PROMOTING A BREAST CANCER SCREENING CLINIC FOR UNDERSERVED WOMEN: A COMMUNITY COLLABORATION

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Objective: To increase breast cancer (BC) awareness, screening services, and education for local underserved women.

Design: Mayo Clinic launched a twice-monthly, half-day outreach breast clinic composed of 3 women physicians, a nurse and medical interpreters.

Setting: Community Adult Literacy Learning Center in Rochester, Minnesota.

Patients: Underserved women from immigrant and minority backgrounds in Rochester.

Interventions: The clinic offered clinical breast examinations, breast imaging, follow-up appointments, assistance in accessing government paid health coverage programs, educational classes, transportation vouchers, and follow-up surveys.

Main Outcome Measures: We assessed the number of patients seen, number of mammograms, breast sonograms, number of patients diagnosed with BC, number of interpreters, quantity of transportation vouchers and results of follow-up surveys.

Results: Between December 1, 2005 and July 31, 2009 there were 177 patient visits (including 46 follow-up visits) provided to 131 women on 58 days spent in the clinic. One hundred thirteen women (86.3%) had mammograms, sonograms, or both. Screening identified one woman with a diagnosis of breast cancer, 5 with symptomatic breast cysts and 3 women who underwent breast biopsy after a suspicious lesion was identified with breast imaging. One hundred and twenty women required an interpreter for the initial examination and mammogram visit. Transportation vouchers were used by 51 women. All follow-up surveys indicated overall satisfaction with the breast clinic, services and screening procedures.

Conclusions: For effective breast screening of underserved in a community setting, it is important to address racial/ethnic background, socioeconomic status, English language proficiency, and access to health care in general. (*Ethn Dis*. 2010;20:463–466)

Key Words: Access, Barriers, Breast Cancer, Language, Prevention, Screening

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INTRODUCTION

Studies have shown that mortality from breast cancer in the United States is disproportionately higher for women from African American and Hispanic backgrounds than for White women.[1–4] In addition, women from minority backgrounds have been shown to have lower levels of education and essential knowledge regarding breast cancer screening, diagnosis, and treatment.[5] Our conceptual interests in developing a clinic model for breast disease and breast cancer in women from underserved and minority backgrounds were focused on the possibilities that increased education and knowledge about preventive breast disease services, breast disease symptoms, and the health risks for developing breast disease would have been more likely to result in earlier diagnosis, appropriate treatment, and better clinical outcomes for breast diseases and breast cancers. Increasing appropriate knowledge of all of the aforementioned has the potential to ultimately reduce health disparities and possibly decrease morbidity and mortality.[6,7]

Minority women, women newly arriving in the United States from immigrant backgrounds, underinsured and uninsured women, disproportionately have lower rates of screening mammography procedures.[8] The use of screening mammography with appropriate diagnosis, appropriate therapy and appropriate follow-up has been shown to decrease breast cancer mortality rates by 20% to 35% in women aged 50 to 69 years and slightly less in women aged 40 to 49 years.[8] Multiple factors including older age, race/ethnicity other than White, Hispanic background, lower education level, lower household income, lower general health status, rural residence, absence of a routine physical examination in the past year, and lack of health insurance coverage are all associated with a lower likelihood of having had a recent mammogram.[5,9–12]

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Language discordance between the patient and health care provider puts the patient at risk for receiving limited counseling and has also been linked to decreased knowledge about breast cancer and its potential complications.[5,13] Addressing such factors can lead to greater awareness and self-efficacy among patients during interactions with physicians, thus resulting in higher rates of screening and enhanced breast cancer knowledge.[4,5]

METHODS

In 2005, the Mayo Clinic Breast Diagnostic Clinic launched a collaborative effort (community based partnering) with a Community Adult Literacy Learning Center that routinely serves approximately 2,200 learners of various educational backgrounds, ethnicities, race, and immigrant status. In developing the partnership, our goal was to increase awareness about breast cancer, the potential for preventing it, and to provide breast cancer screening services to underserved, as well as to immigrant and minority women in the surrounding community. Many of the adult student learners and participants at the center had limited understanding of breast diseases and/or BC. Also noted was the limitation of insurance and financial means to access age appropriate breast disease and BC screening procedures. Our learners and participants also had some distrust of the medical system, some fatalistic belief patterns regarding cancer diagnoses, and apprehension toward navigating the nuances of large integrated academic medical system. Many of the women from new immigrant backgrounds were also found to have limited ability to write and/or read in their native languages.

