WEIGHT CONCERNS AND BODY IMAGE AS RELATED TO COMPENSATORY BEHAVIOR AMONG RURAL PREGNANT SMOKERS.

Kristen Carlosh, Suzanne Allen, M.A., William T. Dalton III, Ph.D., & Beth Bailey Ph. D.

McNair Research Project
East Tennessee State University
Abstract

Weight concerns have been identified as a contributing and maintaining factor in smoking behavior. Additionally, smoking has been identified as a weight-related compensatory behavior; therefore, weight concerns among women who smoke may be predictive of other compensatory behaviors. Our objective was to examine the relationship between weight concerns/body image and compensatory behaviors among rural women who smoke during pregnancy. We hypothesized that greater weight concern/body image dissatisfaction at 1st trimester would predict the following at 3rd trimester 1) greater compensatory behaviors, and 2) less pregnancy weight gain. As part of the Tennessee Intervention for Pregnant Smokers (TIPS), forty pregnant smokers were recruited at a first trimester prenatal health care visit and assessed throughout pregnancy. Participants completed a battery of measures including the Weight Concern Scale (WCS), Body Image Concern Inventory (BICI), and Eating Attitudes Test-26 (EAT-26), which assesses compensatory behaviors. Weight was assessed using self-report and anthropometric measures gathered at doctors’ visits. WCS and BICI scores were significantly correlated with the EAT-26 scores ($p<.05$). In a multiple regression analysis, demographic variables (i.e., age, income, education), WCS scores, and BICI scores were regressed on EAT-26 scores, yielding a significant effect ($F=6.65$ [5, 16], $p<.01$). However, standardized beta coefficients showed that BICI score ($\beta = .67$, $p < .01$) was the only significant predictor. Thus, greater body image concerns surveyed in 1st trimester predicted more engagement in eating disordered behaviors by 3rd trimester among smoking pregnant women. Targeting body image early in pregnancy could counteract the development of potentially harmful weight control behaviors. This may be especially important in rural populations where smoking is highly prevalent and pregnancy outcomes are poor.
Introduction

- Rural Areas & Pregnancy Smoking
- Weight Concerns & Smoking Behaviors
- Weight Concerns & Compensatory Behaviors
- Weight Concerns & Compensatory Behaviors during Pregnancy
Objective

- To examine the relationship between weight/body image concerns and compensatory behaviors/weight gain
- Greater weight/body image concern at 1st trimester was predicted to yield
  1) greater engagement in compensatory behaviors at 3rd trimester and,
  2) less weight gain from pre-pregnancy weight to 3rd trimester weight.
Participants – 40 pregnant smokers
Measures – WCS, BICI, EAT-26, and BMI
Procedure – Recruited at primary care, process of interviews, surveys and chart reviews
Results

- Weight concern $r(34) = .40, p<.05$ and body image $r(34)= .67, p<.01$ were significantly associated with engagement in compensatory behaviors.

- In a regression that modeled the predictive value of several measures on compensatory behaviors, Body Image Concern Inventory showed the greatest influence ($\beta = .94, p < .01$).
First hypothesis was supported through regression
Second hypothesis was not supported through the regression analyses
However a final t-test revealed significantly less weight concerns among those with greater BMI change
Stress correlated significantly with weight concerns, which correlated with body image and compensatory behaviors
Screening for these symptoms, especially during pregnancy is vitally important to the health and well-being of the unborn child (Macali, et al, 2007; Astrachan-Fletcher, E., 2008).

This is especially true when the mother is already engaged in a detrimental behavior, such as smoking (Bailey, 2006).
Discussion (cont.)

- Limitations
  - Self-report BMI
  - Sample size
- Future Study
  - Coping skills
  - Affects of specific stressors
  - Different weight concern measure
Questions
References


