Low-Income African American Women's Perceptions of Primary Care Physician Weight Loss Counseling: A Positive Deviance Study

Elaine Banerjee MD, MPH
Lehigh Valley Health Network, Elaine_S.Banerjee@lvhn.org

Sharon J. Herring MD, MPH

Katherine Puskarz MPH

Neil Shah MPH

Kyle Yebernetsky MD

See next page for additional authors

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Authors
Elaine Banerjee MD, MPH; Sharon J. Herring MD, MPH; Katherine Puskarz MPH; Neil Shah MPH; Kyle Yebernetsky MD; Katelyn E. Hurley MPH; and Marianna LaNoue PhD

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Elaine Seaton Banerjee, MD, MPH[1]; Sharon Herring, MD, MPH[2]; Katherine Puskarz, MPH[3]; Neil Shah, MPH[4]; Kyle Yebernetsky[3]; Katelyn Hurley, MPH[5] Marianna LaNoue, PhD[3]

[1]Lehigh Valley Health Network, Department of Family Medicine, Allentown, Pennsylvania; [2]Temple University, Center for Obesity Research and Education, Philadelphia, Pennsylvania; [3]Thomas Jefferson University, Department of Family and Community Medicine, Philadelphia, Pennsylvania; [4]University of Virginia, School of Medicine, Charlottesville, Virginia; [5]ACT.md, Boston, Massachusetts

BACKGROUND

Context: Low-Income, African American women are disproportionately impacted by obesity.[1,2] However, some members of this high risk population are still able to successfully lose a significant amount of weight. Prior studies evaluated weight-related interactions of African-Americans with their PCPs and identified patient preferences regarding physician counseling.[3-5] However, it is not known if these preferences result in improvements in weight loss success. The National Weight Control Registry studied Americans who had lost a significant amount of weight, but included very few African Americans or low income participants.[6]

Objective: To qualitatively and quantitatively evaluate the interactions between low-income, African American women who successfully lost weight and the healthcare system.

METHODS

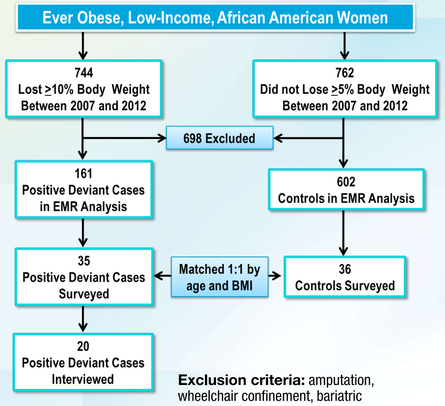
Design:
Mixed methods study following a positive deviance approach.

Setting:
Urban, academic, family-practice office

Participants:
Low-income, African American, 18-64 y.o. women who were at one time obese. - Positive deviants lost at least 10% of their maximum weight and maintained this loss for at least 6 months. - Controls had not lost more than 5% of their maximum body weight.

Instrument:
EMR records and surveys with positive deviants and controls. Interviews with positive deviants.

Outcomes:
EMR documentation of physician counseling; EMR documentation of a weight-related medical problem; EMR documentation of obesity on the problem list; participant-report of physician counseling; participant report of a weight-related medical problem.



Exclusion criteria: amputation, wheelchair confinement, bariatric surgery, taking antipsychotic medication, unintentional weight loss, intellectual disability, inability to give consent in English, or severe illness, pregnancy or within 3 months postpartum during weight loss.

Quantitative Results

Table 1. EMR Demographics

	Control (N=602) N(%)/Mean (SD)	Case (N=161) N(%)/Mean (SD)	P
Sex			N/A
Female	602 (100%)	161 (100%)	
Age	37.3 (11.8)	40.1 (11.6)	0.006
EMR Documented Race			N/A
African American	602 (100%)	161 (100%)	
Max Documented Weight	217.1 (48.7)	219.0 (43.9)	0.647
Max Documented BMI	37.2	36.4	0.600
Average Weight Lost	41.9 lbs (18% max weight)	N/A	
Average Weight Maintained	33.9 lbs (15% max weight)	N/A	

EMR documentation of dietary counseling and a weight-related medical problem were significant predictors of positive deviant group membership. Documentation of obesity on the problem list was predictive of control group membership.

