

■ *CJON* Writing Mentorship Article

Getting Patients Active: Using National Data to Drive Practice

Leah A. Scaramuzzo, MSN, RN-BC, AOCN®, Janet Gordils-Perez, MA, RN, ANP-BC, AOCNP®, and Patsy McGuire Cullen, PhD, PNP-BC



© monkeybusiness images/iStock

Data from a National Cancer Institute–designated comprehensive cancer center taking part in the ONS Foundation–supported Breast Cancer Care Quality Measures Set pilot study revealed a lack of interventions recommended for patient-reported symptoms of fatigue. A team was formed to address the issue using the steps of the evidence-based practice process and to implement practice changes. This article describes the barriers and challenges faced, in addition to the integration of exercise resources into patients' plans of care. The authors describe the curriculum for staff education regarding the practice change, implementation of an evidence-based fatigue assessment and interventions, and methods to integrate these resources into patient care.

Leah A. Scaramuzzo, MSN, RN-BC, AOCN®, was, at the time of this writing, the associate director of nursing and patient education at Rutgers Cancer Institute of New Jersey in New Brunswick and currently is a nurse clinician II in the inpatient cancer care unit at Billings Clinic in Montana; Janet Gordils-Perez, MA, RN, ANP-BC, AOCNP®, is the executive director of nursing at Rutgers Cancer Institute of New Jersey; and Patsy McGuire Cullen, PhD, PNP-BC, is a professor and director of the doctoral and nurse practitioner programs at Regis University in Denver, CO. 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 authors were participants in the *Clinical Journal of Oncology Nursing (CJON)* Writing Mentorship Program. Cullen received honorarium from the Oncology Nursing Society for her role as a mentor in the *CJON* Writing Mentorship Program. 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. Scaramuzzo can be reached at leahscaramuzzo@gmail.com, with copy to editor at CJONEditor@ons.org. (Submitted March 2014. Revision submitted May 2014. Accepted for publication May 30, 2014.)

Key words: fatigue; exercise; breast cancer care

Digital Object Identifier: 10.1188/14.CJON.S2.41-43

The ONS Foundation–supported Breast Cancer Care (BCC) Quality Measures Set pilot study examines evidence-based assessment and interventions for common symptoms (e.g., distress, fatigue, sleep-wake disturbance, nausea and vomiting, neutropenia) experienced by patients with breast cancer with stages I–IV disease receiving IV chemotherapy (Fessele, Yendro, & Mallory, 2014). The Putting Evidence Into Practice (PEP) initiative from ONS (Eaton & Tipton, 2009) was used as the basis for the measures. Clinical sites throughout the United States took part in the BCC Measures pilot study, representing a diverse sample of practice settings (academic centers, ambulatory facilities, community hospitals, and private practices in urban, suburban, and rural areas) throughout a wide geographic area to ensure applicability of the measures to multiple practice types.

In an outpatient setting at Rutgers Cancer Institute of New Jersey, a National Cancer Institute–designated comprehensive cancer center, nurses agreed to participate in this quality mea-

asures project for several reasons, including an opportunity to work with ONS and the Joint Commission, the ability to work with other nurses across the United States to benchmark best practices, and for the opportunity to improve nursing practice to achieve the highest quality care and best patient outcomes. Similar to other clinical sites participating in the BCC Measures pilot study, initial results revealed a low score in the measure of interventions for fatigue at Rutgers Cancer Institute of New Jersey. Analysis of the institutional data revealed that inadequate interventions were being recommended by the healthcare team for patients reporting symptoms of fatigue.

Intervention

The steps for implementation of the evidence-based practice (EBP) problem-solving approach, as described by Melnyk, Fineout-Overholt, Stillwell, & Williamson (2010), were used as a guide for this project. The first step was to ask the clinical question using the PICO format, a mnemonic for the key

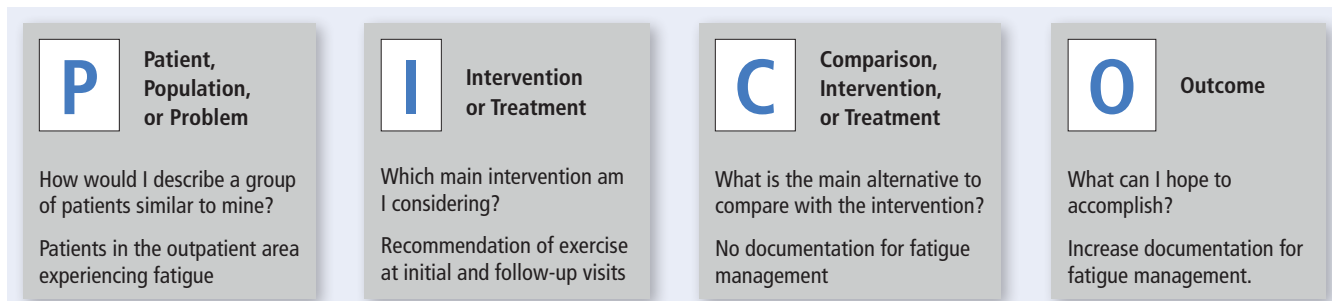


FIGURE 1. Tips for Building and Examples of the PICO Methodology

Note. Based on information from Stillwell et al., 2010.

