

Successful weight loss: A positive deviance study of low-income African American women

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

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Successful weight loss: A positive deviance study of low-income African American women

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Elaine Seaton Banerjee

MD, MPH

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Conflict of interest

- My husband works for a pharmaceutical packaging company.
 - No pharmaceutical products will be discussed during this presentation.



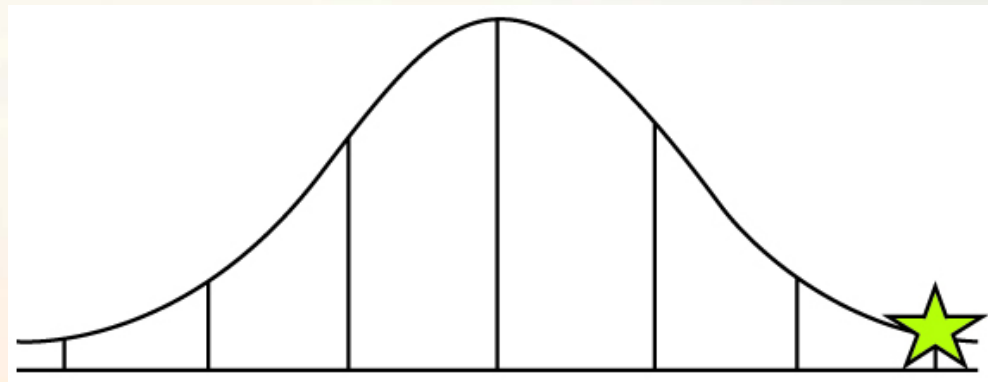
Background: Population

- High risk of obesity:
 - African Americans
 - Women
 - Low-Income



Background: Positive Deviance

- Positive deviants deviate from the norm in a good way



- NWCR is one example of this type of approach in weight loss

Marsh , Schroder, Dearden, Sternin, & Sternin, 2004; Klem, Wing, McGuire, Seagle, & Hill, 1997

Image: Deloitte University Press. (2013). Positive Deviance [Image]. Retrieved from <https://dupress.deloitte.com/dup-us-en/topics/talent/what-darwin-can-teach-government-harnessing-positive-deviants-to-help-solve-vexing-problems-within-your-organization.html>.



Objective

- To evaluate the experiences low-income African American women who successfully lost weight, following a positive deviance approach, to qualitatively explore consistent themes that may promote weight loss



Setting & Participants

- Setting: Urban, academic, family practice office
- Participants: 71 Low-income, AAW, 18-64 years old, ever had obesity
 - 35 Positive deviants intentionally lost $>10\%$ of their max weight & maintained for >6 months
 - 20 Positive deviants participated in interviews



Qualitative outcomes: Interview questions

- When you successfully lost weight, what motivated you to make the effort?
- What do you think made your weight loss effort successful?
- What were the biggest barriers to weight loss for you?
- How did you overcome these barriers?
- Is there anything else you want to share with us?



Results: Positive Deviants

- Average Age 45 years
- Average weight loss 41.9 lbs
(18% max weight)
- Average weight maintained 33.9 lbs
(15% max weight)
- Average household income \$24,848/year
122% of the poverty level

Results: Qualitative

Major themes

- Epiphany
- Opportunity
- Flexibility & Creativity



Results: Qualitative

Theme 1: Epiphany

- “Do it for me”
- Health
- Appearance
- Quality of Life
- Family



Results: Qualitative

Theme 1: Epiphany – “Do it for me”

“But I said you know what I have to do what I can do for me, I can’t live for other people anymore.”

“I had to lose the weight, *for me*, couldn’t do it for nobody else, I had to do it for me.”



Results: Qualitative

Theme 1: Epiphany – Health

“It was finding out that I had the diabetes... I was like you gotta be kidding, but when she gave me the kit and everything, then I knew it was the truth.”



Results: Qualitative

Theme 1: Epiphany – Appearance

“Yeah, I took a look at myself, I really did look. I told you I walked by that window, and I went, ‘Oh my God, look at you girl, you big.’”



Results: Qualitative

Theme 1: Epiphany – Quality of Life

“I like being able to tie my shoes, I like being able to run up and down a couple of steps.”

“My legs, my legs used to rub when I used to walk. I didn’t like that.”



