

Abstract

Disparities in health according to race, gender, socioeconomic status, sexual orientation, and other group differences have been documented in the United States for several decades. Despite intense scrutiny, the persistence of this and other disparities and our inability to fully explain or understand them suggest new research paradigms are needed. Community-based participatory research (CBPR) represents a promising avenue for health disparities research. In the proposed project, it will be used to understand group disparities in breast cancer, notably why Black women develop earlier-onset breast tumors that are more aggressive and lethal than do White women. The long-term objective of the proposed CBPR project is to increase the flow of health information, especially about breast cancer and its treatment, between communities on the South Side of Chicago and investigators at the Center for Interdisciplinary Health Disparities Research. Communication of this nature will help to promote an understanding of the social, behavioral/psychological, and biological/genetic factors influencing Black and White differences in breast cancer onset and course. Toward that objective, the specific aims of the project are: 1) in partnership with the Faith-Based Wellness Network and other South Side agencies and institutions, to conduct interviews with community residents to understand how they conceptualize breast cancer and its treatment and to understand how accurately psychosocial constructs used in other Center research projects (Projects #1,2,3) capture residents' life experiences; 2) to use information obtained in interviews to inform and modify as needed instruments to be used in other Center investigations; 3) to utilize the informed and modified instruments along with physiological (e.g., cortisol levels) and neighborhood/community variables (e.g., collective efficacy, crime) to understand the relationships between social, behavioral, and biological phenomena in groups South Side women with breast cancer whose tumors are being studied by Olopade (Project #2); and, 3) to develop recommendations to inform health care policy, practice, and education around breast cancer.

Project 3 Research Plan

a. Specific Aims

Racial differences in breast cancer represent a major example of health disparities in the United States. Although White women have a higher incidence of breast cancer compared to Blacks, their breast cancer mortality is lower than that of Black women. From 1995 to 1999, the average annual incidence (per 100,000) of breast cancer was 139.0 among White and 121.5 among Black women. During that same period, the average annual breast cancer mortality (per 100,000) was 28.2 among White and 37.1 among Black women (Edwards et al., 2002). Between 1973 and 1999, the age adjusted rate of breast cancer mortality declined from 32.5 to 26.3 among White women but increased from 31.4 to 35.8 among Black women (Ries et al., 2002). Of particular concern is the fact that breast cancer incidence rates are increasing more rapidly in young Black women than in any other racial or ethnic group in the country (Eley et al., 1994; Moormeier, 1996). Factors associated with higher breast cancer mortality among Blacks are several and include more advanced stage at the time of diagnosis and more aggressive tumor morphology.

Investigators at the University of Chicago (UC) are actively pursuing integrated research and clinical care programs that address issues in breast cancer genetics, tumor biology, and advanced imaging to improve breast cancer care for all women, with a specific emphasis on ensuring that

these advances reach medically underserved populations. First, the University is home to the only Comprehensive Cancer Risk Clinic in the Chicago area that addresses both clinical and research issues in breast cancer genetics. Second, computerized image analysis methods for breast cancer screening have been pioneered and are continuously being advanced at the University, yielding computer assisted techniques for the detection, diagnosis, and risk assessment of breast cancer. Special areas of study include 1) phase I, II, and III clinical trials, 2) the genetics of breast cancer in Black populations, 3) mechanisms of steroid hormone regulation of cellular proliferation in hormone responsive tissues and cancers, and 4) Computer Assisted Diagnosis Applications. In recent years, UC physicians, nurses, and health educators have participated in community programs to increase awareness of breast cancer detection and treatment. The primary partner for these efforts has been the Southside Faith-Based Wellness Network. Since 1999, UC has collaborated with the Wellness Network to enhance communication between the University and surrounding communities and to improve health among community residents through a variety of educational and screening programs.

Although these partnerships have been successful, new ways of utilizing this new avenue of communication between the community and University are needed to gain a better understanding of group differences in breast cancer. The increase in breast cancer mortality among Black women makes clear that new insights and strategies are needed to counter the trend. Community-based participatory research (CBPR) can provide these new insights by involving community residents and community organizations in each phase of the research process, from developing research questions, to designing studies, collecting data, interpreting results, and sharing data. The partnership between UC and the Wellness Network offers a valuable opportunity to study the root causes of racial disparities in breast cancer mortality. Through CBPR, UC scientists and Wellness Network members will design and implement a series of investigations that address key questions related to breast cancer. The specific aims of this project are as follows:

Aim #1: in partnership with the Southside Faith-Based Wellness Network and other South Side agencies and institutions, to conduct interviews with community residents to understand how they conceptualize breast cancer and its treatment (e.g., perceptions, concerns, and values) and to understand how accurately psychosocial constructs used in other Center research projects (Projects #1,2,3) capture residents' life experiences;

Aim #2: to use information obtained in interviews to inform instruments to be used in other Center investigations and to modify them as needed;

Aim #3: to utilize the informed and modified instruments along with physiological (e.g., cortisol levels) and neighborhood/community variables (e.g., collective efficacy, crime) to understand the relationships between social/environmental, behavioral, and biological/genetic phenomena in groups of South Side women with breast cancer, and their tumors will be studied by Olopade (Project #2)

Aim #4: to develop recommendations to inform health care policy, practice, and education around breast cancer.