Improving Health Literacy for Women with Breast Cancer

Robin L. Edwards

College of Nursing, East Carolina University

Doctor of Nursing Practice
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Main Points

- Women diagnosed with breast cancer (BC) have difficult decisions to make regarding treatment options.
- Women in rural populations are more likely to have poor health literacy.
- Increasing health literacy allows patients to make well-informed healthcare decisions and openly communicate with healthcare providers (HCPs).
- Printed educational material provided early can help avoid information overload and anxiety.
- Women were provided with an educational booklet that was easy to understand and written in plain language, improving their confidence in collaborating with their HCPs.

Background and Purpose

It is estimated that over 6,000 women are diagnosed with breast cancer BC in North Carolina (NC) each year (NC Department of Health and Human Services, 2023). Women in rural NC who have poor health literacy may not understand their new breast cancer diagnosis or be able to make meaningful, informed decisions for appropriate patient-centered treatment options. Rural populations are more likely to have higher unemployment rates, less likely to obtain post-secondary education, have lower household incomes, and have poor health literacy. NC’s population is less educated than the US, with 14 percent having less than a high school education (Rafferty et al., 2020). This Doctor of Nursing Practice (DNP) project aimed to provide women in rural NC with an educational booklet created by a former DNP student who personally experienced being diagnosed with BC. She aimed to help increase knowledge of general BC terminology, treatment plans, side effects, and managing life after receiving treatment.

Methodology

The Health Literate Care Model guided this quality improvement project, emphasizing making interactions between patients and HCPs as productive as possible (Koh et al., 2013). Over ten weeks, an educational BC booklet was distributed to women with breast cancer in a
rural NC oncology clinic. The project team comprised the lead faculty, the DNP student, the project site liaison, and a registered nurse (RN).

Women were provided with a booklet at their initial visit with the site surgical oncologist. Each booklet contained a survey that addressed how well the booklet helped to increase health literacy. All patients with a new breast cancer diagnosis were tracked via the site’s electronic medical record, and an Excel® spreadsheet was utilized to track demographic information and qualitative responses to the survey. During the later weeks of implementation, patients in various stages of treatment were also given a booklet. Follow-up interviews were conducted by phone once participants had ample time to review the information within the booklet. Plan-Do-Study-Act (PDSA) cycles were completed to discuss implementation progress and how to encourage patients to provide feedback on whether the booklet increased their health literacy since being diagnosed with BC.

Results

Booklets were distributed to 41 patients seen at the project site. Of these, 23 patients received the booklet before beginning any BC treatments. Patients ranged in age from 28 to 89. Most patients did not complete post-secondary education beyond high school, and 29% had obtained a bachelor’s degree. Of these participants, 15 were White, ten Native American, eight Black, five Hispanic, one White/Black, one White/Native American, and one Asian.

Telephone interviews were conducted with 19 patients. All patients expressed that the booklet was easy to understand and increased their knowledge of their BC cancer diagnosis. Common themes communicated by patients included that they appreciated that the booklet was small enough to fit in most purses and that there was ample space to write down pertinent information provided by their HCP specific to their care. While each patient’s journey with BC
was different, patients endorsed that knowing about various treatments and side effects was beneficial, even if they did not personally experience it.

**Strengths and Limitations**

This project's strengths included the site's endorsement of the need for educational BC material in an underserved rural area. The RN diligently distributed the booklet and contacted patients to encourage them to participate in phone interviews with the DNP student or complete the survey attached to each booklet. Patients did not always have another follow-up appointment during the implementation timeframe, making it critical for the RN to help facilitate participation.

Limitations that hindered implementation included the surgical oncologist requesting revisions to the booklet before distribution began at the clinic. While input from the surgical oncologist was appreciated, the booklet was written from a patient’s perspective. The surgical oncologist also could not distribute booklets to patients since her affiliated organization did not endorse the booklet.

**Implications and Conclusions**

Empowering women with a booklet that helped prepare them for their BC journey was even more profound for this patient population in a rural area. RNs, advanced practice providers, and physicians must know their patients' education levels and health literacy when providing medical teaching or education. Providing this booklet to patients early in their diagnosis of BC can help elude information overload and anxiety associated with having cancer.

Providing an accurate, concise, and up-to-date booklet was vital in bridging the knowledge gap for women with BC. Patients expect educational material to help prepare them for the physical, social, and emotional journey that encompasses a new cancer diagnosis
(Choudhury et al., 2020). Overall, this project effectively increased BC health literacy, and vulnerable populations had access to educational material that helped to decrease health disparities. Future recommendations for this project include the distribution of this booklet at primary care, gynecology, and radiology offices to women recently diagnosed with BC.
References


