© Oncology Nursing Society. Unauthorized reproduction, in part or in whole, is strictly prohibited. For permission to photocopy, post online, reprint, adapt, or otherwise reuse any or all content from this article, e-mail pubpermissions@ons.org. To purchase high-quality reprints, e-mail reprints@ons.org.

Article

Improving Cancer-Related Fatigue Outcomes: Walking Patients Through Treatment and Beyond

Julie Griffie, MSN, RN, AOCN[®], ACNS-BC, and Jean Godfroy, BSN, RN, OCN[®], CBCN[®]



© iStock

Participation in the ONS Foundation–supported Breast Cancer Care Quality Measures Set pilot study defined areas of need for compliance with proposed standards. Key outcomes were the revision of nursing assessment and documentation tools. Subsequent to those efforts, a walking track was made available for patients within the clinical cancer center. The track serves as an exercise resource for patients and family members to use while waiting for and after appointments. The planning involved multiple disciplines, and criteria established by the multidisciplinary team defined what group of patients should be advised of or encouraged to use the walking track without provider consultation. The scheduled nurse-patient education appointment prior to start of chemotherapy

provides the venue for the discussion. The goal is to assist patients in staying active during and after treatment.

Julie Griffie, MSN, RN, AOCN®, ACNS-BC, is a manager of nursing practice and Jean Godfroy, BSN, RN, OCN®, CBCN®, is a clinical nurse coordinator of the Breast Cancer Program, both at Froedtert Hospital in Milwaukee, WI. The authors take full responsibility for the content of the article. The authors received editorial support from Kristen Fessele, PhD, RN, AOCN®, in preparation of this article funded by a grant to the ONS Foundation from the Breast Cancer Fund of the National Philanthropic Trust. The content of this article has been reviewed by independent peer reviewers to ensure that it is balanced, objective, and free from commercial bias. No financial relationships relevant to the content of this article have been disclosed by the independent peer reviewers or editorial staff. Godfroy can be reached at jean.godfroy@froedtert.com, with copy to editor at CJONEditor@ons.org. (Submitted March 2014. Revision submitted May 2014. Accepted for publication May 30, 2014.)

Key words: breast cancer; fatigue; cancer program quality

Digital Object Identifier: 10.1188/14.CJON.S2.21-24

ajor changes occurred in 2008 at Froedtert Hospital regarding the organizational approach to cancer care. The opening of a new clinical cancer center lent itself to redefining models of practice. The breast cancer center became fully operational as a multidisciplinary clinic, with surgeons, plastic surgeons, medical oncologists, radiation oncologists, breast radiologists, breast pathologists, and breast imaging working together and sharing clinic space.

At the same time, electronic health records (EHRs) were implemented. The EHR selected did not have an ambulatory nursing assessment tool available. In response, nurses developed a template for consultation and follow-up visits. The templates were based on general professional nursing standards. Neither the consultation visit nor the follow-up visit template included fatigue, sleep-wake disturbances, or distress assessments. All nursing assessment documentation was formatted narratively, and filed as individual progress notes. Finding specific information in a progress note was very difficult. Timely access to the patient's nursing assessment documentation and plan of care became a major challenge.

Because rapid growth occurred in patient volume, gaps were identified in documenting practice standards. The nursing staff was aware of the documentation issues related to fatigue and was committed to revisions using evidence-based knowledge. The literature supports symptom clusters of pain, distress, sleep disturbances, and fatigue, and, as such, none of these symptom reports should be considered isolated. That concept is the basis of the National Comprehensive Cancer Network ([NCCN], 2014) guideline for cancer-related fatigue. Findings from the literature indicate that patients with cancer should be encouraged to maintain physical activity during and following cancer treatment and to participate in exercise programs; in addition, patients with comorbidities or deconditioning should be referred to physical therapy (Stricker, Drake, Hoyer, & Mock, 2004). However, in the authors' practice, a consistent process was not in place for assessing fatigue and making activity recommendations. Therefore, staff welcomed the opportunity to become involved in the ONS Foundation-supported Breast Cancer Care (BCC) Quality Measures Set pilot study. Participation was viewed as a way to bring grounded data for improved collaboration at a professional level with the providers.

The BCC Measures pilot study allowed for the development of disease-specific quality measures that could be tested across multiple diverse practice settings, with the opportunity for future benchmarking across these sites. Participation in the pilot study allowed access to the set of quality measures being developed from evidence-based clinical practices. The BCC Measures population (common to all BCC measures) was defined as newly diagnosed patients with biopsy-proven breast cancer or patients with breast cancer with newly diagnosed metastatic disease, who were aged 18 years or older, and whose treatment plan included IV chemotherapy treatments in the ambulatory care setting. Charts were reviewed for comparison with the measures set. The review was done by staff nurses, allowing a close review of practice issues and documentation concerns.

Findings

Major deficits were noted immediately after beginning the review. Fatigue was one of eight items included in the measure set, along with the expectation of "an exercise program recommended prior to initiation of treatment." Although verbally addressed, fatigue assessment and a documented intervention were rarely accomplished. This finding was validated when the BCC Measures pilot study results arrived. The rates for each pilot measure were reviewed, and the findings for the measures related to fatigue reassessment and exercise recommendation were low. Therefore, three steps were taken to address the deficits noted.