Table 3. Predictive Analysis for Positive Deviant Case Group Membership on Basis of EMR Data

Predictor	Odds Ratio	r^2	x^2	P
Documentation of dietary counseling	2.378	0.031	16.916	<0.001
Documentation of Weight-related Diagnosis	1.874	0.025	12.514	<0.001
Documentation of Obesity on Problem List	0.648	0.012	5.661	0.018

Table 2. Survey Demographics

	Control (N=36) N(%)/Mean (SD)	Case (N=35) N(%)/Mean (SD)	P
Marital Status			0.100
Single, Divorced, Widowed	29 (85%)	24 (69%)	
Married or Living w Partner	5 (15%)	11 (31%)	
Education			0.027
Did not complete High School	3 (8%)	12 (34%)	
High School Graduate or GED	17 (46%)	11 (31%)	
Some college or Beyond	16 (44%)	12 (34%)	
Employment			0.006
Currently Employed	24 (67%)	12 (34%)	
Not Currently Employed	12 (33%)	23 (66%)	
% Federal Poverty Level	122% (123%)	110% (92%)	0.706

Participant-reported physician counseling or a weight-related medical problem were not predictive of positive deviant group membership.

Table 4. Predictive Analysis for Positive Deviant Case Group Membership on Basis of Survey Data

Predictor	Odds Ratio	r^2	x^2	P
Participant-reported Weight-related Diagnosis	0.667	0.013	0.717	0.398
Participant-reported Discussion of Weight	0.909	0.001	0.034	0.855

Qualitative Results

Theme 1: Framing the problem of obesity in the context of other health problems provided motivation.
"When I walked out of his office, I said, 'You know what? I'm just gonna do this because he sayin' my blood pressure was really out of control, and the medication that they had me on was really too much.'"

Theme 2: Having a full discussion around weight management was important.
"Well they broke it down to the point where they broke it down to the grams, to the you know, to the portion sizes, to what could clog your arteries all this stuff…"

Participants who received advice without information expressed frustration and abandonment.
"They could have geared me to the information. Instead of just telling me the problem, and sending me on my way. 'Cause they told me, 'You got an atomic bomb here. Now you go figure it out.'"

Theme 3: An ongoing conversation and relationship was helpful.
"Well they broke it down to the point where they broke it down to the grams, to the you know, to the portion sizes, to what could clog your arteries all this stuff…

Subtheme 3A: Celebrating small successes was helpful in ongoing motivation.
"It's more encouraging when you have a doctor tellin' you you're doing good, keep up the good work."

Theme 4: Advice is helpful but self-motivation was required in order to make a change.
"You know, I had to really want to do it for myself… And, and, in order to stick to it as well."

DISCUSSION

Our results are similar to prior studies of African American patient preferences for weight-loss counseling.[3-5] Our findings suggest this guidance is not only what this patient population wants but may also be a part of successful weight loss.

The positive deviance methodology seeks to identify a homogenous population. This approach leads to solutions that are accessible and culturally acceptable to this population. However, this methodology also resulted in a small sample size for the survey.

The results are likely generalizable to low-income, African American women in other urban areas, but may not be generalizable to other populations. As low-income, African American women are at such high risk for obesity, population specific findings are still valuable.

CONCLUSIONS

Physician counseling for obesity should include more specific guidance or referrals.

Physicians should help patients draw connections between obesity and the resulting weight-related medical conditions.

References:

1. Ogden, CL, Carroll, MD, Kit, BK, & Flegal, KM (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. *JAMA*, 311 (8), 806-814.
2. Ogden, CL, Lamb, MM, Carroll, MD, &Flegal, KM (2010). Obesity and socioeconomic status in adults: United States, 2005-2008. National Center for Health Statistics Data Brief, *Centers for Disease Control and Prevention*, 50.
3. Blixen, CE, Singh, A, Xu, M, Thacker, H, & Mascha, E (2006). What women want: understanding obesity and preferences for primary care weight reduction interventions among African-American and Caucasian women. *J Natl Med Assoc*, 98(7), 1160-70.
4. Chugh, M, Friedman, AS, Clemnow, LP, & Ferrante, JM (2012) Women weigh in: obese African American and white women's perspectives on physicians' roles in weight management. *JABFM*, 26(4)421-428.
5. Ward, SH, Gray, AM, & Paranjape, A (2009). African Americans' Perceptions of Physician Attempts to Address Obesity in the Primary Care Setting. *Journal of General Internal Medicine*, 24(5), 579-584.
6. Klem, ML, Wing, RR, McGuire, MT, Seagle, HM, & Hill, JO (1997). A descriptive study of individuals successful at long-term maintenance of substantial weight loss. *The American Journal of Clinical Nutrition*, 66, 239-46.

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Contact: Elaine_S.Banerjee@LVHN.org