Palliative Care Services on an Adult Inpatient Oncology Unit

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Palliative Care Services on an Adult Inpatient Oncology Unit

Heather E. Barger

B. S. Nursing, Saint Louis University, 2015

A Dissertation Submitted to The Graduate School at the University of Missouri- St. Louis in partial fulfillment of the requirements for the degree Doctor of Nursing Practice with an emphasis in Family Nurse Practitioner

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Abstract

**Problem:** Palliative care (PC) services are widely underutilized for patients with cancer, partly due to the shortage of PC specialists. Additionally, many Americans have not filled out advance directive (AD) paperwork which is commonly addressed in PC. In the absence of an AD, cancer patients are at risk of receiving undesired aggressive treatments in the event they are unable to make decisions independently.

**Methods:** This quality improvement pilot initiative utilized a descriptive observational design to evaluate the number of ADs documented in the electronic health record (EHR) on an inpatient oncology unit. A retrospective EHR review was used to collect baseline comparison data. A prospective EHR review was performed after the implementation of visual aids, daily reminders, and audit tools for nurses.

**Results:** Chart review of 70 patients before implementation showed 21 patients (30%) had ADs documented. After implementation, a chart review of 80 patients showed 33 patients (41.3%) had ADs documented. Pre-implementation, 42 patients (60%) were screened for ADs at the time of admission. The number of patients screened increased to 73 patients (91.3%) in the post-implementation group. A Chi-square test of independence between screening for AD and documentation of AD was statistically significant ($p < .001$).

**Implications for Practice:** Implementation of visual aids, daily reminders, and audits improved nurses’ awareness of patients without AD paperwork. The findings of this study suggest several approaches could be implemented by nurses regarding PC services and the importance of ADs.
Palliative Care Services on an Adult Inpatient Oncology Unit

People are living longer due to advances in medical technologies and treatment options with serious and chronic illnesses becoming more prevalent in the United States. More specifically, people with cancer are living longer due to improved treatments. The Institute of Medicine’s (IOM) landmark publication *Dying in America* specified the aging population, limited access to care, and the fragmented healthcare system as key factors in the poor quality of life often experienced by patients near the end of life (IOM, 2015). Much focus has been placed on curing the disease rather than improving quality of life, which has led to burdensome treatments, costly interventions, and prolonged suffering in patients with serious diseases (Center to Advance Palliative Care [CAPC], 2019). Cancer patients often endure unrelieved symptoms such as chronic pain, fatigue, dyspnea, anxiety, and depression (Chow & Dahlin, 2018). Palliative care (PC) services may greatly improve the quality of life for seriously ill patients but are often underutilized or implemented too late in the disease progression (CAPC, 2019). The underutilization of PC services may be partially due to the lack of education about the differences between PC and hospice.

The American Society of Clinical Oncology published guidelines supporting the introduction of PC services early after diagnosis of cancer and concurrently with ongoing treatment (Ferrell et al., 2017). PC aims to improve quality of life through pain and symptom management, psychosocial and spiritual support, and assistance for family members. When PC is integrated into oncology practice, patients experience improved symptom control, fewer undesirable aggressive treatments, fewer hospitalizations, and
less caregiver burden among family caregivers (Evans et al., 2019; Hobden et al., 2021; Sedini et al., 2022).

The World Health Organization (WHO) recognizes PC as a basic human right, but the growing number of patients in need of PC services poses a challenge: the workforce of PC specialists is not large enough to provide quality care to all who would benefit (WHO, 2020). The prevalence of serious illness is expected to increase by 20% over the next two decades, with an estimated shortage of 18,000 PC specialists (Kamal et al., 2019). Training an additional 18,000 clinicians to become PC specialists is not feasible nor cost-effective. Nurses represent the largest group of providers in the healthcare workforce and spend the most time with patients, which places nurses in the ideal position to provide quality palliative services. In addition, PC and hospice is one of the four spheres of care listed in the American Association of Colleges of Nursing’s (AACN’s) Essentials for Professional Nursing document (AACN, 2021). However, PC education provided in nursing programs varies widely and many nurses are not confident in their abilities to provide high-quality PC services (de Campos & Walsh, 2021; Ferrell et al., 2018; Parajuli & Hupcey, 2021).

