Disparities in Cervical Cancer Mortality Among Black, non-Hispanic Women in Massachusetts

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Background
In Massachusetts, despite high rates of screening, Black non-Hispanic women are more likely to be diagnosed at a late stage for cervical cancer, and have the highest cervical cancer mortality rates compared with women of other racial or ethnic groups (2.5 per 100,000 for Black non-Hispanic women vs. 1.4 per 100,000 for White non-Hispanic women). The Massachusetts Department of Public Health has established the goal of reducing the proportion of Black, non-Hispanic women diagnosed with late stage (regional and distant) cervical cancer to 2 per 100,000 by 2016. The Massachusetts Cancer Registry, the Behavioral Risk Factor Surveillance System, the Office of Clinical Prevention Services and the Comprehensive Cancer Control program collaborated to prepare presentations on incidence, mortality, and screening to illustrate cervical cancer disparities in Massachusetts.

Methodology

The methodology behind this project is depicted in the following visual:

- **Key research questions identified based on Behavioral Risk Factor Surveillance System and Massachusetts Cancer Registry data.**
- **Facilitation guides were tailored to the four types of focus groups (Black NH cervical cancer survivors, Black NH women without cervical cancer, community leaders, and providers).**
- **Topics included:**
  - Understanding the purpose of a Pap test, how it is performed, and how often they should be screened for cervical cancer.
  - Facilitators and barriers, such as insurance status, to getting a Pap test.
  - Screening, treatment, and follow-up experiences and the patient-provider relationship.
  - Cultural perspectives on the Pap test and cervical cancer diagnosis.
- **Recommendations to increase cervical cancer screening rates and follow-up among Black, non-Hispanic women.**
- **Recruitment took several forms: flyers at health centers, Craigslist, ads in local papers (for women with and w/o cervical cancer), community networks (for community leaders), and contacts at health and participating cancer centers.**
- **Six focus groups were conducted:** one with survivors (6 women), one with Black women from the general population (11 women) ; one with community leaders (5 participants); three provider roundtables (total 42 providers).
- **Final Report** included summaries of consumer, community leader, provider perspectives.

Results

- **Average Annual Age-Adjusted Cervical Cancer Incidence and Mortality Rates**

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Incidence</th>
<th>Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>2.3</td>
<td>0.1</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>4.1</td>
<td>0.4</td>
</tr>
<tr>
<td>Asian, non-Hispanic</td>
<td>2.2</td>
<td>0.0</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>1.4</td>
<td>0.0</td>
</tr>
</tbody>
</table>

- **Prevalence of Cervical Cancer Screening (Pap Smear Within Past 3 Years), Among Massachusetts Women, 2010**

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>84%</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>66%</td>
</tr>
<tr>
<td>Asian, non-Hispanic</td>
<td>77%</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>82%</td>
</tr>
</tbody>
</table>

- **Stage at Diagnosis**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Black, non-Hispanic</th>
<th>White, non-Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>1</td>
<td>30%</td>
<td>34%</td>
</tr>
<tr>
<td>2</td>
<td>42%</td>
<td>51%</td>
</tr>
<tr>
<td>3</td>
<td>19%</td>
<td>16%</td>
</tr>
<tr>
<td>4</td>
<td>1%</td>
<td>0%</td>
</tr>
</tbody>
</table>

- **Summary**

  - More likely to be diagnosed at a late stage for cervical cancer, and have the highest cervical cancer mortality rates compared with women of other racial or ethnic groups (2.5 per 100,000 for Black non-Hispanic women vs. 1.4 per 100,000 for White non-Hispanic women).

- **Recommendations**

  - Develop a cervical cancer screening education and awareness campaign.
  - Simplify and educate patients about the insurance process and enrollment.
  - Reassess coverage of state-provided insurance plans.
  - Clarify and educate patients and providers about screening guidelines.
  - Continue to research biological factors related to increased cervical cancer mortality rates among Black non-Hispanic women.
  - Improve physical access to cervical cancer screening.
  - Increase use of patient-level navigators.
  - Further examine patient-level data.
  - Implement changes in provider practices and procedures; improve quality of provider-patient relationships.

Limitations

- Small numbers due to low cervical cancer incidence and mortality overall.
- Small focus group sample size of women with cervical cancer and lack of recruitment of women with late stage cervical cancer.
- Limited geographic area represented (Boston).
- Lack of representation of two large health centers in Boston.
- Short time frame limited a more thorough and comprehensive assessment.
- Challenges accessing patient-level data for purposes of recruitment.

Next Steps

- **Media Campaign** focusing on breast and cervical cancer that will emphasize the benefits and importance of early detection and of follow-up of abnormal results with a doctor. Media will include newspapers, buses/billboards, posters at YMCA, nail salons, gas pumps, and social media.
- Campaign for Providers that will offer online Continuing Medical Education credits through the Massachusetts Medical Society.