
Women of Color, Breast Cancer and the Environment

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Breast Cancer in the US

- One in seven lifetime risk of developing
- 2nd leading cause of cancer death in women



Breast Cancer in the US

■ Risk Factors

- Age
 - Age at Menstruation/Menopause
 - Reproductive Status
 - Family and Personal History
 - Genetic Mutation
 - Diet and Lifestyle
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Women of Color and Breast Cancer

■ Breast Cancer Incidence by Race*

- White: 141 per 100,000 women per year
- Black: 119 per 100,000 women per year
- Asian†: 97 per 100,000 women per year
- Hispanic: 90 per 100,000 women per year
- Native‡: 55 per 100,000 women per year
- All: 134 per 100,000 women per year

*Data from National Cancer Institute's Surveillance, Epidemiology, and End Results Program between 1998 and 2002

† Includes Pacific Islanders

‡ Includes American Indians and Alaskan Natives

Women of Color and Breast Cancer

- **Breast Cancer Mortality by Race**
 - Black: 35 per 100,000 women per year
 - White: 26 per 100,000 women per year
 - Hispanic: 17 per 100,000 women per year
 - Asian: 14 per 100,000 women per year
 - Native: 13 per 100,000 women per year
 - All: 30 per 100,000 women per year
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Women of Color and Breast Cancer

- Reasons for Differences
 - Type of cancer
 - Stage at diagnosis
 - Differences in traditional risk factors
 - Access to health care
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Women of Color and Breast Cancer

- None of these factors explain all of the breast cancer mortality difference between black and white women
 - Could it be environmentally linked?
 - African-Americans are exposed to more contaminants
 - African-Americans have higher amounts of some chemicals in their bodies
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Environmental Causation

- Hypothesized that chemicals can
 - Genetically alter cells
 - Affects cell growth
 - Affects ability to control tumor
 - Act like estrogen
 - A known breast cancer risk factor
 - Have a cumulative effect over a lifetime
 - Critical periods of exposure are important
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Environmental Causation

- Chemicals that Alter Cells
 - From petroleum refineries, internal combustion of engines, grilled meats, plastics
 - Estrogen Mimicking Substances
 - Include DDT, PCBs, phthalates, metals, dioxin, organic solvents
 - Found in many products and are by-products of industrial processes
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Environmental Causation

- Evidence for a Link Uncertain
 - Much evidence based on animal research
 - Link between breast cancer and PCBs and DDE in humans are inconclusive
 - Some studies show a link between organic solvents, dioxin, PAHs, benzene and breast cancer
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Environmental Causation

- Reasons for Inconclusive Results
 - Study Design Limitations
 - Exposure misclassification
 - Current exposure status does not reflect past exposure
 - Confounding factors not adjusted for in some studies
 - Critical periods of exposure not assessed
 - Cumulative exposures not assessed
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Environmental Breast Cancer Movement

- Research into environmental causation spurred by activists
 - Began what is termed the Environmental Breast Cancer Movement (EBCM)
 - Amalgam of breast cancer activism, women's health activism, and environmental activism
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Environmental Breast Cancer Movement

- Characteristics of the EBCM
 - Belief in environmental cause of breast cancer
 - Focus on community-level prevention
 - Adhere to precautionary principle
 - Activist involvement in scientific studies



Environmental Breast Cancer Movement

■ Goals

- ❑ Increase public awareness of environmental causation
- ❑ Increase research on the issue
- ❑ Increase activist participation in research
- ❑ Prevent incident cases through policy change



Environmental Breast Cancer Movement

- Case Studies
 - Cape Cod, Massachusetts
 - Founding of the Silent Spring Institute
 - Breast cancer activists on advisory committee



Environmental Breast Cancer Movement

■ Case Studies

□ San Francisco Bay Area

- Successfully pushed for activist involvement in research
 - Advocate stricter regulation of chemicals
 - Bayview Hunters Point Community
 - Bring minority perspective to breast cancer incidence and the environment
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Women of Color, Breast Cancer and the Environment

- Research Question:

Is there potential for a similar movement among women of color to address the environmental causation of breast cancer?