Identifying Fatigue

Identifying fatigue in patients undergoing chemotherapy for breast cancer and updating documentation tools were fully supported by all clinicians. An immediate change in the EHR templates was implemented to include prompts to ensure assessment was completed. Efforts were made to champion fatigue as the sixth vital sign. Because fatigue is a subjective experience, it must be self-reported. ONS provided an easy-to-use reporting tool that allows the patient to conceptualize their personal experience and score it using a numeric scale ranging from 0 (no fatigue) to 10 (worst fatigue), with 3 or greater used as the point of referral (Eaton & Tipton, 2009). This fatigue scale was accepted by providers and staff and readily implemented. The use of the tool opens the assessment to a more detailed exploration of symptoms and possible physiologic issues. Clinician buy-in, enhanced documentation tools, and an easy-to-use assessment scale allowed these changes to be easily incorporated into daily clinical practice. As a result, documentation of fatigue scores improved during a sixmonth period.

Providing an Intervention

A review of the literature identified walking as the preferred exercise for women during treatment of breast cancer (Bernardo, Abt, Ren, & Bender, 2010). The ability to self-pace, while meeting daily physical activity needs, helps to make exercise an obtainable goal (Bernardo et al., 2010). An earlier study by Mock et al. (1997) indicated that patients undergoing radiation therapy for breast cancer benefited from a self-paced walking program. In addition, clear evidence showed that exercise during treatment for breast cancer mitigates fatigue (Mock et al., 2001, 2005). Exercise guidelines for cancer survivors, as identified in the Roundtable Consensus Statement by the American College of Sports Medicine, gave additional credence to address exercise as a response to fatigue (Schmitz et al., 2010). The guidelines are designed to address the needs of patients with cancer, including treatment, conditions predating treatment, and the results of cancer. No specific risks are associated with cancer treatments when survivors exercise. Conversely, consistent evidence shows that exercise during and after treatment is safe (Schmitz et al., 2010).

Adapting a Self-Pace Walking Program

A multidisciplinary team of nurses, a medical oncologist, a physical therapist, and hospital wayfinding specialist met to explore ways to adapt the intervention to the environment of the clinical cancer center. A commitment was made to develop a process that would encourage the increased use of exercise as an intervention to manage cancer-related fatigue. Congruent with the theory of self-efficacy (Haas, 2000), the group wanted to design an intervention that focused on education, encouragement, and engaged walking behaviors during treatment appointments.

The clinical cancer center had a natural path on the clinic-level floor that was square (with rounded corners). Before clinical areas could be adapted, certain questions needed to be addressed: "Could we ensure that adequate safety measures were in place to help patients who needed assistance while they were walking?" "Would we be able to find patients who were walking if they were being called to be roomed for an appointment?" "Could nurses encourage patients to walk without a provider's order?" After a multidisciplinary discussion, the consensus was yes to each of the questions. The remaining question became how to define the patients for whom nurses could initiate a walking program without provider collaboration. The following criteria were agreed on: receiving adjuvant therapy for breast cancer, hemoglobin and hematocrit within normal limits, afebrile, no known metastatic disease, no cognitive impairments, speaks English, and has a Karnofsky Performance Scale score of 90-100. Patients who did not meet the criteria would be reviewed by their healthcare provider before being encouraged to use the walking track. Patients with poor functional status would be referred to the rehabilitation team to assist in personalizing an activity program.

Implementing "On the Move"

Prior to its opening, "On the Move" was chosen as the walking program's name based on staff suggestions. Small environmental adjustments were made, including the installation of signage and additional benches along the path to allow patients to stop and rest if they became fatigued. A pamphlet was designed for nurses to review with the appropriate patients. Internal publicity was completed, and a ribbon-cutting ceremony was held. The walking track opened with great enthusiasm in November 2011. Eligible patients from all cancer clinics may use the walking track. Patient pagers also are available at all clinic reception desks for those who wish to walk while waiting. A check-in desk is located in an area near the track with a wellness kiosk and a staff member always available. Patients are urged to wear comfortable, supportive shoes and walk at a normal, relaxed pace. A backpack is available at check-in, which allows patients to comfortably carry personal belongings while walking. Patients are advised that five complete trips around the square equal about one mile.

Challenges

Many lessons were learned about implementing and sustaining change. During the first 12 months, more than 100 people used the walking track multiple times. In a subsequent review, these numbers decreased. Not all patients checked into the program at the designated kiosk site; however, patients were using the walking track on any given day. Therefore, the number of patients checking in did not reflect the actual use.

Change in clinic staff included the need to explain the program details to new employees and help them incorporate it into their assessment and teaching. All programs need a champion with access to potential users on a daily basis. When a key nurse champion of the program retired, a decrease in users of the program was noted. Although the information was originally presented at a staff meeting, no ongoing reorientation about the program occurred. Although nurses have been completing the fatigue assessment, they also need to know that an activity recommendation should be made for each patient prior to the initiation of treatment. This discussion is now prompted by the EHR, along with the opportunity for documentation in the oncology assessment flow sheet. Another complication regarding use of the walking track was the unforeseen problem of not having the colorful and informative brochure available for almost one year. This has since been corrected, and nurses have a visual teaching tool to provide to the patient.