components of a well-focused question (see Figure 1). The issue identified was that, for patient-reported fatigue, a low proportion received an exercise recommendation. Following the EBP problem-solving approach (Melnyk et al., 2010), a team was formed that included a nurse educator, the director of nursing services, a social worker, and a research nurse clinician. However, because of work commitments, time constraints, and inadequate staffing, the social worker resigned from the team. The remaining members continued the project with the goal of generating more interest in the issue from other healthcare workers.

Problem Identification

The team examined the current practice at Rutgers Cancer Institute of New Jersey for the assessment of fatigue, implementation of interventions, and documentation of nursing practice. The electronic medical record was used effectively to document fatigue measured by the medical health technician using a scale from 0 (no fatigue) to 10 (greatest fatigue imaginable) during each patient visit. The institute had adapted the fatigue measurement as the sixth vital sign in 2009. The team identified that the nursing documentation for fatigue in the infusion area was comprehensive and identified onset, duration, relieving factors, aggravating factors, and effect on activities of daily living. A plan of care for fatigue was in place in the institution's nursing documentation, with exercise listed as one of the recommended interventions (see Figure 2). Therefore, the necessary documentation resources were available. However, it was obvious that not all nursing departments consistently noted the fatigue assessment or recommended and documented specific interventions to manage fatigue. This led to various questions.

- Why are nurses not documenting fatigue interventions?
- Why are they not recommending exercise as an intervention being that it has been shown to help fatigue?
- Do nurses know what resources to recommend in helping patients manage fatigue?
- Do they know why it is important to recommend exercise for fatigue?

These questions helped the team to remain focused, because the emphasis of this change project (change in documentation of fatigue interventions) was the recommendation of the exercise intervention, not the assessment of fatigue.

Evidence-Based Practice

The team reviewed *Putting Evidence Into Practice: Improving Oncology Patient Outcomes* (Eaton & Tipton, 2009) as well as the ONS PEP resource on fatigue (www.ons.org/practice-resources/pep/fatigue) and noted that exercise was the only evidence-based intervention for fatigue that was recommended for practice. A review of published literature revealed a number of publications relevant to the project. In particular, Jankowski and Matthews (2011) reported the benefits of exercise, including improved aerobic fitness, muscular strength, flexibility, reduced body fat, increased lean muscle mass, and reduced fatigue in a systematic review of available research regarding patients with breast cancer. Another benefit of exercise was the effects on risk reduction in cancer recurrence for prostate, breast, and colorectal cancers (Haydon, Macinnis, English, & Giles, 2006; Holick et al., 2008; Kenfield, Stampfer, Giovannucci, & Chan, 2011). The team agreed that educating nurses to recommend exercise and getting patients to adhere to daily physical activity are critical.

- Determine rate of fatigue and impact on ability to participate in desired activities.
- Assess for potential etiologic factors and dialogue with the doctor or nurse practitioner on appropriate interventions.
- Recommend exercise or increase activity level as tolerated.**
- Review energy conservation and activity management interventions.
- Provide/review with patient information from the patient education intranet site.
- Review measures patient can use to optimize sleep quality, such as relaxation and avoiding long or late naps.
- Refer to social work department for relaxation training and stimulus control therapy.
- Dialogue with the doctor or nurse practitioner regarding correction of anemia with erythropoiesis-stimulating agents.
- Dialogue with the doctor or nurse practitioner regarding management of fatigue related to medication regimen.

FIGURE 2. Plan of Care for Fatigue: Recommended Nursing Interventions

Note. Courtesy of Rutgers Cancer Institute of New Jersey. Used with permission.

Application to Practice

Jankowski and Matthews (2011) identified several resources for exercise “prescriptions” that detail the recommended mode, duration, frequency, and intensity. The American College of Sports Medicine (ACSM) website (http://members.acsm.org/source/custom/Online_locator/OnlineLocator.cfm) includes a list of certified cancer exercise trainers in each state. The team at Rutgers Cancer Institute of New Jersey identified contacts in the state, confirmed contact information, and met with each trainer. The team then developed a referral list and uploaded this information to the institution’s intranet to ensure easy accessibility for clinicians.