- Specifically, will women of color breast cancer activists and environmental justice (EJ) activists work together on this issue?
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Women of Color, Breast Cancer and the Environment

- Current evidence for a similar movement among women of color
 - Conference in October 2004 organized by an environmental justice group
 - EBCM/environmental justice study underway examining household exposures
 - Recent forum at Brown addressing the issue
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Women of Color, Breast Cancer and the Environment

■ Methods

- 18 in-depth interviews with women of color involved in either breast cancer organizations or environmental justice organizations
- Interviews were approximately an hour in length and were transcribed and coded for analysis



Women of Color, Breast Cancer and the Environment

- Framework for Analysis
 - Belief in environmental causation of breast cancer
 - Approach to activism
 - Perception of environmental justice/breast cancer activism
 - Belief in environmental causation of racial disparity in breast cancer mortality
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Women of Color, Breast Cancer and the Environment

- **Belief in Environmental Causation of Breast Cancer**
 - A majority of the interviewees believed that environmental agents could be linked to breast cancer
 - 11 of the 18 interviewees changed their lifestyle in some way to avoid exposure
 - Most thought that future research should focus on the environmental link
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Women of Color, Breast Cancer and the Environment

- Belief in Environmental Causation of Breast Cancer
 - Some of the interviewees were skeptical of a link
 - A few expressed frustration with conflicting studies
 - One activist conveyed a sense of hopelessness:
 - “I don’t really believe there is a cure, and if there is a cure, it’s not going to do any ... good if we gotta keep... breathing the same air, and drinking the same water, and ... re-infecting ourselves with the same thing.”
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Women of Color, Breast Cancer and the Environment

- Approach to Activism
 - Priorities of interviewees' organizations
 - Perspective on activist involvement in research
 - Perspective on government role in chemical regulation
 - Thoughts on outreach to communities of color
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Women of Color, Breast Cancer and the Environment

- Approach to Activism
 - Breast cancer activists' organizations primarily concerned with access to health care
 - Environmental justice activists' organizations concerned with increasing quality of life in various ways, including reducing exposure to toxins, creating sustainable development projects, improving health outcomes
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Women of Color, Breast Cancer and the Environment

- Approach to Activism
 - Both groups wanted activist involvement in research
 - Some interviewees expressed concern with how activists are received:
 - “Breast cancer activists are at the table with scientists today. However, I don’t know that [the scientists are] taking us as seriously as they should be.”
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Women of Color, Breast Cancer and the Environment

■ Approach to Activism

- Both groups wanted a change in how the government regulates chemicals
 - Stricter penalties for violators
 - Better communication from government
 - Increased regulation of chemicals
 - Increased accountability:
 - “[Money] basically controls politics in this country. If you’re a big business and ... you have enough money to lobby ... you’re always going to get your way. That’s how it is, that’s how the system is designed.”
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Women of Color, Breast Cancer and the Environment

- Approach to Activism
 - Important to reach out to communities of color
 - Leadership must come from within communities of color
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Women of Color, Breast Cancer and the Environment

- Perception of Environmental Justice
 - All breast cancer activists acknowledged people of color more likely to be exposed
 - Most were not familiar with the term environmental justice:
 - “Anyone saying NIMBY, you know, most people of color don’t even know what that means. If you say, ‘not in my backyard’, then they know, oh, it’s going to be in our neighborhood.”
 - Some activists were skeptical of race being a factor in environmental justice
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Women of Color, Breast Cancer and the Environment

- Perception of Breast Cancer Activism
 - Most environmental justice activists held a positive view of breast cancer organizing
 - Concern about presence in communities of color:
 - “[If] I don’t know about them... that’s ... part of the problem. I don’t know really of any breast cancer organizations that are ... solely dedicated to breast cancer... in communities of color... But you could say the same thing about our organization... [We] go out and people are like, ‘I didn’t know you guys exist.’”
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Women of Color, Breast Cancer and the Environment

- Belief in environmental causation of racial disparity
 - Eight of the twelve breast cancer activists thought there could be a link
 - They also stressed that economic factors, such as access to health care, were also to blame
 - Other reasons brought up were fear, distrust of the medical field, and failure to seek medical care
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Women of Color, Breast Cancer and the Environment

- Belief in environmental causation of racial disparity
 - Most of the environmental justice activists also believed that environmental exposure could be a factor in the difference
 - Only one believed that the environment was not an issue for women of color
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Women of Color, Breast Cancer and the Environment

■ Conclusions

- There is a lot of overlap between the thinking of breast cancer activists and environmental justice activists
 - Some concerns:
 - Lack of visibility of each other's movement
 - Breast cancer activists' primary concern with access to health care
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Women of Color, Breast Cancer and the Environment

■ Conclusions

- Important components to accelerate a linkage between groups:
 - Outreach to one another
 - More awareness of link between environmental contaminants and breast cancer in women of color



Women of Color, Breast Cancer and the Environment

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