

Breast Cancer in Fort Bend County

Jude Des Bordes
Jennifer Elliot
Scherezade Mama
Satyam Nayak
Helena Vonville

University of Texas School of Public Health
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Health Problem Summary

According to the Healthy People 2010 objectives, Fort Bend County has yet to meet the goal for the reduction of breast cancer mortality rates, with a breast cancer mortality rate of 26.0 compared with the target rate of 21.3 per 100,000 women. Breast cancer affects women across all races, with an elevated risk as age increases, especially for women age 40 and older. Of all cancers, breast cancer is the number two killer in women. Many of these deaths are preventable if the cancer is caught at an early stage, and early treatment is more cost-effective. In Fort Bend County, breast cancer rates have been fluctuating since 1999. In order to reduce the breast cancer mortality rate, interventions should be tailored to increase early detection in women. Current cancer resources are inadequate in reaching certain groups, such as African Americans, Hispanics, and rural and low income populations.

Health Problem Description

Breast cancer is an uncontrolled growth of breast cells with the potential of spreading to other tissues if not caught in the early stages (http://www.breastcancer.org/cmn_and_idx.html) and is the second cause of cancer mortality among women. Predisposing factors include, but are not limited to, family history, not having children or having children late in life, certain medications, obesity, and alcohol. It can be found in four stages, in situ, localized, regional, and distant, where localized describes breast cancer which may be invasive within the breast but has not spread to the lymph nodes, and distant describes invasive breast cancer which has metastasized beyond the breast and nearby lymph nodes. If caught in the localized stage, there is a 97% survival rate versus the distant stage, in which there is only a 23% five year survival rate (Texas Cancer Facts and Figures, 2004). Therefore, early detection is critical in reducing breast cancer mortality rates.

Population at Risk

Breast cancer has few boundaries when it comes to at risk populations. It affects both males and females of all races/ethnic groups, although it primarily afflicts females. Women over 40-years-old are at a higher risk of being both diagnosed with, and dying from, breast cancer. As noted above, a major risk factor for breast cancer mortality is diagnosis at a later stage. In Fort Bend County, 32% of breast cancer patients were diagnosed with either stage 3 or 4 breast cancer, putting these patients at a greater risk of dying from breast cancer, while only 30% of breast cancer patients are diagnosed with late stage breast cancer in the U.S. and 29 % Texas. According to the American Cancer Society, 37.9% of African American women in Texas and 35% of Hispanic women are diagnosed at a later stage, indicating that this population may also be at a greater risk of dying from breast cancer. Non Hispanic black women make up only 15% of the Ft. Bend population and comprise 18% of breast cancer incidence, yet they account for 24% of all breast cancer deaths.

Impact of the Health Problem

The most serious impact of breast cancer is loss of life, and this is largely an effect of late diagnosis. According to the Centers for Disease Control and Prevention, 181,646 women were diagnosed with breast cancer and 41,619 women died from breast cancer in the United States in 2003. In Fort Bend County, the average mortality rate for females from breast cancer was 25.5 (2000-2004, age adjusted). This is above the state average of 25.0 and exceeds the Healthy People 2010 goal of 21.3 deaths per 100,000 females.

Data is not available for the cost for treating cancer or the costs associated with mortality in Fort Bend, but a 2001 report, *Cost of Cancer*, estimated that breast cancer cost the state of Texas \$1.25 billion dollars in 1998. Nearly 11,000 hospital stays were reported at a cost of over \$84.6 million. Approximately 46,000 women were disabled (either short term or long term) at a cost of over \$486 million (+/- 29%) in lost productivity. This report estimated that the average years of life lost per woman due to breast cancer was 20 years.

Trends in the Problem

Taken on a yearly basis, there are the usual increases and decreases in breast cancer mortality. However, the data is best viewed in 5-year cumulative totals. There has been a slight decrease in breast cancer mortality (26.0, 1999-2003; 25.5, 2000-2005) but the rates are still higher than those in Texas, 25.1 and 24.6 respectively. Rates for African American women remain significantly higher than the overall rates (33.1, 2000-2004). The number of deaths attributable to breast cancer is too small to calculate a mortality rate for Hispanic women.

Potential Interventions

While primary prevention strategies, such as a healthy diet and increased physical activity, are effective long-term strategies for reducing breast cancer incidence, early detection is key to reduce breast cancer mortality rates. Data suggests that mammography screenings every 1 to 2 years are most beneficial to women between 40 and 70 years of age and is a cost-effective method to screen for breast cancer, which may lead to early detection.

Based upon the literature, potential interventions designed to educate women about the importance of mammograms is the most effective way to increase screenings and early detection. In Fort Bend County, cultural sensitivity will be critical to ensure that it adequately reaches those groups most at risk and those least likely to seek breast cancer screening. The proposed intervention is designed not only to educate women on the importance of mammographies in a culturally sensitive manner, but to increase utilization of free mammograms by eligible indigent women through a voucher system in collaboration with a well-known county medical center.

Gaps in Services/Interventions

Lack of access to both screening and treatment is a problem in Fort Bend County and will be important to address in the intervention design. Fort Bend County has limited screening facilities and no mobile accredited mammography facilities. Due to the large rural areas, a good portion of the population has geographic and financial barriers to the existing prevention and treatment resources. The one existing cancer treatment center in Fort Bend County is currently not an American College of Surgeons approved program and is unable to provide mammograms to those without insurance that do not fall below the poverty line. The proposed intervention is designed to deal with these gaps in services and to increase utilization of existing services in hopes of reducing the breast cancer mortality rate in Fort Bend County.

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