Breast Cancer Among Black and African-American Women

**Incidence and Mortality**

Breast cancer is the second leading cause of cancer death among Black and African-American women in the U.S. as it is for non-Hispanic white and Hispanic/Latina women. Studies show that Black and African-American women have slightly lower breast cancer incidence rates compared to white women (see table below). However, among younger women (less than 45 years), incidence rates are higher among Blacks and African-Americans than whites. Black and African-American women also have a lower 5-year relative survival rate as compared to white women. This difference in mortality is not yet well understood, but several related factors, such as higher grade tumor and advanced stage at diagnosis and being diagnosed with a triple negative breast cancer, are more common in Blacks and African-Americans than whites.

Breast cancer incidence rates among Black and African-American women increased rapidly during the 1980s, largely because of increases in mammography screening. Incidence rates have become more stable since the 1990s. During the early 2000s a sharp decline in the incidence rates among white women was associated with a drop in the use of menopausal hormones. This trend was not seen among Black and African-American women because hormone therapy use was already low in this population.

Black and African-American women have more than a 40 percent higher rate of breast cancer death than white women, despite a slightly lower incidence rate.
**Five-Year Relative Survival Rates**
Relative survival compares survival rates between women with breast cancer to women in the general population. For example, the 5-year relative survival for Black and African-American women diagnosed with breast cancer is 80 percent. This means Black and African-American women diagnosed with breast cancer are, on average, 80 percent as likely as Black and African-American women in the general population to live five years beyond their diagnosis. These rates are averages and vary depending on a person’s diagnosis and treatment.

**Relative Survival Rates by Age at Diagnosis**
The 5-year relative survival rate for Black and African-American women diagnosed with breast cancer is about 82 percent, compared to nearly 92 percent among non-Hispanic white women. The differences in survival rates may be related to diagnoses with late-stage disease and tumors associated with poor prognosis and delays in medical care after initial diagnosis of breast cancer among Black and African-American women. In addition, disparities within age groups indicate that Black and African-American women under 45 have a significantly lower 5-year relative survival rate compared to non-Hispanic white women.

<table>
<thead>
<tr>
<th>Age at Diagnosis</th>
<th>Black and African-American</th>
<th>Non-Hispanic White</th>
</tr>
</thead>
<tbody>
<tr>
<td>All ages</td>
<td>80.4</td>
<td>90.8</td>
</tr>
<tr>
<td>Under 45</td>
<td>78.6</td>
<td>89.6</td>
</tr>
<tr>
<td>45-54</td>
<td>81.2</td>
<td>91.7</td>
</tr>
<tr>
<td>55-64</td>
<td>80.6</td>
<td>91.1</td>
</tr>
<tr>
<td>65 and older</td>
<td>78.0</td>
<td>90.0</td>
</tr>
</tbody>
</table>

**Relative Survival Rates by Stage at Diagnosis**
When talking about breast cancer survival rates, it is important to understand that 5-year relative survival rates vary depending on the stage at diagnosis. Breast cancer staging is very complex and is done by health care professionals. The stage of the cancer is determined by the size of the tumor, whether it has spread to lymph nodes and whether it has spread to other parts of the body. For instance, *Ductal carcinoma in situ* (also called *DCIS* or *in situ*) refers to the stage in which the cancer is contained within the milk duct. It is considered pre-cancerous as it has not yet spread outside of the duct. Please remember, each cancer is unique and each individual diagnosed with cancer should ask her/his doctor to help determine her/his prognosis (likely outcome).

<table>
<thead>
<tr>
<th>Stage at Diagnosis</th>
<th>Black and African-American</th>
<th>Non-Hispanic White</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Situ</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Localized</td>
<td>94</td>
<td>99</td>
</tr>
<tr>
<td>Regional</td>
<td>75</td>
<td>86</td>
</tr>
<tr>
<td>Distant</td>
<td>17</td>
<td>27</td>
</tr>
</tbody>
</table>
Screening Habits
Mammography screening rates for Black and African-American women are similar to those for non-Hispanic white and Hispanic/Latina women\textsuperscript{6, 9, 10, 11}. There is some evidence that Black recent immigrants (living in the U.S. for less than 10 years) have a lower rate of annual mammography screening than do U.S.-born African-Americans and whites. This is likely a result of factors related to lower health care utilization, due in part to a lack of health insurance among the Black immigrant population\textsuperscript{12}.

Black and African-American women are often diagnosed with breast cancer at a later stage than non-Hispanic white women\textsuperscript{1}. It is believed that this may occur for a number of reasons, including longer timespans between mammograms, lack of timely follow-up on suspicious screening results, as well as differences in tumor characteristics\textsuperscript{13, 14}. However, it is believed that much of this disparity remains unexplained\textsuperscript{15}.

\begin{center}
\includegraphics[width=0.7\textwidth]{chart.png}
\end{center}

Trip\emph{}le Negative Breast Cancer
Studies have shown that Black and African-American women are at higher risk of triple-negative breast cancer (TNBC)\textsuperscript{5, 16}. This diagnosis refers to cancer cells that test negative for three receptors including Estrogen (ER-), Progesterone (PR-) and Human Epidermal Growth Factor 2/neu-negative (HER2-). Women diagnosed with TNBC have a poorer prognosis for at least the first five years after diagnosis than those with other breast cancer subtypes. This is largely due to the lack of specific therapies to treat the tumor, though many cases of TNBC are effectively treated with chemotherapy.

For more information about triple negative breast cancer, see Facts for Life: Triple Negative Breast Cancer.
It is important to remember that while Black and African-American women are at higher risk of TNBC, the percentage of Black and African-American women diagnosed with this type of breast cancer is still relatively low. TNBC is typically seen in basal-like cell carcinoma which accounts for only 10-20 percent of breast cancer diagnoses. Among Black and African-American women, more than 30 percent of breast cancer cases are TNBC, compared to 10 percent among white women.

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