



## Intersectionality of Obesity, Cancer, and Health Disparities in Population-Based Research

### Webinar

March 25, 2021, 3:00-4:30 p.m. (Eastern Time)

### Webinar Questions and Answers

#### Moderator:

**Amelie G. Ramirez, Dr.P.H., M.P.H.**

*University of Texas Health Science Center at San Antonio*

#### Panelists:

**Tiffany L. Carson, Ph.D., M.P.H.**

*Moffitt Cancer Center*

**Gary Bennett, Ph.D.**

*Duke University*

**Andrea Richardson, Ph.D., M.P.H.**

*RAND Corporation*

- 1. This question is about study targets. Do you think we should get away from weight loss and state fat loss? The benefit of weight loss is the loss in fat, not any losses in lean or muscle (which is common for some interventions.)**

**Tiffany Carson, Ph.D., M.P.H.:** So, I think it's a reasonable question, but that's also something that I alluded to in the presentation, in that I think we need to think about multiple anthropometric measures as they relate to both obesity and cancer risk. A lot of the epidemiologic data that we have is literally based on weight or on BMI because that's sort of what we can do in population-based studies. And we at least see some evidence there that there are important outcomes and risks that are associated with weight and BMI. Obviously, body composition is important, and when we can have measures of body composition in our studies, I certainly think that there's added value. When we can target other body composition measures, there's added value as well, but I think that goes to my point that there are more areas to investigate including BMI versus weight change versus central adiposity, waist circumference, and associated risks with those different measures.

**2. Are you aware of any data on long-term changes in physical activity among cancer patients, and whether these changes are different by race?**

**Tiffany Carson, Ph.D., M.P.H.:** I'm most familiar with a couple of cohorts among breast cancer survivors and physical activity among those populations, and in general what they have all sort of consistently reported is that the vast majority of survivors overall are not meeting the minimal recommended guidelines for physical activity for breast cancer survivors. Most of the time, it's around one-third overall. For the studies that have looked at this by race-ethnicity, typically we see that Black women are even less likely than White women among those to achieve those minimum guidelines. Again, generally most are not meeting the guidelines overall and then there is some variation within race, as well.

**3. Is there a policy that asks schools to provide a minimum nutritional standard, or is it feasible to ask schools if there's a minimum nutrition standard to offer?**

**Andrea Richardson, Ph.D.:** Yes. In fact, based on recent research, most schools are able to meet the new nutritional standards. They've been out for a while. There was a lot of feedback from schools when they were first introduced or even proposed. Many of the concerns people raised about the act was that there would be increased plate waste and reduced lunch/meal participation, and those things haven't come to pass. So, a lot of the concerns have not materialized. As I mentioned, schools do have a tremendous number of balls in the air as they implement these nutritional standards and how they purchase and offer meals. So, across the country, there's a ton of variation, and there's also a ton of variation in terms of funding. That plays a huge role, too.

**4. Have you done (or do you know of anyone who has) any qualitative work to learn about how CEP (Community Eligibility Provision) is implemented (or if there are regional variations in how it is implemented)?**

**Andrea Richardson, Ph.D.:** Yes. As I mentioned, CEP adoption is quite variable across the United States, although it has increased steadily since it was rolled out. The reasons why some schools participate and some don't have to do with reimbursement. There's a certain range of the proportion of students who are characterized as low income: 40% to 62.5%. Those schools will not be reimbursed completely for the meals they are offering. So there are concerns about reimbursement. There are also concerns about losing other programming, such as Title I. The Food Research and Action Center has been doing a lot of work to understand barriers to CEP implementation and working with schools and school nutrition associations to understand the reasons and how it is being implemented in different locations.

**5. Could you please give some insights as to how to motivate people to stay engaged with their digital applications, as well as getting more people interested in weight loss?**

**Gary Bennett, Ph.D.:** If I had a great answer for that question, I promise you I'd probably be sitting on a beach somewhere right now. I think that, from an engagement perspective, we find that it's really about the feedback. One of the things that I didn't mention is that we spent a lot of time thinking about how to deliver personalized feedback that will motivate the patients to track the next time. We use a one-to-one ratio between any kind of tracking and the provision of feedback. The other way to say that is every time we get data from a patient, we provide her some type of feedback, and we think about constructing that feedback in ways that will be motivationally enhancing. So, we may give them some interpretation of their kind of weight changes to date or their behavioral changes to date, and we deliver a kind of supportive message. We think about how to reinforce the kinds of positive changes and again to provide some support for areas in which they've been having some difficulty. And this is really the place where I think humans do the best job. It's where the accountability hit that comes from a really qualified clinician who's informed by good data can provide – it can be very, very helpful in the context of ongoing care. My experience hasn't been as helpful in how to motivate interest in weight loss in general for patients who are unmotivated. However, on the back end of most of our weight gain prevention trials, we do find that many patients are interested in going on and continuing that work. They have some small changes that they have found motivating in and of themselves, and we're really interested in that effect and trying to figure out how to optimize on that.

