Obesity & Cancer Webinar Series

Intersectionality of Obesity, Cancer, and Health Disparities in Clinical Research Webinar
March 18, 2021, 3:00-4:30 p.m. (Eastern Time)

Webinar Questions and Answers

Moderator:

Worta McCaskill-Stevens, M.D., M.S.
National Cancer Institute

Panelists:

Jennifer Ligibel, M.D.
Susan F. Smith Center for Women's Cancer at the Dana-Farber Cancer Institute

Kathryn Schmitz, Ph.D.
Penn State Cancer Institute

Khalid Matin, M.D.
Virginia Commonwealth University's Massey Cancer Center

1. **How did Dr. Ligibel decide on the time from diagnosis for eligibility criteria? Why exclude HER-2-positive patients?**

   Jennifer Ligibel, M.D.: In terms of the enrollment window, we structured this study to be developed in the same way as an adjuvant trial for breast cancer that evaluates the impact of a medication or surgical technique on cancer outcomes. And so, in order to develop our power calculations, we used event rates that would occur in that period of time starting from diagnosis. We needed to enroll patients close enough to diagnosis so that we did not miss early events. We recognize in breast cancer there's a bimodal timing of recurrence events. You have a population of patients who tend to have earlier recurrence, and these are often patients with triple-negative cancers and some of the luminal B, hormone receptor-positive cancers. And then you have a second group of recurrences that tend to occur later, and these are often the luminal A hormone receptor-positive cancers. We wanted to be able to look at both of those groups, which required that we had enrollment tied fairly tightly to the time of diagnosis. Over time, we extended the eligibility window

slightly as we found that modern treatments often extend beyond the 12-month mark, especially in patients with triple-negative breast cancer who often receive neoadjuvant therapy, surgery, radiation, and then often adjuvant capecitabine. And so, over time, we did extend that window a little bit so that we were able to include some of those patients as well. In terms of the second question about HER-2 positive patients, when we designed this trial, there was very little data that looked at the relationship between body mass index and outcomes in the HER-2 positive subset of patients. The studies that did look at this had very inconsistent outcomes. An analysis was just published in the Journal of the National Cancer Institute (JNCI) over the last week or two that suggested more of a consistent relationship between body mass index and outcomes in HER-2 positive patients. But those data were not available when we designed the study. The other factor is that those patients received a more prolonged course of adjuvant therapy, often extending for more than a year. Given that we really wanted to be able to enroll patients within a relatively consistent time frame, we had decided to omit the HER-2 positive patients from this study.

2. **What were the qualifications or educational backgrounds of the health coaches?**

   Jennifer Ligibel, M.D.: We have 15 coaches working on the BWEL (Breast Cancer WEight Loss) study, and they have a variety of backgrounds. The majority are registered dietitians, but we also have a couple of exercise physiologists, a few nurses, and a social worker. All of the individuals had prior coaching experience, and they also went through about a six-month program for training in the protocol as well as training in working with these patients. Most of them had not worked with breast cancer patients prior, and that was the hardest piece, I think. Training on the intervention was relatively straightforward, but training individuals to work with a higher-risk group of breast cancer patients was a little bit more of a challenge. I was very fortunate to work with Linda Delahanty, a dietitian and researcher who had worked on the diabetes prevention program in the Look AHEAD study. Linda has really helped to manage the call center in terms of the training and the certification of the coaches. Throughout this entire intervention period, we've had weekly meetings where we have reviewed calls from all the coaches on a regular basis to look for strengths and weaknesses. Linda has also done both an initial certification of the coaches based on their performance on a number of key calls and a yearly recertification.

3. **How did you decide on a BMI of >27 for inclusion criteria? And as part of your secondary analyses, could you explore rate of weight loss on your outcomes?**

   Jennifer Ligibel, M.D.: That was the topic of a lot of discussion as we were planning this study. Most of the data linking BMI to outcomes has demonstrated a relationship between obesity and poor outcomes. But we also recognize that a lot of patients with breast cancer gain weight in the years after diagnosis. We did not want to omit individuals who had BMIs close to the threshold of obesity who might gain weight over the period of their breast cancer survivorship. So, we ultimately looked at some spline curves for where you started

to see the increase in recurrence and mortality associated with BMI; that was how we chose 27.

One of our secondary outcomes is looking at the relationship between weight loss and overall survival and recurrence. We are planning to look at both the degree of weight loss and the trajectory of weight loss over time. The other thing we're very interested in is weight regain and trying to get a sense of, if you lose weight but you gain it back, is that the same as not losing weight?

