Weight Gain in African American Breast Cancer Survivors

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Breast Cancer Facts and Figures in African Americans

- Breast cancer is the most common form of cancer in African American women.

- Despite lower incidence, mortality from breast cancer is substantially higher in African American women compared to Caucasian women.

- Limited information is available on survivorship issues among African American breast cancer survivors.
Weight Gain in Breast Cancer Survivors

• About 56% to 75% of breast cancer survivors gain following diagnosis and treatment.

• Weight gain during treatment has been associated with an increased risk for cancer recurrence.

• Weight gain may also increase risk for developing other diseases such as diabetes, hypertension, and heart disease.
Racial Differences in Weight Gain in Breast Cancer Survivors

Mean Weight Gain

- African American: 13
- Caucasian: 6
- Asian American: 1

Rock et al., J Am Diet Assoc. 1999;10:1212
Objectives

• To Evaluate the psychological impact of post-treatment weight change in African American breast cancer survivors

• To evaluate the behavioral impact of post-treatment weight change
Study Design and Sample

• Mixed methods study using qualitative and quantitative methods
  – Phase I: Focus groups
  – Phase II: Cross-sectional survey

• African American breast cancer survivors
  ages 21 and older

• Diagnosed with stage I, II, III disease

• Completed primary treatment

• Short and long-term survivors
Conceptual Framework
Transactional Model of Stress and Coping

Stressor
Weight Change

Primary Appraisal
Level of Stress about Weight Change

Secondary Appraisal
Self-Efficacy to Cope with Weight Change

Sociocultural Factors*

Coping Efforts
Weight Management Strategies

Psychological Reactions
Depressive Symptoms, Distress about Weight Change

*Religious coping style, temporal orientation, communalism
## Phase I: Focus Groups (n=34)

### Topics about Weight Gain

<table>
<thead>
<tr>
<th>Pre-Diagnosis</th>
<th>Treatment</th>
<th>Post-Treatment</th>
</tr>
</thead>
</table>
| • Weight gain history  
  • Body image perceptions  
  • Level of concern about weight during adulthood  
  • Weight management efforts  | • Experiences with weight change during treatment  
  • Knowledge about impact of treatment on weight change  
  • Concerns about weight changes relative to survival  
  • Weight management efforts  | • Estimated weight change since treatment completed  
  • Concerns about weight gain relative to other side effects  
  • Attributions about changes in weight  
  • Weight management efforts  |
## Sample Characteristics (n=34)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital status</td>
<td>Not married</td>
<td>22 (65%)</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>12 (35%)</td>
</tr>
<tr>
<td>Education level</td>
<td>≤ High school</td>
<td>18 (53%)</td>
</tr>
<tr>
<td></td>
<td>≥ Some college</td>
<td>16 (47%)</td>
</tr>
<tr>
<td>Employment status</td>
<td>Employed</td>
<td>19 (56%)</td>
</tr>
<tr>
<td></td>
<td>Not employed</td>
<td>15 (44%)</td>
</tr>
<tr>
<td>Income level</td>
<td>≤ $35,000</td>
<td>21 (62%)</td>
</tr>
<tr>
<td></td>
<td>&gt; $35,000</td>
<td>13 (38%)</td>
</tr>
</tbody>
</table>
Clinical Characteristics

- Mean (SD) age at diagnosis was 52.5 (8.5)

- 62% of women had a lumpectomy and 44% of women had a mastectomy*
  - 67% of women received chemotherapy
  - 74% of women received radiation
  - 56% of women received Tamoxifen

- Most (74%) women were short-term survivors

*Total exceeds 100% because some women had both types of surgery.
Stressors

• Experiences with weight change
  – 47% of women gained weight
  – 21% stayed the same weight
  – 32% lost weight

• Among those who gained weight, average amount gained was 16 pounds
Primary Appraisal
Level of Stress about Weight Change

• Many women did not feel the same in their bodies as before being diagnosed

• Women were unhappy with their weight
  – Those who gained weight felt uncomfortable; gaining weight was upsetting. “I gained 35 pounds in four months”
  – Those who lost weight said the loss made them feel sick and gaunt, which would lead to death. “…you always think of cancer as losin’ weight and dying”

• Fear about the implications of weight change was common
## Attributions about Weight Change

<table>
<thead>
<tr>
<th>Weight Gain</th>
<th>Weight Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Treatment</td>
<td>• Lack of appetite</td>
</tr>
<tr>
<td>• Eating more food (during and after treatment)</td>
<td>• Nausea</td>
</tr>
<tr>
<td>• Eating more food to cope with stress about diagnosis and treatment</td>
<td>• No taste because of chemotherapy</td>
</tr>
<tr>
<td>• Increased intake of sweets and high fat food</td>
<td></td>
</tr>
<tr>
<td>• Being at home more</td>
<td></td>
</tr>
</tbody>
</table>
Coping Efforts
Strategies to Cope with Weight Change

- Exercising more, especially walking
- Changing diet; planning meals each week
- Wearing layers of clothes to accommodate weight loss
- Buying bigger clothes to accommodate weight gain
Collaborators

• Janet Audrain-McGovern, Ph.D.
• Frances K. Barg, Ph.D.
• Aliya Collier, B.A.
• Angela DeMichele, M.D.
• Shiriki Kumanyika, Ph.D.
• Benita Weathers, MPH