

**Title of Intervention:** Environmental Tobacco Smoke Reduction Intervention

**Intervention Strategies:** Group Education, Supportive Relationships

**Purpose of the Intervention:** To reduce environmental tobacco smoke exposure for children with asthma

**Population:** Children aged 3-12 with asthma who were exposed to environmental tobacco smoke and their parents/caregivers

**Setting:** Valley's Children Hospital in Fresno, CA; health care facility-based

**Partners:** Hospital administrators and staff

**Intervention Description:**

- **Group Education:** The intervention consisted of three behaviorally-based sessions spaced over approximately three weeks. Each session followed a written protocol for a nurse-educator to instruct the caregivers. This protocol included instruction about asthma and its treatment, including environmental controls. The protocol was designed to ensure a basic understanding of the connection between asthma and environmental tobacco smoke. The strategies used included monitoring environmental tobacco smoke exposure, role modeling and role-playing of interactions with other smokers to secure their cooperation in reducing the child's exposure, personal feedback on progress and contingency contracting. To the extent that the children were developmentally able, they also were involved in learning about asthma and the problems of environmental tobacco smoke exposure and played an asthma Jeopardy-like game along with the caregiver to demonstrate what they had learned.
- **Supportive Relationships:** The children and parents learned the same material together, creating an understanding environment for the child.

**Theory:** Not mentioned

**Resources Required:**

- **Staff/Volunteers:** Nurse-educators
- **Training:** Not mentioned
- **Technology:** Not mentioned
- **Space:** Meeting Space
- **Budget:** The families received \$10 for each data collection session
- **Intervention:** Educational materials, incentives for children
- **Evaluation:** Questionnaire

**Evaluation:**

- **Design:** Randomized controlled trial
- **Methods and Measures:**
  - Questionnaires assessed types of tobacco products smoked, the amount smoked, the relationship of the child to each smoker who lived in or regularly visited the home, the degree to which the child was exposed to environmental tobacco smoke and any restrictions on smoking in the home.
  - Interviews collected data on family demographic characteristics, the child's asthma history, current symptoms, activity limitations, environmental factors and medication regimen.
  - Hospital records reported emergency room visits and hospitalizations.

**Outcomes:**

- **Short Term Impact:** There was an increase in prohibition of smoking in the home.
- **Long Term Impact:** There was a significant reduction in hospitalizations and emergency room visits.

**Maintenance:** Not mentioned

**Lessons Learned:** An educational intervention that emphasized reduction in environmental tobacco smoke exposure and that used a variety of motivational, instructional and other aides to promote behavior change was associated with significantly lower odds of having more than one acute medical visit for asthma.

**Citation(s):**

Wilson SR, Yamada EG, Sudhakar R, et al. A controlled trial of an environmental tobacco smoke reduction intervention in low-income children with asthma. *Chest*. Nov 2001;120(5):1709-1722.