In addition, Livestrong™ at the YMCA offers a free 12-week program for patients with cancer. Included on their website are programs and contact information categorized by state. The team confirmed contact information, met with each representative throughout New Jersey, and developed brochures about the programs containing current contact information. Brochures were placed in the patient waiting areas and uploaded to the institution’s intranet for clinicians to access when referring patients to the program.

Jankowski and Matthews (2011) also developed a patient education document titled *General Exercise Guidelines for Cancer Survivors*, which includes a step-by-step approach to begin a walking program and track progress with a log. This document also was uploaded to the institution’s intranet for staff to access and use as a tool when educating patients about fatigue management.

Once the team reviewed the evidence and identified the specific changes they wanted to make, the change process was developed. Educational sessions were held for the infusion, research, advanced practice, and clinic nurses. Data were shared with the staff about the BCC Measures, and all were taught about the new resources available as well as the rationale for the exercise intervention. During these sessions, the staff collaboratively developed methods to integrate the resources into patient care.

Outcomes

Research nurses identified that adding the fatigue plan of care to their documentation would be a trigger for them to include education about fatigue management interventions. This modification was then implemented in their electronic medical record documentation.

Contact was made with the hospital’s fitness center, which happened to employ an ACSM-certified trainer. Discussions occurred about the feasibility of developing and implementing a cancer rehabilitation exercise program with clear methods of referral embedded in the electronic medical record. A protocol was submitted to and approved by the institutional review board to evaluate the feasibility of an integrated structured exercise program for cancer survivors receiving adjuvant chemotherapy for stages II–III breast and colorectal cancer to improve physical function of patients, reduce treatment-related side effects, and improve quality of life in patients. Future directions include an audit of chart entries to verify chart documentation of exercise recommendations in managing fatigue as well as

Implications for Practice

- ▶ Educate patients and their families about the importance of exercise for fatigue management and prevention of cancer recurrence.
- ▶ Consider participating in national quality projects to enhance professional development and ultimately improve patient care.
- ▶ Continue to remain updated about evidence-based practice symptom management interventions and incorporate them into daily practice.

data collection regarding the number of referrals to the cancer rehabilitation exercise program.

Conclusions

Nurses should consider taking the lead in making practice improvements based on evidence. Nurses must understand the necessity of screening and delivery of effective interventions designed to reduce fatigue in patients with cancer. Exercise resources identified in the BCC Measures pilot study can be adapted to any geographic area and then incorporated into each patient interaction, providing the best quality care.

References

- Eaton, J., & Tipton, J. (2009). *Putting Evidence Into Practice: Improving oncology patient outcomes*. Pittsburgh, PA: Oncology Nursing Society.
- Fessele, K., Yendro, S., & Mallory, G. (2014). Setting the bar: Developing quality measures and education programs to define evidence-based, patient-centered, high-quality care. *Clinical Journal of Oncology Nursing*, 18(Suppl.), 7-11. doi:10.1188/14.CJON.S2.7-11
- Haydon, A., Macinnis, R., English, D., & Giles, G. (2006). Effect of physical activity and body size on survival after diagnosis with colorectal cancer. *Gut*, 55, 62-67.
- Holick, C.N., Newcomb, P.A., Trentham-Dietz, A., Titus-Ernstoff, L., Bersch, A.J., Stampfer, M.J., . . . Willett, W.C. (2008). Physical activity and survival after diagnosis of invasive breast cancer. *Cancer Epidemiology, Biomarkers and Prevention*, 17, 379-386.
- Jankowski, C., & Matthews, E. (2011). Exercise guidelines for adults with cancer. *Clinical Journal of Oncology Nursing*, 15, 683-686. doi:10.1188/11.CJON.683-686
- Kenfield, S., Stampfer, M., Giovannucci, E., & Chan, J. (2011). Physical activity and survival after prostate cancer diagnosis in the health professionals follow-up study. *Journal of Clinical Oncology*, 29, 726-732.
- Lillington, L., Scaramuzzo, L., Friese, C., Sein, E., Harrison, K., LeFebvre, K.B., & Fessele, K. (2013). Improving practice one patient, one nurse, one day at a time. *Clinical Journal of Oncology Nursing*, 17, 584-587. doi:10.1188/13.CJON.584-587
- Melnik, B., Fineout-Overholt, E., Stillwell, S.B., & Williamson K.M. (2010). Evidence-based practice: The seven steps of evidence-based practice. *American Journal of Nursing*, 110, 51-53.
- Stillwell, S.B., Fineout-Overholt, E., Melnyk, B., & Williamson K.M. (2010). Asking the clinical question: A key in evidence-based practice. *American Journal of Nursing*, 110, 58-61.