Lessons Learned

Important components are needed to keep such a program on track, including team support, ongoing staff and patient education, exercise recommendations, clinic champions responsible for orientating new staff members and ensuring written materials are available, exercise alternatives for patients who cannot use the walking track, incentive programs, and periodic reviews to identify barriers and concerns. Potential nursing research questions have evolved as a result of this intervention. Do patients who use the walking track report decreased fatigue? Do patients who become active during treatment stay active after treatment? Would organizing groups of walkers increase regular activity during and after treatment? Further work is needed to enhance the evidence base of fatigue management interventions.

Conclusion

Participation in the BCC Measures pilot study verified a known clinical need and allowed response to an identified practice gap. Standard measure sets were used as the foundation to direct changes in nursing practice. These changes affected multiple cancer clinics and are now woven into the

Implications for Practice

- Establish the integration of fatigue as a standard in every nursing assessment completed.
- Offer all patients easily available and reasonable interventions for exercise.
- Collaborate with the multidisciplinary team to develop and sustain effective interventions.

fabric of all oncology nursing assessments. The EHRs now provide an oncology nursing documentation flow sheet that includes fatigue and sleep disturbances. The Distress Thermometer tool has become a standard part of nursing assessment (NCCN, 2013). Documentation of assessment criteria is now visible to all departments in the clinical cancer center; however, advising patients of available resources remains a challenge. Participation in the development and review of standards resulted in the professional growth of staff, program enhancements, and most importantly, perceived improvement in clinical outcomes and satisfaction.

The authors gratefully acknowledge Kristen Fessele, PhD, RN, AOCN®, Kathleen Ptacin, BSN, RN, OCN®, CBCN®, Kristen Koebele, BSN, RN, CBCN®, Christopher Chitambar, MD, Tamara Chase, RTRM, Sue Derus, MA, Tina Curtis, MSN, MBA, RN, NEA-BC, Paul Wendelberger, BFA, MBA, and the providers and staff of the Breast Care Center for their sustained support in making the walking track a reality.

References

- Bernardo, L.M., Abt, K.L., Ren, D., & Bender, C. (2010). Self-reported exercise during breast cancer treatment. *Cancer Nursing*, *33*, 304–309. doi:10.1097/NCC.0b013e3181cdce2c
- Eaton, L.H., & Tipton, J.M. (Eds.). (2009). Fatigue. In *Putting Evidence Into Practice: Improving oncology patient outcomes* (p. 153). Pittsburgh, PA: Oncology Nursing Society.
- Haas, B.K. (2000). Focus on health promotion: Self-efficacy in oncology nursing research and practice. Oncology Nursing Forum, 27, 89-97.
- Mock, V., Dow, K.H., Meares, C.J., Grimm, P.M., Dienemann, J.A., Haisfield-Wolfe, M.E., . . . Gage, I. (1997). Effects of exercise on fatigue, physical functioning, and emotional distress during radiation therapy for breast cancer. *Oncology Nursing Forum*, 24, 991-1000.
- Mock, V., Frangakis, C., Davidson, N.E., Ropka, M.E., Pickett, M., Poniatowski, B., . . . McCorkle, R. (2005). Exercise manages fatigue during breast cancer treatment: A randomized controlled trial. *Psycho-Oncology, 14*, 464–477. doi:10.1002/pon 863
- Mock, V., Pickett, M., Ropka, M.E., Muscari Lin, E., Stewart, K.J., Rhodes, V.A., . . . McCorkle, R. (2001). Fatigue and quality of life outcomes of exercise during cancer treatment. *Cancer Practice*, *9*, 119-127.
- National Comprehensive Cancer Network. (2013). NCCN Clinical Practice Guidelines in Oncology: Distress management [v.1.2013]. Retrieved from http://www.nccn.org/professionals/ physician_gls/pdf/distress.pdf

National Comprehensive Cancer Network. (2014). NCCN Clinical

Practice Guidelines in Oncology: Cancer-related fatigue [v.1.2014]. Retrieved from http://www.nccn.org/professionals/ physician_gls/pdf/fatigue.pdf

Schmitz, K.H., Courneya, K.S., Matthews, C., Demark-Wahnefried,W., Galvão, D., Pinto, B.M., . . . Schwartz, A.L. (2010). AmericanCollege of Sports Medicine roundtable on exercise guidelines for

cancer survivors. *Medicine and Science in Sports and Exercise*, *42*, 1409–1424. doi:10.1249/MSS.0b013eOc112

Stricker, C.T., Drake, D., Hoyer, K.A., & Mock, V. (2004). Evidencebased practice for fatigue management in adults with cancer: Exercise as an intervention. *Oncology Nursing Forum*, 31, 963–976. doi:10.1188/04.ONF.963-976