This article examines how faith community nurses (FCNs) fostered early breast cancer detection for those at risk in rural and African American populations throughout nine counties in midwestern Illinois to decrease breast cancer disparities. Flexible methods for breast cancer awareness education through FCNs, effective strategies for maximizing participation, and implications for practice were identified. In addition, networking within faith communities, connecting with complementary activities scheduled in those communities, and offering refreshments and gift items that support educational efforts were identified as effective ways of maximizing outcomes and reinforcing learning. Flexible educational programming that could be adapted to situational and learning needs was important to alleviate barriers in the project. As a result, the number of participants in the breast cancer awareness education program exceeded the grant goal, and the large number of African American participants and an unexpected number of Hispanic and Latino participants exceeded the target.

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Breast cancer is the most common cancer in American women; rates of breast cancer vary between women and men and among people of different ethnicities and ages (DeSantis, Naishadham, & Jemal, 2013). Although no sure way exists to prevent breast cancer, some preventive measures are available, and they can decrease the risk of breast cancer by fostering early detection and treatment, which reduces premature mortality and death rates (American Cancer Society [ACS], 2013). More prevalent among at-risk populations is a disproportionate burden of suffering and death from breast cancer (ACS, 2013). The Centers for Disease Control and Prevention’s (CDC’s), 2013 Office of Minority Health and Health Equity defined at-risk populations as populations that are most vulnerable to health disparities based on gender, age, race, ethnicity, or another factor. Two identified populations at risk for breast cancer are African American women and women living in rural communities. These two at-risk populations made up the target population for the intervention that was intended to foster early detection of breast cancer.

Background

African American Women

According to DeSantis et al. (2013), an estimated 27,060 African American women were expected to be diagnosed with breast cancer in 2013, and another 6,080 African American women were expected to die from the disease in the same year. The former figure makes up a significant part of the 226,870 expected new breast cancer cases in all women in 2013. Since the early 1990s, breast cancer rates have slowly been decreasing. Breast cancer is still a significant burden to Caucasian women but increasing in African American women by 2% per year (ACS, 2012). According to the ACS (2012), in the early 1980s, 1 in 20 women was diagnosed with breast cancer. Today, one in nine African American women will be diagnosed with breast cancer, whereas one in eight Caucasian women will be diagnosed. African American women continue to have a lower five-year survival rate (78%) compared to Caucasian women, who have a five-year survival rate of 91% (ACS, 2012; Fair, Monahan,
Russell, Zhao, & Champion, 2012). Although the incidence of breast cancer is high for both Caucasian and African American women, the mortality rate for African American women with breast cancer surpasses the rates for all other racial and ethnic groups (CDC, 2012; Susan G. Komen, 2013). DeSantis et al. (2013) further substantiated the focus on African American women as an at-risk target population; African American women are more likely to have factors associated with a poorer prognosis, such as a higher-grade tumor and negative hormone receptors.

According to the North American Association of Central Cancer Registries (2011), 25% of breast cancers are diagnosed at a late stage in the United States; among African American women, more than 35% are diagnosed at a late stage. Several research studies have been conducted to uncover reasons for the disparity in breast cancer diagnosis and treatments. Fair et al. (2012) found that the lowest rate of mammography adherence was in African American women who perceived the highest risk and the lowest benefit of mammography. The research identified the need for interventions that would increase the perception of mammography benefit and potentially decrease breast cancer mortality rates for African American women (Fair et al., 2012).

Rural Women

The disparity in breast cancer diagnosis and treatments among rural women has been well researched. Purtzer (2012)

Locate local churches.
• Use Internet searches to locate churches in specified counties.
• Ask faith community nurses and others familiar with the county to name local churches.
• Call churches identified.

Identify church leaders.
• Use informants such as faith community nurses, community residents, and parishioners to identify appropriate leader contacts.

Meet with identified leaders, including ministers, social planners, and group leaders.
• Explain the need for the program, along with its benefits.
• Schedule time for the program.
• Determine education plan based on learning and situational needs.

Identify social activities and events.
• Examples include monthly group meetings, luncheons, and tea parties.