A twice-monthly, half-day breast clinic was opened within the school. We provided examinations to female students at the center, their female family members, and women from the surrounding community. The medical staff members included 3 female physicians from the Mayo Clinic Breast Diagnostic Clinic and a nurse well versed in community outreach. To provide an educational opportunity and introduce students to efforts at reducing disparities in the diagnosis of breast disease and breast cancers, medical students were supervised and allowed to participate in the breast examination visits and educational sessions. In addition, to ensure the likelihood of effective communication for students with limited English language proficiency, we had access to medical and foreign language interpreters who were either on site or communicated via telephone through the Pacific Interpreters language line. The on-site interpreters assisted the women with completion of forms and/or assisted the physician or nurse with the breast examination visit. The on-site interpreters also assisted staff in leading half-hour didactic classes with female students in small-group settings. Interpreters were fluent in various languages including Cambodian, Swahili, Vietnamese, Russian, Amharic, French, Somali, Tagalog, Arabic, Spanish, and Chinese. Pictorial charts and silicone breast models were used to demonstrate the benefits of breast cancer screening and to teach the women how to perform breast self-examinations. Breast health literature at an 8th-grade literacy level and available in several languages, was also distributed at each of the education sessions. At additional times, physician and nursing staff also attended health fairs at the Community Adult Literacy Learning Center to promote interest in breast cancer screening and prevention and to discuss with participants what they might expect during breast examinations and mammograms.

Appropriate breast imaging, (either screening or diagnostic), was offered and scheduled at the Mayo Clinic Breast Imaging and Diagnostic Center, about one mile from the school. Results of the testing were communicated by making a specific follow-up appointment, interpreter aided phone call, and/or a letter. If a suspicious lesion and/or malignancy were detected during breast imaging, staff worked with the uninsured women to obtain health coverage from Medicaid and the Minnesota Breast and Cervical Cancer Control program. Two important processes were established to provide for payment and/or reimbursement for the breast examinations and mammograms and for transportation to and from the Mayo Clinic Breast Imaging and Diagnostic Center to complete the mammograms. The first process was to ensure that reimbursement for the screening process was achieved. This was made possible through the use of the CDC's Breast and Cervical Cancer Screening Program which is administered by the state of Minnesota. To be eligible for this program, women were required to meet certain age, financial and insurance eligibility criteria. Transportation to and from the learning center and/or to the Mayo Clinic Breast Imaging and Diagnostic Center was also an important consideration for women to receive appropriate screening, diagnosis and/or therapeutic intervention if necessary. Transportation was expedited by providing cab vouchers that the women could use to travel between their homes, the education center, and the clinic. To assess their satisfaction with the process, patients completed evaluations of their learning experiences in the clinic at the end of their visit(s).

RESULTS

Between December 2005 and July 2009, we held 26 language-specific breast health education classes with 333 women attendees (Table 1). Fifty-five different language interpreters (female) also participated in the classes and clinical examinations. The language interpreters assisted with enrolling women into the state screening program, helping the women with the completion of relevant paperwork, and also assisted in helping the women make transportation arrangements to and from the clinic. Feedback from the interpreters indicate that they also found the classes to be personally useful and furthermore allowed them to contribute to the dissemination of important education regarding breast care information learned during the interactions with the patients. A booth at the Community Adult Literacy Learning Center's annual health fair and other

Table 1. Language-specific breast education classes and number of attendees

Language	Classes	Attendees
Spanish	7	74
Somali	8	142
Arabic/Sudanese	3	28
Cambodian	3	38
Chinese	1	5
English	4	46
Total	26	333

community outreach events reached another estimated 1,000 women.