One important component of healthcare typically addressed by PC specialists is advance care planning (ACP), including assisting patients in the creation of advance directive (AD) paperwork. ADs specify the patient’s treatment preferences and wishes for future care in the event he or she is no longer able to make decisions independently (Izumi et al., 2019). Family members are often faced with making difficult decisions in the absence of an AD. Furthermore, less than one-third of Americans have a documented AD (Auriemma et al., 2020). According to the National Cancer Institute, all adults ages
18-years and older should specify their wishes through AD paperwork prior to becoming ill (National Cancer Institute, 2021).

In a large suburban hospital’s adult oncology unit, there was an opportunity to improve the number of ADs documented in the electronic health record (EHR). The purpose of this project was to evaluate the number of ADs documented in the EHR. The aim was to increase the number of ADs documented in those who are inpatients on an oncology unit by 20% over three months. The primary outcome measure was documented ADs. Secondary outcomes included pastoral care and palliative consultations. The Iowa Model of Evidence-Based Practice guided this project and the question for study was: In adults 18-years and older who are inpatients in an oncology unit, how does a nursing consultation to pastoral care affect the number of ADs documented when compared to palliative consultations?

**Literature Review**

A comprehensive search of the literature was conducted to examine current trends in registered nurses providing PC interventions, including discussion of ADs. A systematic search of the databases CINAHL, PubMed, Medline, and the Cochrane Library was performed. Key search terms included *palliative care*, *nurse*, *nursing*, *advance directive*, *cancer*, and *oncology*. The search strategy utilized the Boolean operators AND and OR and was carried out identically in each database. The initial number of publications generated was 9,886. Inclusion and exclusion criteria were then applied to further refine the search. Inclusion criteria were studies including adults aged 18-years and older, studies conducted in acute inpatient settings, studies published within the past five years, and publications written in English. Exclusion criteria were studies
including children aged 17-years and younger, studies conducted in outpatient or emergency department settings, studies published more than five years ago, and publications written in languages other than English. After applying these criteria, 103 publications were generated. An ancestry method was utilized, which produced three additional studies not initially included. Of the 106 publications identified, 14 were appropriate and selected for this literature review. Of these publications, one was a systematic review, four were case series studies, one was a cross-sectional study, two were mixed methods studies, one was a qualitative meta-synthesis, four were qualitative descriptive studies, and one was an expert consensus.

Many of the reviewed publications recognized an imbalance in the demand for PC services and the relatively small number of PC specialists available to provide those services. In general, quality of life in America is impacted by the aging population and the increasing prevalence of chronic diseases (Mazanec et al., 2020; O'Connor et al., 2020; Sekse et al., 2018). Even individuals without serious diseases can be affected when a family member is ill and requires caretaking. The purpose of PC is to improve the quality of life for seriously ill patients and their loved ones, through education, advocacy, and collaboration. However, access to specialty PC varies and is often offered too late in the disease progression to be beneficial (Downing et al., 2016; Evans et al., 2019; Mazanec et al., 2020).

Several studies recommended educating staff nurses about PC topics as a strategy to improve access to beneficial PC services without overwhelming the small number of PC specialists (Downing et al., 2016; Engel et al., 2021; Mazanec et al., 2020; Sekse et al., 2018). Nurses are well-positioned to provide routine PC services because they spend
the most time with patients, build trusting relationships with patients and family members, advocate for patients, and coordinate care (de Campos & Walsh, 2021; Dowling et al., 2020; Sekse et al., 2018). Nurses already possess the necessary skills to incorporate palliative interventions in their daily care of patients. Furthermore, nurses are skilled in therapeutic communication, which is necessary to initiate meaningful goals of care conversations, help patients express their care preferences, and provide education about PC topics (de Campos & Walsh, 2021; Dowling et al., 2020; Parajuli & Hupcey, 2021).