**6. Did you do any type of digital literacy assessment when developing your digital intervention? How did you handle challenges associated with low technology literacy among participants? Also, in which format was it shared – app or website?**

**Gary Bennett, Ph.D.:** I'm glad you asked that question that way because the challenge of low technology literacy is the challenge for the developers, not the patient. You might have seen examples of text messaging in some of the images that I showed. I think the first answer to this question is that you use modalities that don't require heavy use of graphical interfaces. So, we use text messaging, interactive voice response, vocal user agents, things of that ilk first before we design apps, more smart phone apps, because they're easier for our patients to use. One the things that people sometimes find surprising is that if given a choice of what kind of technology modality to use, the thing that works best in our experience across a wide range of age groups and populations is actually interactive voice response, the kind of automated telephone calls that we love to get from our banks. Those kinds of things work extraordinarily well in sort of digital health applications, as does text messaging. Limiting the kind of interface challenges, focusing on very, very face-valid, very clear answers is vital. So, we work very hard to make it easier for our patients to use, say, text messaging. One of the ways we do that is instead of asking patients to, say, self-

monitor the amount of food that they ate or the precise food that they ate, we ask dichotomous questions. Have you been successful; have you achieved your goal of doing X; or were you able to do Y, so that we can limit the technical challenges and limit the literacy and numeracy challenges that our patients may have. That means that the nerdy, quantitatively inclined scientists that are doing the work are sometimes a little bit less satisfied with the data that we're getting. But I think it works better for our patients, and that for me is a reasonable exchange.

**7. Can the panelists talk more about addressing the upstream factors that are leading to obesity, including structural racism, and how researchers should think about intervening there?**

**Tiffany Carson, Ph.D., M.P.H.:** I think it's a great question, and that we are starting to move and think about things in that way. In some ways, some of the unfortunate events that we've all experienced over the past year I think have opened the conversation for us to think about structural racism and structural inequities as they have perpetuated disparate outcomes in COVID and other things. But that applies in so many other areas of health, including obesity. I think another important thing that is being elevated more, and I think we should consider, is that race is not the risk factor. Race is the social construct that is associated with other variables that are the risk factor, one of which is obviously racism associated with race. So, in thinking about our research that way, these are some things that we should perhaps measure and that will give us more data in terms of where we might intervene. Some of my work personally looks at the role of stress and stress management in Black women; some of that is driven by racism and discrimination and the role that that may play in weight-loss attempts and weight-management efforts as well. So, I think that it's spot on, and it's not only things that we can do at the individual level but also at the system level as well.

**8. What role if any might culture or stigma play in obesity or cancer health disparities experienced by Black women?**

**Tiffany Carson, Ph.D., M.P.H.:** Culture and stigma may play a role in weight-related behaviors and cancer-prevention practices among Black women. As it relates to weight, in general, there is an acceptance or preference for Black women to have larger or curvier bodies than other members of the Black community, which may influence decisions about diet, physical activity, weight management, and body image. There is also still a fair amount of stigma associated with cancer among some Black communities, making some Black women hesitant to share a breast cancer diagnosis with others. This can have implications in terms of having an accurate account of family history, which is an important risk factor to assess, and in just ensuring that the community is accurately educated about prevention, screening, and treatment for cancer. Lastly, the history of Black women in this country has resulted in many cases where Black women feel the need to always exude strength and care

for others while sometimes neglecting themselves. This can create a situation in which decisions that affects one's own health are neglected, leading to increased risk for obesity and/or some cancers.

**9. Is it possible that the differences in diet across the various racial groups might have a lot to do with why certain groups tend to have problems with obesity?**

**Tiffany Carson, Ph.D., M.P.H.:** There are many cultural, historical, social, and emotional drivers for the food choices that people make, and these are probably the most difficult factors to try to overcome because they are related to who people are at their core. I agree that there is not one answer, but we can start by helping individuals to make modifications that are acceptable to them while still recognizing any cultural or other psychological considerations and helping to make modifications sustainable for the long term. I think we must also be thoughtful about the messaging, which may need to be tailored based upon the individual.

**10. How is addressing obesity complicated by the body-positive moment we see in younger generations, along with ongoing efforts to fight fat stigma? How can we address both truths?**

**Andrea Richardson, Ph.D.:** Weight stigma can be deeply detrimental to youth and impair their quality of life. Body positivity should be supported, along with healthy dietary behaviors and physical activity. Health researchers and practitioners are recommending that treating youth with overweight or obesity should include an empathetic approach to address stigmatization of unwanted weight and its social and emotional impact. Shifts in health care and research that reflect this approach include using "people-first" language where the individual is placed first before the disease, such as a "child with obesity." Yet stigma remains a major challenge, and we need concerted efforts across multiple sectors, such as medical training, to eliminate it while supporting healthy children's growth.