

**Title of Intervention:** A Pediatric Intervention to Reduce Maternal Smoking and Relapse

**Intervention Strategies:** Individual Education, Campaigns and Promotions, Provider Education

**Purpose of the Intervention:** To reduce maternal smoking and prevent relapse

**Population:** Pregnant women who were current smokers or who had quit due to pregnancy

**Setting:** Oregon pediatric offices; health care facility-based

**Partners:** Oregon Academy of Pediatrics, American Lung Association

**Intervention Description:**

- Individual Education: All participants received a packet of materials containing a brochure, a letter to the mother signed by her pediatrician and a nursery non-smoking sign to hang above the crib. The message and materials were designed to alert the mother to reduce her newborn's exposure to passive smoke and also encouraged the mother to quit smoking or to stay quit if she stopped for pregnancy. In the extended condition, participants received additional information at the first four well baby visits. Mothers received information on the adverse health effects of passive smoking, hints for quit strategies, role modeling and a letter to fathers. Smokers were encouraged to set a quit date and were given a quit kit from the American Lung Association.
- Campaigns and Promotions: Mothers in the extended condition also received refrigerator magnets, a bib and a non-smoking sign for the baby's room. A videotape was designed for the project and offices in the extended condition received copies of the tape and a combination TV/VCR unit. The purpose of the tape was to show mothers the potential health effects of passive smoking as well as the benefits of quitting. A \$2 bill and a cover letter stating that the respondents would be entered in a monthly lottery with a chance to win \$100 accompanied the questionnaire as an incentive for returning the form.
- Provider Education: A small sticker in the form of a checklist was attached to the charting sheet for the day to remind the pediatrician to perform the intervention. Written project materials, tailored to the mother's current smoking status, were inserted into the chart by either a receptionist or nurse. Physicians were trained to engage smokers into brief discussions about amount smoked, barriers to quitting and results of past quit attempts. The pediatricians were told to encourage quitters to stay quit.

**Theory:** Not mentioned

**Resources Required:**

- Staff/Volunteers: Pediatricians, receptionist, nurse, staff members to train physicians and staff
- Training: Providers received intervention protocol training
- Technology: TV/VCR units
- Space: Not mentioned
- Budget: Not mentioned
- Intervention: Quit kit materials, refrigerator magnets, bibs, non-smoking signs, sticker checklist, Freedom from Smoking materials, videotape, incentives for follow up
- Evaluation: Questionnaires

**Evaluation:**

- Design: Blocked randomized controlled trial
- Methods and Measures:
  - Questionnaires collected data on prospective predictor variables.
  - Telephone surveys of mothers assessed reported receipt of intervention components by providers.
  - Chart reviews in the extensive intervention condition determined if the requisite labels and checklists were in place.

**Outcomes:**

- Short Term Impact: Mothers in the intervention smoked fewer cigarettes per day, had a more negative attitude toward smoking, had a higher readiness to quit and demonstrated more knowledge regarding the dangers of passive smoke exposure compared with mothers in the minimal condition. Mothers in the extended condition reported receiving more advice than mothers in the minimal condition.
- Long Term Impact: For mothers that quit for the pregnancy, those in the extended condition were significantly more likely to maintain their cessation for 12 months than mothers in the minimal condition. Among smoking mothers, the extended condition mothers were more likely to quit by six months and stay quit throughout the 12-month assessment than mothers in the minimal condition.

**Maintenance:** Not mentioned

**Lessons Learned:** New models of intervention will need to deal more effectively with smoking partners. Future interventions may want to emphasize prohibition of smoking in the house for women not willing or ready to quit smoking. Future interventions with postpartum women will need more emphasis on weight gain or loss in the materials and counseling provided.

**Citation(s):**

Severson, H. H., J. A. Andrews, et al. (1997). "Reducing maternal smoking and relapse: long-term evaluation of a pediatric intervention." *Prev Med* 26(1): 120-30.

Wall, M. A., H. H. Severson, et al. (1995). "Pediatric office-based smoking intervention: impact on maternal smoking and relapse." *Pediatrics* 96(4 Pt 1): 622-8.