

# Current Public Health Research Abstracts

## EVALUATION OF PREDICTIVE VALUE OF TRANSFERRIN RECEPTOR LEVELS IN THE EARLY IDENTIFICATION OF IRON DEFICIENCY IN INFANTS

Rebecca Black, MS

This study evaluated growth parameters, dietary intake, and iron status indicators in nine exclusively breastfed (plus infant cereal) and seven exclusively formula fed (plus infant cereal) infants at six months of age to investigate the sensitivity of transferrin receptor in detecting early iron deficiency. A negative correlation of protein intake per kg of body weight with transferrin receptor levels ( $p=0.005$ ) was found in the breastfed group. The transferrin receptor was negatively correlated with ferritin in the breastfed group ( $p=0.034$ ). Erythrocyte protoporphyrin levels were positively correlated with length gain per day in the formula fed group ( $p=0.031$ ). The amount of cereal fed was positively correlated with ferritin ( $p=0.033$ ), and hemoglobin ( $p=0.047$ ) in the breastfed group. The formula fed infants took a higher proportion of total calories ( $p<0.001$ ) and iron ( $p<0.001$ ) from cereal than did the breastfed infants. Transferrin receptor was helpful in identifying early iron depletion in 33% of the breastfed group.

## REDFINING CRITERIA FOR SUCCESS WHEN EVALUATING LONG-TERM COMPLIANCE IN INTERVENTIONS INVOLVING WEIGHT LOSS, DIET, AND EXERCISE

R.E. DiGirolamo, R.G. Sargent, H.J. Bantle, J.B. Hasever, P.A. Shanon, P.M. Mink

Traditional evaluations of weight loss intervention programs have focused on weight loss compliance with discouraging results. While weight loss is important in health risk reduction, improved diet and exercise adherence carry important independent risk reduction qualities. Long term effects of an intensive 26-day residential weight loss intervention program were determined in 198 men and women 1.5 years post-treatment. While only 16.0% and 13.7% of males and females respectively were able to maintain a 10% weight loss at follow-up (based on program entry weight), 87% reported to engage in regular walking, of which 76% did so two more days per week at a high intensity (77.0%), for an average duration of 45 minutes/week. Overall 56.7% were categorized as high active. Additionally, respondents reported an average 2.81±1.23, 2.43±1.12, and 3.29±1.77, fruit, vegetable and bread/cereal servings per day respectively, and only 1.99±1.12 meat servings per day. The conclusion is that while weight maintenance was modest, most of the intervention group predicted risk reducing behaviors and behaviors. Although conventional evaluation protocol regarding the effectiveness of the weight control program may suggest this program unsuccessful, redefining "success" provides an encouraging results. Thereby, redefining measures of success will enable us to identify programs that stimulate and help maintain changes in exercise habits and dietary behaviors promoting protective effects of their own.

## RETAIL STORES PROVIDE A SUCCESSFUL AVENUE FOR PUBLIC HEALTH EDUCATION

Dawn Lewis and Karen O. Jones, Farmers are

undermaured and do not seek preventative health services. Most use over the counter medications to treat any illness rather than seeking medical services. Because of the difficulty in reaching farming populations with health messages, the Cancer Control Section/ University of Georgia Grant - Georgia Harvesting Healthy Habits has taken Public Health Education a step beyond. The project developed Skin Cancer Prevention Displays with free pamphlets available for retail stores. The project is geared toward Skin Cancer Prevention in the farming community. The goal of the project was to educate the target audience in a creative and innovative way. The method used made the health message readily available. The displays were set up in local feed and seed stores where farmers go to buy farm supplies. The displays had pictures of different types of skin cancer and information about skin cancer prevention and detection. The farmer could also pick up a brochure which had the same information. As a result of these displays, over 3000 brochures were distributed, 10 classes on skin cancer prevention have been taught, a statewide 4-H education program was developed, and a National Company is getting ready to develop these displays for national distribution.

## SYRINGE DISPOSAL BEHAVIORS OF INJECTION DRUG USERS

Karen W. Skinner, MPH, Claire Short, PhD, T. Stephen Jerns, MD, Kathy Malar, PhD, MPH, Cheri Jennifer Tanner, MPH, CHES

Background: Syringes discarded by injection drug users (IDUs) may place community members, refuse workers and other IDUs at risk for injury or infection with HIV, HBV and HCV. However, few communities have syringe disposal programs designed for IDUs. Objectives: 1) To examine current syringe disposal behaviors of IDUs in one Atlanta, Georgia community; 2) To assess factors influencing where, how and when IDUs dispose used syringes. 3) To investigate community attitudes toward three specific syringe disposal interventions: a one-way drop box, a syringe exchange program (SEP) and home collection. Methodology: One hour, semi-structured interviews were conducted with 26 IDUs in Atlanta. Data analysis was guided by Green and Knutson's PRECEDE model and data were coded using The Ethnograph qualitative software package. Results: Most IDUs reported taking some precautions when disposing syringes, including breaking the needle, containing the syringe in a soda can and disposing the syringe in the trash or sewer. The most common reason cited for disposing with precautions was to protect children and other IDUs. Fear of arrest for syringe possession was a common factor motivating IDUs to dispose syringes indiscriminately. A syringe exchange program was the preferred syringe disposal intervention because IDUs could obtain a new syringe for each used syringe.