Identify local faith organizations.
• Examples include the Christian Women’s Club, Bible Study Fellowship, and Faith Coalition.

Identify complementary events.
• Examples include health fairs, events at Christian colleges and universities, and Bible study groups.

FIGURE 1. Networking Methods and Examples in Faith Communities

studied the mammography screening decision-making process for rural, low-income women to determine the catalysts that move women from avoiding screening to undergoing screening. Transformative learning, or learning that includes a triggering event, was identified as a component of the decision-making process. As part of transformative learning, women were encouraged to question their beliefs, and, as a result, some of their attitudes and fears toward screening activities changed (Cranton, 1996).

According to Bennett, Olatosi, and Probst (2008), rural women were found to be less likely to practice preventive care, and cancer was found at later stages. A study by Avis-Williams, Khoury, Lisovicz, and Graham-Kresge (2009) revealed three primary barriers to routine mammogram screening for rural women: cost, limited knowledge of early-detection benefits, and fear associated with cancer diagnosis and consequences. Additional barriers identified were transportation costs, lack of insurance, and limited knowledge of available resources (Avis-Williams et al., 2009). The fear of finding cancer, along with the perceived side effects, could deter some women from participating in screening. Many did not understand the value of early detection and that early-stage cancers are easier to treat than later-stage cancers. Research studies have shown that, when logistical barriers such as transportation are addressed, compliance with screening mammography is better (Fair et al., 2012). This is not the complete answer to the problem, however. One reason for educating the rural community is to dispel myths related to screenings with education and information. With both rural and African American women, early detection results in better outcomes (ACS, 2012).

Role of Faith Community Nurses

Nurses using holistic, client-centered care were identified as being in a unique position to facilitate screening (Purtzer, 2012). Faith community nurses (FCNs) focus on promotion of health and wellness within the context of a faith community, and they are in the unique position to facilitate breast cancer awareness education and screening. FCNs practice holistic and client-centered care, and they also have the ability to reach at-risk populations who have limited access to care. They are able to practice within faith communities, which minimizes barriers to care. The use of FCNs is a way to have effective health ministry in faith communities (Patterson, 2003; Westberg & Westberg McNamara, 1990).

In an effort to ensure quality care for all people and to support implementation of evidence-based interventions targeting communities with high breast cancer incidence and mortality rates, Susan G. Komen for the Cure® provided a grant through the National Vulnerable Populations Community Grants Program (Susan G. Komen, 2013) to St. John’s Hospital in Springfield, IL. A planning committee representing St. John’s Hospital, St. John’s Center for Living, and the Department of Continuing Education at St. John’s College discussed available services within the respective systems that could affect breast cancer through education, screening, and treatment. FCNs were determined to be valuable resources who could affect the quality of care across the continuum for at-risk populations.
The grant was provided for breast health awareness, education, and screening, and it was meant to decrease breast cancer disparities affecting at-risk populations throughout nine counties in midwestern Illinois. The nine counties were rural communities, although two included metropolitan areas. The funding allowed RNs to complete an FCN basic preparation course offered through the Department of Continuing Education at St. John’s College; they did so to provide breast cancer awareness education to those at risk in rural and African American populations in the specified nine counties. The purpose of this article is to detail the role of FCNs in fostering early detection of breast cancer, identify effective strategies for maximizing participation in at-risk populations, and discuss implications for practice.

Methods

Nine counties in Illinois were selected for the target population based on their proximity within the regional service area. Rural counties’ populations are generally more than 95% Caucasian (U.S. Census Bureau, 2011). Two of the counties each contained a metropolitan area in which the general demographics are at least 12% African American (U.S. Census Bureau, 2011).

To reach the span of this geographic area, the committee believed that the FCN program housed in the Department of Continuing Education at St. John’s College would be a good fit for the outreach; more than 100 FCNs have graduated from the program, and all nine counties selected for the breast cancer awareness education program were represented by those graduates. Grant funds assisted in the education of four RNs who were tasked with reaching into those counties; they were assisted by seasoned FCNs. In addition, grant money was allotted for stipends, refreshments, and educational materials for the church communities.

