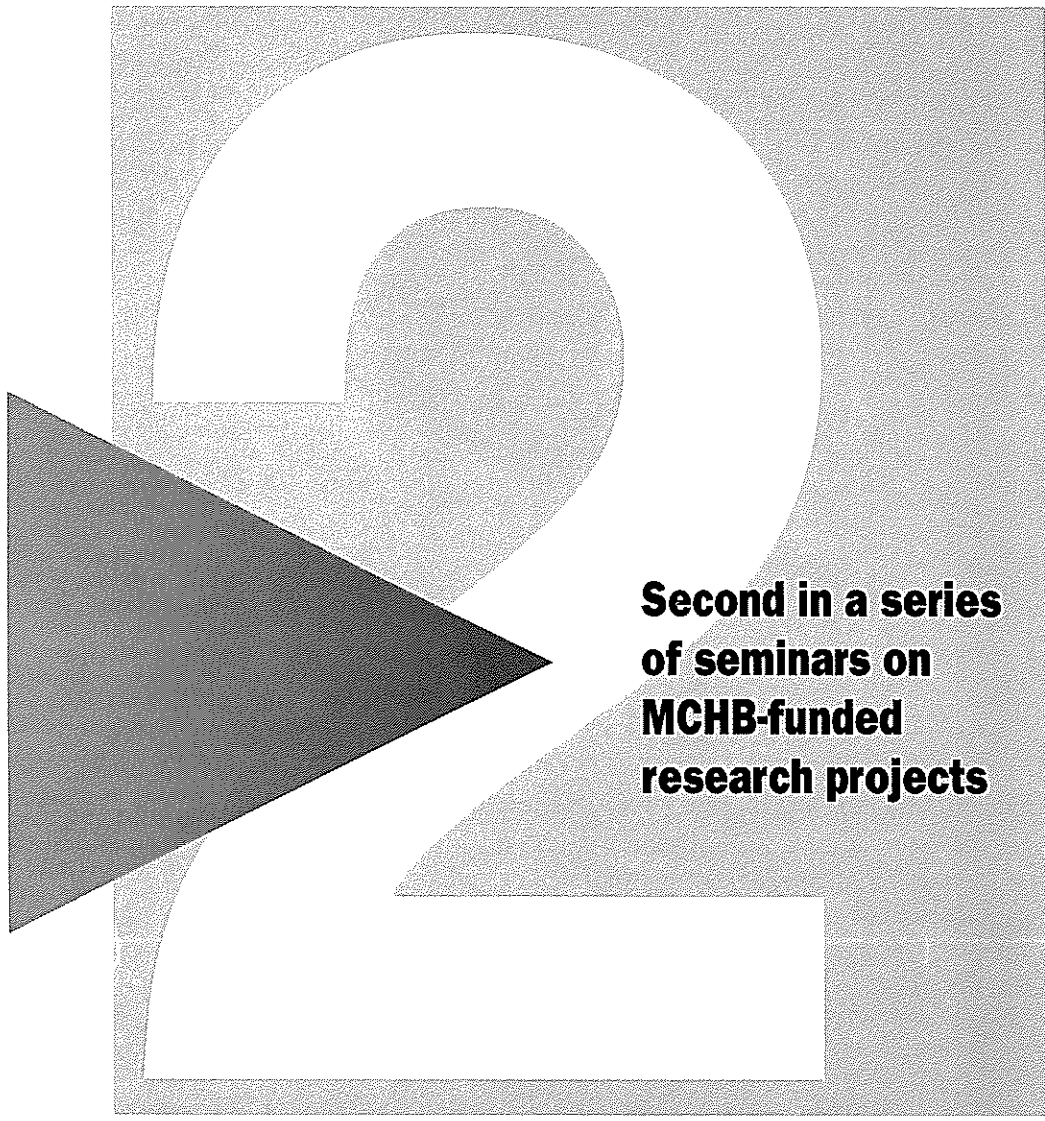


# Research Roundtable



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March 12, 1993 ☺ 12:30 to 2:00 pm  
Parklawn Building, Potomac Room

*Smoking Cessation and Relapse  
Prevention in Low-Income Mothers*

**Speakers:** Ruth R. Faden, Ph.D., M.P.H., and Andrea C. Gielen, Sc.D., Sc.M.  
Department of Health Policy and Management  
Johns Hopkins School of Hygiene and Public Health

**Reactor:** To be announced

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Sponsored by the Maternal and Child Health Bureau, HRSA, PHS, DHHS  
RSVP to Shelley Spisak at the National Center for Education in Maternal and Child Health (703) 524-7802.  
Bring your lunch and enjoy the coffee and dessert provided.