4. **A question on the enrollment of Hispanics. You had a central counselor. Were you able to determine whether there were differences in the origins of the Hispanic populations? In other words, disaggregating them from Puerto Rico versus Central America. Were you able to comment on that at all? Were there any complications in terms of the language interpretation or delivery?**

   Jennifer Ligibel, M.D.: That's an excellent question. We do have some information that has not yet been analyzed about the origins of the different groups. Our entire intervention and all materials were available in both English and Spanish. It was a more involved process to gain approval for all of those materials than I had anticipated when we started this study. That led to a delay of almost two years in being able to open the Spanish-language intervention, which I know was detrimental to our ability to enroll patients. We also found different psychosocial stressors and availability for calls. Some of the socioeconomic factors that impacted not just our Latina breast cancer survivors, but we had a lot of individuals whose job and work schedules were more variable, that were working more shift work. So, we had more difficulty at times, even after enrolling patients, in being able to keep them engaged in the intervention. That is something that we're really delving into now. We employed a lot of different strategies while the trial was still enrolling; we developed recruitment materials specifically for different communities, especially in Black and Latina patient populations. And we tried to work specifically with clinics that had a higher proportion of these patients. But I think that sometimes in a study of this scale, it's a little bit more difficult to really be on the ground and develop the types of relationships that you need to be able to enroll as many patients as we would have liked to.

5. **Have you partnered with faith communities? If yes, please share what those partnerships looked like and any outcomes you can report.**

   Kathryn Schmitz, Ph.D.: I have. Women of Faith and Hope is a remarkable organization in the Philadelphia area. We went to them early on when we were doing the PAL (Physical Activity and Lymphedema) trial. I wasn't going in trying to make a formal partnership; I was going in saying, you all are this community: teach me. Help me to know how to interact with folks here. And they really became my mentors in the community. They read letters before we would send them out to the community. They did presentations. We participated in a

number of their activities. So, it became very much a symbiotic relationship. And that just continued the entire time through that, as well as the WISER Survivor trial.

6. **Do you have any hints as to why your rates of obesity in Blacks are higher than Blacks in other parts of the country?**

   Khalid Matin, M.D.: No. I think some of the work Dr. Sheppard and her group have done, part of it has been a lack of awareness and access to education. These factors exist in some of our southern counties where there is not as much formal training, education, or awareness regarding these things. Along with that are some of the unhealthy dietary habits in our region as well. I think it's probably a combination of those things. But we have found that with engagement and education, we are able to improve things.

7. **Does strength training improve lymphedema not associated with cancer treatment/mastectomy? Has your intervention for lymphedema been adopted in non-research clinical settings?**

   Kathryn Schmitz, Ph.D.: There would be no reason for it not to. The only thing I would think would not work there would be when it is the version of primary lymphedema that is a genetic malformation of the lymphatic vessels. In that case, I have absolutely no idea. But lymphedema that would be caused by other traumatic events should respond to strength training the same way as breast cancer.

   I mentioned 700 sites, but it's probably over 800 at this point. Those are just clinical sites. And actually, Strength ABCs has been adopted by Select Medical, the largest for-profit organization in the country that does cancer rehabilitation at their breast cancer rehabilitation protocol. So, it's all over the place now.

8. **Would nudge theory, this flexible and modern concept for understanding how people think, make decisions, and behave toward their money, when buying health foods in a food desert help in the obesity intervention?**

   Kathryn Schmitz, Ph.D.: The evidence base that I'm aware of for trying to change and shift the issue of obesity and increase physical activity, shows that we need multilevel interventions. I think that nudge is one level that’s an interpersonal level of change but changing the interpersonal element without changing the food desert that exists, without changing the environment, without changing community opportunities for being physically active, without changing access and competency and education, I think it's spitting in the wind. I think we need a lot of levels in order to change these very intractable issues.

   Khalid Matin, M.D.: I would second that. Part of it also at some level potentially has to be at a higher legislative level as well. I think there have to be some changes made because

otherwise a lot of companies and shops are going to follow what's economically good for them, but there have to be certain incentives put in place so that some of these communities have access to some of those healthier things. And certainly, education is a huge part, once you have those avenues open to the population, to those communities, it helps them make better choices by educating them on the short-term and the long-term benefits. So, it's not just one particular area. I think it has to be targeted at different levels of society to really have sustainable benefits.

9. **Given the number of health disparities between African/Latin Americans and their White counterparts, what policies/shifts in healthcare (e.g., insurance coverage) do you believe would be most impactful in mitigating these disparities?**

Khalid Matin, M.D.: There are so many, but if I have to pick, I think something centered around access to healthier foods for individuals in those communities would be the one that I would pick out among everything else.

Jennifer Ligibel, M.D.: I also think we need more focus on preventative care and better reimbursement, whether it's the primary care physician or somebody in an oncology clinic. More support for referrals to nutrition. I think that the problem with a lot of this system is that it's just underfunded, and it's not accessible to a lot of the patients that we care for.