

Title: IMPACT OF LIVE WEBINAR ASTHMA EDUCATION FOR CAREGIVERS OF PRESCHOOL CHILDREN

Authors: Joy Sawicki, DNP, APN, AE-C, Respiratory Center for Children, Morristown, NJ

Background: Chronic airway inflammation and structural changes characteristic of asthma often develop in the preschool years. The CDC estimates that 6.2 million children in the US have asthma; 935,000 asthmatic children are under the age of 4. The National Asthma Education and Prevention Program (NAEPP) Expert Panel Report (EPR-3) recommends self-management education for asthmatic children and their families along with ambulatory care. Despite the need for education, barriers to attending classes, such as time, travel and expense often exist. Alternative formats for asthma education may help mitigate barriers.

Study Objective: The primary purpose of this research was to evaluate the impact of a novel education format for caregivers (live webinar) on asthma control in preschoolers. Additional aims included caregiver satisfaction with webinar learning, and impact on emergency visits and hospitalizations.

Methods: The study used a one-group prospective cohort design with repeated measures. Caregivers of asthmatic preschool children (N=30) participated in a single 1-hour live asthma education webinar. Asthma control was measured using the Test for Respiratory and Asthma Control in Kids (TRACK) prior to the webinar, 1-month, and 3-months following. Demographic, webinar satisfaction and emergency/hospitalization questionnaires were also administered.

Results: Statistically significant increase in TRACK scores over 3- points in time ($n = 21$), indicating improved asthma control ($F = 5,128, p = 0.01$). More than 84% found the webinar convenient, helpful, and would recommend to others. Emergency visits (<60%) and hospitalizations (<70%) remained consistent with the study site's historically low emergency and hospitalization rates.

Conclusion: These findings suggest that live webinar asthma education is an effective method of teaching that is convenient for families and results in improved asthma control. Innovative methods of teaching are crucial skills for healthcare providers to keep patient education interesting and accessible.