

## ABSTRACT

Breast cancer is a disease that causes breast cells to grow out of control which can lead to several additional health issues. Furthermore, breast cancer can manifest in the lobules, ducts, and connective tissue of the breast and the rates of this disease vary by race and ethnicity. However, for African American women, breast cancer is the most common form of cancer. As a result, the goal of this project was to recruit African American women 18 years and older to participate in an informational event to provide health education to participants on ways to increase awareness and lower risk of breast cancer.

## PURPOSE AND BACKGROUND

The aim of this project was to increase awareness and teach preventative behaviors regarding breast cancer, encourage women over 40 to have annual mammograms/breast cancer screenings, and increase overall knowledge about the disease to African American women 18 years or older within the Nashville area and surrounding communities.

Breast cancer is a disease that causes breast cells to grow out of control and this uncontrolled growth can occur in three different areas of the breast: lobules, ducts, and connective tissue. The type of breast cancer a person has is dependent on where the unchecked growth occurs (Center for Disease Control and Prevention, 2018). The most common place where breast cancer occurs is in the ducts that transport milk to the nipple (ductal cancers), but it can also develop in the glands that make the breast milk (lobular cancers). It is less common for breast cancer to develop within the connective tissue (American Cancer Society, 2019). Over time, it is possible for the cancer cells to grow outside of the breast and invade nearby lymph nodes. Once the cancer reaches this area of the body, it then has access to a pathway to invade other areas of the body. There are several treatment options to help fight against the spread of breast cancer and in some cases eliminate it completely (Breast Cancer, 2018).

Rates of breast cancer in the U.S. vary by race and ethnicity and among African American women it is the most common form of cancer (Susan G. Komen, 2020). In women under 45, breast cancer has shown to be more prevalent in black women than white women (Center for Disease Control and Prevention, 2018). African American women have a 31% breast cancer mortality rate which is the highest of any U.S. racial or ethnic group. This ties into the fact that younger African American women are more likely to present with a triple negative subtype of the disease, a subtype that is both more aggressive and associated with higher mortality (Breast Cancer Prevention Partners, 2020). Throughout the recent coronavirus pandemic, it has been shown that people being treated for breast cancer may have a higher risk of severe illness if they contract COVID-19 (Breast Cancer, 2020).

## METHODS AND PROCEDURE

Since COVID-19 is still prevalent, a virtual health presentation was scheduled via Zoom. Subsequently, the event was promoted using an informational flyer to different organizations throughout the Nashville community to garner the target audience. The presentation was held on a weekday evening with the Student Health Ambassador serving as moderator. Prior to the presentation starting, she posted a link with a pre-test in the “chat box” to ascertain baseline knowledge from participants on breast cancer awareness. Participants were instructed to type “done” when they were finished, so, she would know it was acceptable to move forward with the program.

Next, keynote speaker Dr. Jamelle Bowers, outlined different preventative measures participants can incorporate into their lifestyle to lower their risk of developing breast cancer. Following the presentation, there was a question and answer period. At the conclusion of the event, a link with the post-test was posted in the “chat box” to measure the knowledge gained from the talk. Again, participants were instructed to type “done” when they were finished. In addition, all participants who completed the pre-test and post-test were entered into a drawing for a monetary gift card. Finally, to ensure that the pre and post instruments were properly matched, yet, refrain from collecting identifying information, individuals were asked to type the numeric portion of her street address and her initials (first, middle, and last) on both pre/posttest. The surveys were administered through Google Forms.

## OUTCOME

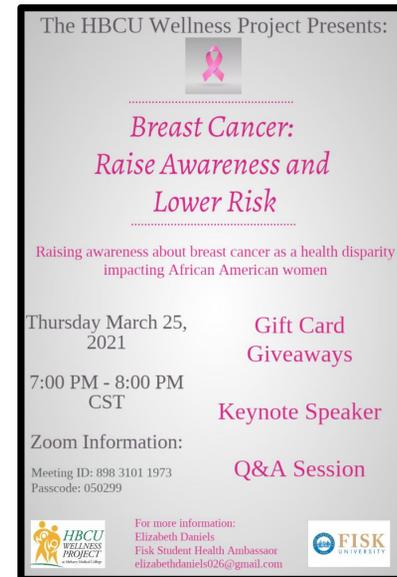


Figure 1. “Breast Cancer: Raise Awareness and Lower Risk” Event Flyer

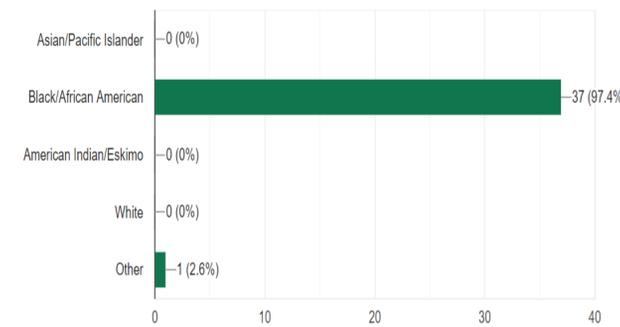


Figure 2. Race and Ethnicity Demographics of participants

Question	%Correct (Pre-Test)	%Correct (Post-Test)
At what age should you begin getting mammograms?	60.50%	73.70%
You should get a mammogram earlier than other women if an immediate family member (mother, sister) was diagnosed with Breast Cancer at an early age?	100%	100%
How often should you get a mammogram?	97.70%	97.40%
Why should you get a mammogram?	86.00%	94.70%
What is a way to reduce your chances of getting breast cancer?	58.10%	84.20%
What is a way to increase your chances of getting breast cancer?	90.70%	94.70%

Table 1. “Pre and Post Test Responses for Breast Cancer: Raise Awareness and Lower Risk” Event

## DISCUSSION

By creating a virtual event for African American women, focused on breast cancer, knowledge, attitudes, and behaviors can significantly increase as this demographic is often overlooked. By the same token, spreading awareness regarding the disease, sharing ways to lower risk, and encouraging participants to complete annual breast cancer screenings can have large impact in this population.

As indicated in the data, participants gained more knowledge about breast cancer and ways to lower risk. There was a 13.2% increase in correct responses to the question regarding when a woman should begin getting mammograms. Additionally, in relation to information about ways to reduce your chances of getting breast cancer, there was a 26.1% increase in correct responses. This indicates that participants’ knowledge about breast cancer and ways to lower risk increased after attending the virtual health presentation.

The virtual health presentation allowed many African American women to receive essential information regarding breast cancer awareness that not only can be used in the daily practices of those who attended the event, but can be shared within each individual's community.

## REFERENCES

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