### **About the Speakers**

*Ruth R. Faden, Ph.D., M.P.H.*, is Professor of Health Policy and Management and Director of the Program in Law, Ethics, and Health at the Johns Hopkins University School of Hygiene and Public Health. Dr. Faden is also Senior Research Scholar at the Kennedy Institute of Ethics, Georgetown University. In addition to serving as a consultant to numerous government and private agencies, Dr. Faden is the author of books and journal articles on health policy, biomedical ethics, and health behavior. She is also working on procedure-based rationing in medical care. Dr. Faden holds an M.A. in humanities from the University of Chicago, and an M.P.H. and Ph.D. from the University of California at Berkeley.

*Dr. Andrea Gielen, Sc.D., Sc.M.*, is Assistant Professor in Behavioral Sciences and Health Education at the Johns Hopkins University School of Hygiene and Public Health. Her research interests are in the development and evaluation of community- and clinic-based programs that address health problems affecting women and children. Dr. Gielen's work focuses on planning and evaluating health education programs that address a variety of health-related behaviors primarily among economically disadvantaged women and children. The application of behavioral science theories and health education principles to childhood injury prevention is an area of special interest. Dr. Gielen earned her Sc.D. in Health Policy and Management and the Sc.M. in Health Education, both at the Johns Hopkins University.

# Smoking Cessation and Relapse Prevention in Low-Income Mothers

MCJ-240562 • 11/1/87 to 10/31/91

**Ruth R. Faden, Ph.D., M.P.H.**

Johns Hopkins School of Hygiene and Public Health  
Department of Health Policy and Management  
624 North Broadway • Baltimore, MD 21205  
Phone: (410) 955-3018

## Statement of the Problem

Poor, African-American women have received relatively little attention in smoking cessation research. In addition, very little is known about how best to motivate pregnant women to stop smoking. This study addresses these issues using an experimental design with biochemical confirmations in a large cohort of low-income, pregnant women and new mothers followed until 6 months post-delivery.

## Research Questions or Hypotheses

We hypothesized that pregnant smokers exposed to multiple smoking cessation and relapse prevention interventions will exhibit greater levels of reduction and abstinence than those not exposed. The primary aims of this study are: (1) to develop multi-component smoking cessation/relapse prevention interventions suitable for use in health care settings that serve low-income, minority women during the childbearing year; and (2) to determine the behavioral impact of the multi-component interventions on smoking cessation, relapse, and reduction rates, both during and after pregnancy.

## Study Design and Methods

The interventions were tested among 467 pregnant, current smokers who were randomly assigned to receive either: (1) a prenatal and postpartum intervention (Intervention Group); or (2) no special intervention—usual clinic procedures (Control Group). The interventions included individual counseling in the use of self-help materials and supportive reinforcement by clinicians. The two primary measurement techniques were self report and biochemical confirmation using saliva cotinine levels. Interviews were conducted at the first prenatal visit, at a third trimester visit, immediately postpartum, at 3 months postpartum, and at 6 months postpartum.

## Results

There was no effect of the intervention on quit rates in the third trimester of pregnancy, regardless of whether cessation was cotinine confirmed or self-reported. Adjusted for baseline differences in ethnicity and education between the two groups, there was still no evidence of an intervention effect. Moreover, there was no difference between the two groups in the proportion of smokers who reduced their cigarette consumption during pregnancy.

Comparing the Intervention women ( $N=46$ ) who were smokers and received the smoking cessation intervention during the hospital stay to the Control women ( $N=48$ ) who were smokers and received standard care during the hospital stay, only 3 women (6%) in the Intervention group reported that they quit smoking at 3 months postpartum compared to 2 women (4%) in the Control group. However, at 6 months postpartum 7 (15%) of the Intervention group and only 2 (4%) of the Control group reported having quit.

A total of 13 women (Intervention and Control group combined) who had quit smoking at third trimester were successfully followed through 6 months postpartum. Of these, only 2 women (15%) who quit by the third trimester of pregnancy remained non-smokers through 6 months postpartum. Among an additional 18 women who quit sometime between the third trimester interview and delivery, only 3 (17%) were still quit at 6 months postpartum.

Relationships were found between cotinine levels and number of cigarettes reportedly smoked daily, and passive exposure to cigarettes. Among 163 women who reported smoking five or fewer cigarettes daily, 77 (47%) had cotinine levels above 100 ng. Among 422 women who allow smoking inside their homes, 62% had cotinines above 100 ng, compared to 39% among 41 women who did not allow smoking inside their homes.

## **Upcoming Seminars**

April 23, 1993

Health and Nutrition of U.S. Hispanic Children

Dr. Reynaldo Martorell, Cornell University

Dr. Fernando Mendoza, Stanford University



**Dates are yet to be confirmed for the following topics:**

Simultaneous Screening for Hearing, Speech, and Language

Home Intervention for Infants with Failure to Thrive

Psychological Sequelae of Bronchopulmonary Dysplasia and Very Low Birthweight

### **Maternal and Child Health Bureau Research Program**

Health Resources and Services Administration

Public Health Service

U.S. Department of Health and Human Services

Parklawn Building, Room 18A55

5600 Fishers Lane

Rockville, MD 20857