Of the women seen in the outreach breast clinic only 11 were proficient enough in English not to require the services of the medical language interpreters. English was the primary or native language in only 6 women. One hundred and twenty women required a medical interpreter for the initial clinical breast examination and the mammogram visit.

A total of 177 patient visits (includes 46 follow-up visits) were provided to 131 women on 58 days spent in the clinic. One hundred thirteen women (86.3%) had mammograms, sonograms, or both at our clinic. For 76 (58%) of the women with average age of 46.5 years, it was their first time undergoing any breast imaging.

Of the 131 women, 126 qualified for the state screening program. Screening identified one woman with a diagnosis of breast cancer, five with symptomatic breast cysts that were aspirated, one with an epidermal inclusion cyst removed by excision and three women who underwent breast biopsy, with benign results, after a suspicious lesion was identified with breast imaging. Eighteen women were also found to be eligible for the Minnesota State Cervical Cancer Screening program and had a pelvic exam and cervical Pap testing services at Mayo Clinic in the Preventive Medicine Division. Analysis of the data indicated that transportation vouchers were used by 41 women. Subsequent contact and tracking of the participants showed that 18 of the women have returned to the outreach breast clinic and/or the Mayo Clinic Breast Diagnostic Clinic for an annual mammogram since the beginning of the program. A significant number of the women are no longer students at the school or continue to reside in the community. Follow-up surveys completed by the patients indicated an overall level of satisfaction with the screening procedures, the outreach breast clinic and expression of a willingness to recommend the services offered at the clinic to others in the community.

DISCUSSION

Many women in the United States face barriers to preventive breast care services. Some of these potential obstacles and barriers include racial background, ethnicity, immigrant status, formal education level, health insurance eligibility or coverage, cultural nuances, language proficiency, place of residence, and socioeconomic status.[14–16] Through the establishment of an outreach breast clinic in collaboration with a Community Adult Literacy Learning Center and our academic medical center institutional based clinic (Mayo Clinic Breast Diagnostic Clinic), we attempted to identify and remove some of the putative barriers mentioned above. We sought to create a safe environment and construct a level of trust to build collaborative relationships in the community. We believe that establishment of trust in the collaboration was the key component of our success. We were able to offer important breast health education and breast cancer screening to a diverse group of underserved women and women from immigrant and minority backgrounds in the communities and neighborhoods surrounding the Mayo Clinic. We continue to assess how access to language-appropriate breast health literature can be helpful to identify ways for expansion of the program into the larger Rochester and Olmsted County Minnesota community.

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Didactic group classes with medical language interpreters, visual models, peer-to-peer learning and one-on-one interactions with physicians served to increase the self-efficacy and self-care of preventive breast health in women from underserved, immigrant and minority backgrounds. Women evaluated in the outreach breast clinic serve as ambassadors of our program and this has enabled us to sustain the strong presence in the community. Our long-term goal is to continue to build a strong potential for successful collaborative relationships between the academic medical center and community partners to provide screening and diagnostic services for breast diseases in under-resourced women. We also hope to substantially decrease the breast cancer burden within our community. With the looming shortage of primary care health professionals and declining number of primary care graduates, we also hope to enhance and expand expertise in this common aspect of primary care among medical students and other trainees through exposure in the outreach clinic setting. By establishing the outreach breast clinic in a setting where under-

served, immigrant and minority women feel secure in discussing breast concerns, trainees would doubly benefit by improving their breast examination skills under the supervision of breast clinic faculty as well as enhancing cultural competency and communication skills.[17]

We conclude with the hypothesis that establishment of a community based outreach breast clinic can assist with both the recognition and reduction of the obstacles that prevent the dissemination of important information and education about breast health and breast cancer in underserved, immigrant, and minority women. We also posit that transportation to and from the screening/diagnostic community center or clinic, education level and language-appropriate medical communication, and identification of potential reimbursement sources for screening examinations and imaging procedures, can help to encourage regular breast screening for breast diseases and breast cancer in underserved, immigrant and minority group women with limited resources. These measures introduced in our clinic structure can serve as models to reduce health disparities and increase the opportunities for health equity in women at greater risk for breast cancer.

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