Results: Qualitative

Theme 1: Epiphany – Family

“And I can’t tell [my children] to eat healthy and then I’m not doing it. So I just wanted to do it, just try to, try to eat healthier.”



Results: Qualitative

Theme 2: Opportunity

- Support
- Time



Results: Qualitative

Theme 2: Opportunity - support

'Cause I got a 14-year-old ... he'll watch [my younger children] while they playing ... He told me to keep walking, so that's what I kept doing...

Yeah, he just kept pushing me, and pushing me to do it, so, I, I didn't think I was gonna keep going. So he kept, 'Come on, mom.'"



Results: Qualitative

Theme 2: Opportunity – time

“My husband died... And, having time on my hands, what was I gonna do? Stay home, and get fat!? So I went out, to the Y... Well having a husband meant that I did dinner every day. I did breakfast every day. I did that time for him...and I left me out. So now, it's all about me.”

Results: Qualitative

Theme 3: Flexibility & Creativity

- Self-learning
- Tricks



Results: Qualitative

Theme 3: Flexibility – self-learning

“And I saw like ideas step-by-step and then I see which worked, and I get used to it, and then I move on to something else...”



Results: Qualitative

Theme 3: Creativity – tricks

“This is my sugar water. I call it, I tell everybody there sugar in it, but it’s not, it’s just water.”

“I would kind of like treat myself as I was a diabetic, but I wasn’t.”

“If something has more than 10 ingredients it goes back on the shelf, back in the freezer, it doesn’t even make it to the cart.”

Discussion: Strengths

- Positive deviance approach
 - Solutions are accessible to population



Discussion: Limitations

- Positive deviance approach
 - Limited generalizability

Discussion: Future directions

- Qualitative evaluation with controls
- Developing and quantitatively testing hypotheses
- Developing interventions

Discussion: Conclusion

Positive deviants exist and are beating the odds

They have valuable lessons to teach us about weight loss

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Thank you

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- The study team: Marianna LaNoue, PhD; Sharon Herring, MD, MPH; Katelyn Hurley, MPH; Katherine Puskarz, MPH; Kyle Yebernetsky, MD; & Neil Shah
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Questions?

Contact Information:

Elaine Banerjee

Physician Researcher

Elaine_S.Banerjee@lvhn.org

Results: survey Demographics

	Case (N=35) N (%) or Mean (SD)	Control (N=36) N (%) or Mean (SD)	<i>p</i>
Sex - Female	35 (100%)	36 (100%)	N/A
Age	44.9 (10.4)	43.0 (11.6)	0.475
Race – African American	35 (100%)	34 (94%)	0.314
Ethnicity – Non-Hispanic	35 (100%)	36 (100%)	N/A
Maximum Weight	219.0 (43.9)	217.1 (48.7)	0.647
Marital Status – Married or Living with Partner	11 (31%)	5 (15%)	0.100
Education – Did not complete High School	12 (34%)	3 (8%)	0.007
Employment – Currently Employed	12 (34%)	24 (67%)	0.006
Housing Type – Own Home	7 (20%)	7 (19%)	0.953
Length of Time at Current Residence (y)	8.8 (8.4)	9.2 (11.1)	0.872
Number of People	3.3 (1.5)	4.2 (2.9)	0.113
Household Income	\$24,848 (\$27,406)	\$26,613 (\$28,394)	0.824
% Federal Poverty Level	122% (123%)	110% (92%)	0.706



Results: survey Outcomes

	Case (N=35) N (%)	Control (N=36) N (%)	<i>p</i>
Always get support	14 (40%)	9 (25%)	0.203
Food Insecure	15 (43%)	15 (42%)	0.341
All Meals prepared at home	21 (60%)	13 (36%)	0.044
Are you the person who prepares most meals	28 (80%)	35 (97%)	0.069
Adequate nutritional Literacy	33 (94%)	35 (97%)	0.539
Currently making any diet changes	30 (86%)	22 (61%)	0.019



Discussion:

Comparison with NWCR

- Many more of our participants “just decided to do it”
- Similarly the most common trigger was a medical trigger
- Opportunity via support and time were not factors in the NWCR sample or were not addressed
- Our participants were much less likely to use a formal program and displayed greater creativity and flexibility