



Moving Forward: A Weight Loss Intervention of African-American Breast Cancer Survivors

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Breast Cancer and AA Women

- African-American women exhibit higher breast cancer mortality rates than white women.
- African-American breast cancer survivors are more likely than white women to die from comorbid conditions.
- Poor diet, lack of regular physical activity and obesity contribute to breast cancer progression, as well as the development and exacerbation of comorbid conditions.



Obesity and Breast Cancer

- Obesity is associated with increased risk for BC progression and death, as well as all-cause and CVD mortality.
- Three possible mechanisms:
 - Produces higher concentrations of estrogen and testosterone
 - Contributes to Insulin resistance leading to increased levels of insulin-like growth factors (IGF-1) and insulin-like growth factor-binding protein (IGFBP-3)
 - Contributes to chronic inflammation



Diet, Physical Activity and Breast Cancer

- Diet and physical activity contribute to weight status.
- Inconsistent results from studies on diet and breast cancer.
- Consistent data from studies on PA and BC – decreased risk of mortality.
 - PA lowers body fat, thus impacting sex hormones, insulin resistance and inflammation



Weight Loss, Breast Cancer and AA Women

- 78.2% of AA women are overweight or obese
- Most women gain weight as a result of their treatment for breast cancer
- Randomized weight loss interventions have reported a number of positive outcomes (improved body composition and lipids, decreases in sex hormones, positive behavioral changes)
- All studies included samples that were predominantly white.



Moving Forward Focus Group Study

- Based on a series of focus groups and feedback from AA BC survivors
- Motivation to Make Lifestyle Changes
 - Improve overall health (87.5%)
 - To feel better (87.5%)
 - To keep cancer from coming back (75%)
 - Other health problems like hypertension or diabetes (62.5%)
 - To lose weight (37.5%)



What Do African-American Women Want in Weight Loss Programs?

- Offer holistic and practical information.
- Address barriers:
 - family and social obligations,
 - lack of social support,
 - financial limitations,
 - pain,
 - failure to maintain weight loss, and
 - access to physical activity and healthy eating resources.
- Honor the importance of taste and role of food within the African-American culture.
- Incorporate spirituality and other sources of inspiration and motivation.
- Invite family and friends to participate as guests.



Moving Forward Pilot Intervention Study

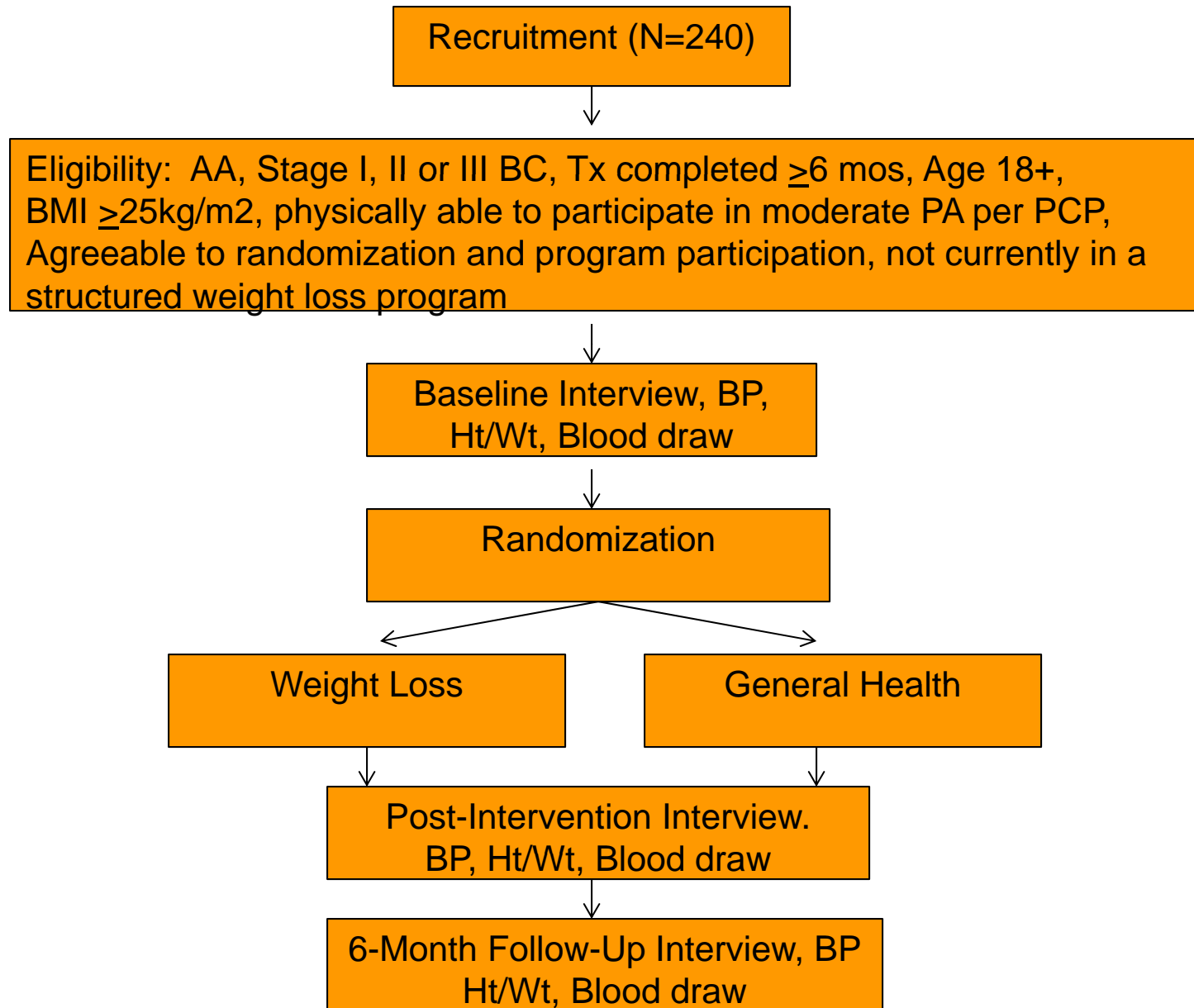
- Pre-post study design
- 24 African-American breast cancer survivors
- 6-month intervention (with 12 months maintenance)
 - 2x weekly classes with exercise
 - Cognitive behavioral strategies (self-monitoring, stimulus control) and hands on learning activities (grocery shopping; weighing out portions)