Preparing Faith Community Nurses

The first objective of the grant project was to educate RNs to serve as FCNs. The oncology facilitator for St. John’s Hospital volunteered to review standard teaching modalities regarding breast examinations and risk reduction with the RNs. This review was given at the quarterly FCN meeting for seasoned FCNs, and time was allotted for the review during the FCN basic preparation course for new FCNs. Educational materials and instructions for reporting were given to the nurses. All FCNs were given the preparation necessary to effectively provide breast cancer awareness education.

Effective Strategies

The offering of breast cancer awareness education sessions to target populations occurred from August 2012 to March 2013. FCNs were selected to plan and implement the education because of their specialization in the promotion of health and wellness within faith communities. FCNs are effective communicators and are often able to network without restrictions in regard to community location in determining individual and group needs.

Education sessions were scheduled in the various counties by the FCNs. Despite recruitment efforts, the participating FCNs lived in only two of the nine targeted counties. Consequently, the FCNs made extra efforts to network with churches and communities in all nine counties to schedule education sessions. Figure 1 outlines methods used to network and connect in those counties to maximize recruitment efforts.

An effective strategy developed during the course of this program was to schedule the education sessions at a time when groups were convening for other purposes. This increased participation. In addition, some participants were identified by socioeconomic need through the Coordinated Access to Community Health (CATCH) program at St. John’s Hospital’s emergency department. CATCH is an access program that assists uninsured and low-income individuals with accessing health services. These participants were educated with a one-on-one education session at the time of contact by a FCN. Therefore, education sessions were held with individuals, and in small and large groups, dependent on the situation. A target sample of 500 individuals throughout the nine counties was projected.

Education Program Design

Education sessions consisted of educating participants on how to take an active role in their health. The sessions began with a presentation of statistics and facts regarding breast cancer in at-risk populations, which was followed by a discussion of early detection through clinical examinations, mammography, and breast self-examination (BSE). Participants were taught how to perform BSEs and had time to apply that knowledge, including the correct positioning for assessment and what to look for, using breast models. A question-and-answer session concluded each education session.

Although the content of the education sessions was similar, the group size and delivery varied. Videos and DVDs, which featured the aforementioned educational content, were available for use by the FCNs. The resources used were dependent on participant preference, learning styles, and available technologic resources. FCNs were able to verbally present information when technologies were not available or when participants preferred

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
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<tbody>
<tr>
<td>Age (years) (N = 501)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 or younger</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>21–30</td>
<td>56</td>
<td>11</td>
</tr>
<tr>
<td>31–40</td>
<td>56</td>
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<td>15</td>
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<tr>
<td>71–80</td>
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<td>12</td>
</tr>
<tr>
<td>81 or older</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Ethnicity (N = 510)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>288</td>
<td>56</td>
</tr>
<tr>
<td>African American</td>
<td>175</td>
<td>34</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>41</td>
<td>8</td>
</tr>
<tr>
<td>Asian</td>
<td>4</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Native American</td>
<td>1</td>
<td>&lt; 1</td>
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<tr>
<td>Other</td>
<td>1</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>

Note. Because of rounding, percentages may not total 100%.
verbal instruction. The flexibility of delivery was helpful in accommodating the needs of individuals and those of the group as a whole. Each participant received a gift bag consisting of a mini breast teaching model, cards illustrating how to perform BSEs and listing preventive care guidelines, and a “Fight Like a Girl” gift pack containing a pen, notepad, and pink boxing glove lapel pin. Life-size breast models were available during the session so participants could practice examination techniques. A survey was distributed at the end of each education session to discover what self-care practices participants took part in prior to the education session and also to learn about their plans for self-care practices. Participant demographics and evaluations of the breast cancer awareness education session were also collected.

Results

In all, nine FCNs led a total of 33 education sessions and involved 586 participants. Participants completed 516 surveys—an 88% return rate. Table 1 shows the demographics of participants who completed the surveys. Table 2 shows responses to the three survey questions asking what breast care participants did prior to attending the session, what breast care they planned to do now that they had attended the session, and whether they found the information presented during the session helpful. Given a list of potential responses, participants were asked to check all that applied. Percentage responses for these questions show that participants selected more than one option for each question. Although responses to categories vary for questions one and two, 50% of participants said they planned to begin performing monthly BSEs. This was a key component of the educational program because the primary purpose of the grant was to foster early detection and treatment of breast cancer through education.

