% of participants completed three technique checks of their inhaler and spacer technique and showed significant improvement in their technique scores. Parent satisfaction with the HKEA was rated excellent or very good by 96.9%.

What are the Limitations of the Proposed Study?
The report is subject to limitations based on limited single center perspective.

What are the Implications of the Study?
Unlike other asthma control programs, the unique feature of the HKEA program is that it allows unscheduled asthma clinic visits to occur at school without parents present. The authors found that the HKEA program was well accepted by parents and resulted in less health care utilization and school absences, as well as improved asthma knowledge in participants and school staff.