Moving Forward Pilot Intervention Study

- Pilot study results
 - 87% retention at 6 months
 - 5.57 lbs weight loss
 - significant reductions in dietary fat
 - significant increases in vegetable intake
 - significant increase in vigorous activity
 - a trend observed for moderate activity
 - significant increase in social support

Moving Forward Study Design





Theoretical Framework

- Intervention based on Social Cognitive Theory and Health Belief model
- Grounded within a socio-ecological framework
- Outcomes are mediated by individual, interpersonal and community-level factors: self-efficacy, social support, perceived access to health food and exercise resources



Community-Based Intervention

- Partnership with Chicago Park District
- Recruitment and program to be conducted in 5-6 neighborhoods
 - Austin, Englewood, Roseland, Grand Crossing, South Chicago, N. Lawndale
 - 40-60 women from each community area
 - Recruitment strategies:
 - Postings at community venues (grocery stores, libraries, churches, clinics), door hangers
 - Presentations at BC support groups, churches, etc.
 - Consult with advisory committee on strategies and materials



Measures

- Demographics
- Medical Data
 - Breast cancer data (self-report and from oncologist)
 - Co-morbid conditions (modified cumulative illness rating scale)
- Outcomes:
 - Height/Weight, BMI, waist/hip circumference
 - Diet (Block brief FFQ, subset 24 hr recalls?)
 - Physical activity (Modified activity questionnaire?, subset accelerometer? Pedometers?)



Measures, contd.

■ Outcomes, contd.

- Biological markers:
 - Co-Morbid Conditions
 - Blood pressure (automatic cuffs?)
 - Lipds
 - Hemoglobin A1C
 - Breast Cancer
 - Sex hormones – estradiol, estrone, sex hormone binding globulin, testosterone
 - Insulin resistance – IGF-1, IGBP-3, leptin, C-peptide, + adiponectin?)
 - Inflammation – C-Reactive protein
- Psychosocial
 - Quality of Life – SF36, Fact-ES
 - Fatigue – FACT-F
 - Depression? PHQ-9
 - Body Image? See body image and relationships scale



Measures, contd.

■ Mediators

- Self-efficacy – TBD
- Social Support – TBD
- Perceived access to healthy eating and exercise resources (from Active Where study by Sallis and colleagues)



Treatment Intervention

■ 6 months twice weekly

- Meeting 1 - 120 minutes information + exercise (w/ HR monitor)
- Meeting 2 – 60 minutes exercise only (w/HR monitor)
- Text messaging (details to be worked out) – 3 messages per week (2 personal, 1 resource oriented) to be contd until 6 month follow-up

■ 20-30 women per group (all receive a free 12-month membership)

■ Goals

- Lose 7% body weight, decrease daily caloric intake (-500 kcals), decrease dietary fat (20% of daily calories), increase F & V (7 per week) increase weekly PA (180 mins per week)



Control Intervention

- Held at CPD on different night
- 6 months, weekly (60 minutes)
- General health topics (lymphedema, BC risk, BC screening, meditation, stress management, stretching, etc. – ideas welcome!)
- All receive a 12-month free membership and program binder at the conclusion of the study
- ? 1-3 Weight loss sessions



Issues to Resolve

- Community areas
 - CPD sites
- Interview location and process
 - At individual homes, group health fairs at CPD or other community site, UIC
 - Blood, blood, blood!
- Intervention
 - Personnel (Angela and Melinda for cohort 1) and responsibilities; training CPD staff
 - Text messaging – exactly what are we going to do

Grocery Store Outing



Survivor Walk Before Baseball Game



Holiday Dinner





THANK YOU!