Discussion

The number of participants in the breast cancer awareness education program exceeded the grant goal of 500 by 86 participants. The networking strategies used resulted in a large number of African American participants and an unexpected number of Hispanic and Latino participants. Also, because the grant did not accommodate educating a RN for each specified county, networking challenges occurred within various communities. Because FCNs were not residents in all nine counties, they had to network not only with local churches but also with various faith organizations to capture larger groups of participants. For convenience and effectiveness, the education sessions took place in conjunction with other planned events, including health fairs, Bible study groups, campus socials at Christian colleges and universities, church luncheons, and Christian Women’s Club dinners.

Networking with key personnel and church leaders was important to assess whether the social activities or events planned would be complementary to breast cancer awareness education. Specific churches known by FCNs from their previous work to have high African American populations were targeted. FCNs met with the church leaders to explain the education sessions and potential benefits. Complementary events were determined, and education sessions were planned in conjunction with them. Offering refreshments and gift bags was an incentive for participants and an effective strategy for getting groups to schedule education sessions. The flexibility of delivery and teaching strategies (audio visuals or lecture format) was helpful in accommodating the situational and learning needs of target populations. A Spanish interpreter was used for the Hispanic participants.

Overall, using FCNs to reach participants in the heart of their communities was well received and effective. Participants’ written comments on surveys reflected their gratitude and a sense of feeling valued, as they were specifically targeted by the education outreach in their respective faith communities. FCNs can be valuable resources who may be able to affect the quality of care across the continuum for at-risk populations and decrease the prevalence of suffering and death from breast cancer among these populations.

Limitations

The survey used to provide most of the data from participants was written as an evaluation tool and may not be generalizable. Not having an FCN familiar with each specified county presented challenges in reaching the target number of participants in the beginning of the project. This challenge, however, led to the development of effective strategies for maximizing participation, which resulted in the project exceeding the target number of participants.

Conclusions

FCNs were effective in providing breast care education to at-risk populations. Networking within faith communities, connecting with complementary activities, and offering refreshments and gift items that reinforced learning were creative strategies utilized to reach women for breast cancer education. Barriers to participation were alleviated by flexible educational programming. This was found to be an effective way to reach African American women and women in rural communities.

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**TABLE 2. Survey Question Responses (N = 516)**

<table>
<thead>
<tr>
<th>Questions and Responses</th>
<th>n</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td><strong>What breast care do you do?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual doctor visits</td>
<td>402</td>
<td>78</td>
</tr>
<tr>
<td>Routine mammograms</td>
<td>330</td>
<td>64</td>
</tr>
<tr>
<td>Regular BSEs</td>
<td>319</td>
<td>62</td>
</tr>
<tr>
<td>Aware of family history of breast cancer</td>
<td>211</td>
<td>41</td>
</tr>
<tr>
<td><strong>What is your plan for breast care after attending the education session?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continue current breast care regimen</td>
<td>263</td>
<td>51</td>
</tr>
<tr>
<td>Begin performing monthly BSEs</td>
<td>258</td>
<td>50</td>
</tr>
<tr>
<td>Schedule mammogram</td>
<td>144</td>
<td>28</td>
</tr>
<tr>
<td>Schedule appointment for breast screening</td>
<td>103</td>
<td>20</td>
</tr>
<tr>
<td><strong>Was the information presented helpful?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>495</td>
<td>96</td>
</tr>
<tr>
<td>No</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>No response</td>
<td>20</td>
<td>4</td>
</tr>
</tbody>
</table>

BSEs—breast self-examinations

Note. Participants could select multiple responses.
Implications for Practice

- Take time to network within faith communities to establish rapport and trust.
- Arrange education sessions in conjunction with complementary activities already scheduled in faith communities, and offer refreshments and gift items that support educational efforts to reinforce learning.
- Use flexible educational programming that can be adapted to situational and learning needs, which is important to alleviate barriers.

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References