## 6TH GRADE HEPATITIS B PROJECT

Sandy Blum, RN

This one year project involved our twelve county district office nursing staff working with Smith KlineBeecham, who supplied the vaccine, and the Occupational Medical Center from Miami, Florida. Sixth graders were selected to be immunized as the specific population before they became sexually active. Statistics have shown that Hepatitis B has been on the rise in non-symptomatic carriers and it is the only vaccine to prevent a cancer causing disease. Boards of Education had to be convinced of the importance of the vaccine, yet we were still unable to get approval from all counties. Communication with the front line people in the schools were difficult, yet this project sparked enough interest that several teacher went to the Health Departments to receive this vaccine. Speaking at PTA and PTO meeting raised positive concerns from parents which resulted in their other children being vaccinated. Many good things happened as a result of this project and over four thousand of our now seventh graders are immunized against Hepatitis B.

## CHARACTERISTICS OF YOUNG WOMEN IN GEORGIA WHO ARE CHRONIC OR BINGE DRINKERS

Mary P. Miall, Roger Roehrig, Florida Scribner, Carol Hadler

Background: Previous studies based on survey data provide limited information about women of reproductive age at risk of chronic or binge drinkers because most surveys contain small numbers of women whose use of alcohol is excessive, most do not cover the entire age group, and few include questions about the consequences of chronic or binge use. Methods: During 1995 the Georgia Division of Public Health, in collaboration with CDC, conducted a statewide telephone survey on women's health issues, including alcohol use and its consequences. A probability sample of 3,130 women ages 15-44 years (73% response rate) was selected by Random Digit Dialing. Bivariate analysis determined correlates of use and consequences. Results: Approximately 15% of women surveyed reported that, on average, they had 1+ drinks/day or that, at least once during the past year, they had 5+ drinks in a row. This pattern of use was associated with being white, being previously or never married, having smoked within the past year, and having attended or completed college. Chronic or binge drinking was negatively related to number of living children and to the frequency with which the woman attended church. Further, for this subgroup of women, alcohol use had negative consequences. Approximately 44% indicated that they had sometimes felt they should drink less, 22% reported that at least once they had drunk alcohol with memory loss, 11% reported that friends or family had sometimes complained about their drinking, and 6% reported that at least once they had had a drink first thing in the morning to prevent being sick. Conclusions: Since a minority of women of reproductive age (15%) engage in chronic or binge drinking which, for many, creates personal and social problems, prevention messages should emphasize the consequences of excessive/regular use of alcohol, and providers of health care should screen patients to determine use so that appropriate interventions can be made. Georgia DPH, NCCDPHP, CDC.



# GPFA

May 7-9, 1997



# *Welcome*

to the 68th  
Annual Meeting  
of the  
Georgia Public Health  
Association

**“Public Health: Linking People,  
Pride, and Professionalism”**

May 7-9, 1997  
Jekyll Island, Georgia

takes participants through the steps the hospital took to produce the new program for dual disordered patients. A thorough literature review will be presented representing the most up-to-date programming for this difficult population, and the special problem areas this work entails. Finally, a description of the current program, a profile of the patients, and creative innovations in treatment are presented. In all, it has been a journey for both the hospital and the patients from coercion to self-efficacy.

10:00 Public Health Specialists Need to Educate Public on Foot Care  
*Barbara McCarthy, MHS*

10:15 CDC Director's Physical Activity Challenge  
*Bruce Leonard, MPH, CHES and Sharon Hammond*

## Disability Evaluation under Social Security

Beachside Hall - Room 13

**Presenter:** *Bruce Johnston*, Professional Relations Manager, Disability Adjudication Section

## Current Public Health Research

Beachside Ballroom - Room 12

**Presenter:** *Bruce Leonard, MPH, CHES*

The purpose of this workshop is for presenters to share their research or program data.

8:30 Evaluation of Predictive Value of Transferrin Receptor Levels in the Early Identification of Iron Deficiency in Infants  
*Rebecca Black, MS*

8:45 Redefining Criteria for Success When Evaluating Long-term Compliance in Interventions Involving Weight Loss, Diet, and Exercise  
*Rita DiGiacchio, PhD, MPH, CHES*

9:00 Retail Stores Provide a Successful Avenue for Public Health Education  
*Dawn Lewis, Karyn Jones*

9:15 Syringe Disposal Behaviors of Injection Drug Users  
*Kristen Springer, MPH, Claire Sterk, PhD, Stephen Jones, MD, Kathy Miner, PhD, MPH, CHES, Jennifer Taussig, MPH, CHES*

9:30 6th Grade Hepatitis B Project  
*Sandy Blair, RN*

9:45 Characteristics of Young Women in Georgia Who Are Chronic or Binge Drinkers  
*Mary Mathis, PhD, MPH, Roger Rochat, Florina Serbanescu, Carol Hadley*

Social Security administers two disability programs: Title II (regular Social Security Disability Insurance program) and Title XVI (Supplemental Security Income Disability program). According to the Congressional Research Service (1/1/96) these two programs constitute the fourth largest category of entitlement spending with an estimated 10 million recipients in 1995. These recipients range in age from birth to 65 years plus. Disability Adjudication Services (DAS), is the arm of Georgia State Government which is funded by SSA to make the medical eligibility decision on disability claims. DAS would like the opportunity to address interested GPHA conferees about disability program requirements and the role various health professionals play in the disability adjudication process. Many GPHA members already receive written request from DAS about their patients/clients. They might like to know more about the eligibility criteria as well as the decision making process. This knowledge could help them in dealing with their clients and could also be valuable for them personally should they ever find themselves unable to work due to a disability.