

Title of Intervention: Environmental Tobacco Smoke Exposure Reduction for Children with Asthma

Intervention Strategies: Supportive Relationships, Individual Education

Purpose of the Intervention: To reduce environmental tobacco smoke for children who have asthma

Population: Children with asthma and their parents

Setting: Pediatric Allergy Medical Centers in San Diego, CA; health care facility-based

Partners: Medical center administration and staff

Intervention Description:

- Supportive Relationships: Both the parent and child attended a series of counseling sessions over six months designed to reduce the child's exposure to parental smoking. Behavior modification techniques such as stimulus control, shaping, personal feedback and contingency contracting were incorporated in a program tailored for each family.
- Individual Education: Between counseling sessions, diaries were used to record parent smoking and child environmental tobacco smoke exposure patterns, children's peak flow meter readings and children's symptoms. These data were used to recommend changes in parental smoking patterns that could reduce environmental tobacco smoke exposure for the child.

Theory: Not mentioned

Resources Required:

- Staff/Volunteers: Educators
- Training: Not mentioned
- Technology: Peak flow meters
- Space: Meeting space
- Budget: Families were given monetary incentives of \$60 for attending the sessions
- Intervention: Diaries, educational materials
- Evaluation: Not mentioned

Evaluation:

- Design: Randomized clinical trial
- Methods and Measures:
 - A nicotine air monitor and construct validity analysis confirmed the validity of the exposure reports.
 - An environmental monitor was used to validate parent-reported exposure and smoking rates.
 - Diaries recorded children's symptoms, peak flow rates and exposure to tobacco.

Outcomes:

- Short Term Impact: Not measured
- Long Term Impact: Exposure to the parent's cigarettes in the home decreased for all groups, but the intervention group sustained a decrease over time while the non-intervention groups increased exposure over time.

Maintenance: Not mentioned

Lessons Learned: Not mentioned

Citation(s):

Hovell, M. F., S. B. Meltzer, et al. (1994). "Reduction of environmental tobacco smoke exposure among asthmatic children: a controlled trial." *Chest* 106(2): 440-6.

Wahlgren, D. R., M. F. Hovell, et al. (1997). "Reduction of environmental tobacco smoke exposure in asthmatic children. A 2-year follow-up." *Chest* 111(1): 81-8.

Meltzer, S. B., M. F. Hovell, et al. (1993). "Reduction of secondary smoke exposure in asthmatic children: parent counseling." *J Asthma* 30(5): 391-400.