Among the studies which supported PC provided by nursing staff, the need to further educate nurses was a common recommendation. Since undergraduate nursing programs vary in the amount and quality of PC education provided, nurses cannot be expected to provide primary PC without further education (de Campos & Walsh, 2021; Harden et al., 2017; Mazanec et al., 2020; Parajuli & Hupcey, 2021). A descriptive cross-sectional study concluded that most nurses feel ill-prepared to communicate about care preferences and initiate conversations about goals of care (de Campos & Walsh, 2021). Additionally, a qualitative study involving oncology nurses found that most nurses lack training in PC and often feel unprepared to provide palliative services (Parajuli & Hupcey, 2021). Parajuli and Hupcey (2021) surveyed oncology nurses and reported that the majority of those nurses incorrectly believed PC was synonymous with end-of-life care and could not be provided along with curative treatments. While most nurses have a general understanding of PC, comprehensive and formal education about PC topics is lacking.
Multiple studies focused on the benefits of providing further education to staff nurses regarding core PC topics and skills (Downing et al., 2016; Harden et al., 2017; Izumi et al., 2019; Mazanec et al., 2020). Downing et al. (2016) utilized a pre-/post-education assessment to quantify nurses’ confidence levels in providing PC. After receiving PC education, nurses’ confidence levels and competence in 13 PC topics significantly increased (Downing et al., 2016). Similarly, Harden et al. (2017) used a pre-/post-test design to measure nurses’ knowledge, attitudes, and behaviors regarding PC topics. After implementation of a four-hour educational session, the researchers reported statistically significant increases in nurses’ knowledge, attitudes, and behaviors (Harden et al., 2017). Newly graduated nurses, as well as experienced nurses, have been shown to benefit from additional PC education.

ACP has been identified as one area of specialty PC in which most nurses lack knowledge and confidence in providing (Dowling et al., 2020; Hobden et al., 2021; Izumi et al., 2019; Sedini et al., 2022). ACP supports the creation of ADs and the specification of care preferences to maximize patient self-determination, autonomy, and person-centered care (Hobden et al., 2021; Sedini et al., 2022). The belief that patients do not want to discuss their preferences and goals of care is a common misperception among nurses. However, most patients who participated in a recent study welcomed the opportunity to discuss their wishes (O’Connor et al., 2020). Current literature recognizes inadequate knowledge as the main barrier to completion of ADs (Dowling et al., 2020; McDonald et al., 2017).

Participation in ACP and creation of ADs have demonstrated numerous benefits for patients, family members, and healthcare providers. Patients with documented ADs
have fewer preventable hospitalizations and hospital deaths, fewer intensive care admissions, fewer aggressive life-prolonging interventions, and improved concordance between their wishes and the care provided (Hobden et al., 2021; McDonald et al., 2017; Sedini et al., 2022). Family members and loved ones experience less caregiver stress, depression, and anxiety when the patient has an AD in place to specify their wishes (Dowling et al., 2020; Sedini et al., 2022). Although not commonly researched, healthcare providers have reported less moral distress when caring for seriously ill patients near the end-of-life when an AD is available (Hobden et al., 2021).

The benefits of ACP and ADs, in combination with inadequate education, necessitate further ACP education for staff nurses. Izumi et al. (2019) evaluated the effects of a brief 30-minute educational session for nurses about ACP topics. After the education, nurses’ confidence levels in leading ACP discussions improved, and their perceptions of barriers, such as lack of knowledge and skills, decreased significantly (Izumi et al., 2019). Additional studies reported increased numbers of ACP conversations as a result of nursing education (Evans et al., 2019; Harden et al., 2017). Although ACP is only one component of specialty PC services, staff nurses have the potential to greatly impact patients’ quality of life through ACP discussions and assistance in creating ADs.

The Iowa Model of Evidence-Based Practice was selected as the framework to guide this QI pilot project. The Iowa Model is frequently utilized to aid clinicians in decision-making processes. Specifically, trigger questions and feedback loops ensure each step of the decision-making process is appropriate and allow changes to be made if necessary (Dang et al., 2019). The Iowa Model was chosen for this project because the
context and evidence are evaluated several times during the implementation of a practice change, which improves the likelihood of sustainable success.

Numerous professional organizations recognize the many benefits of PC services, but the delivery of PC remains inconsistent (AACN, 2021; IOM, 2015; WHO, 2020). The need for clinicians who are knowledgeable and confident in providing PC is only expected to increase in the coming years. Since the number of PC specialists is small, other options to improve patients’ quality of life must be considered. Educating nurses to provide PC services has the potential to greatly improve access to PC. Furthermore, education focused on ADs can improve nurses’ confidence levels in discussing care preferences, educating patients, and advocating for patients’ wishes to be upheld.

Methods

Design

This QI pilot project utilized a descriptive observational design. A retrospective EHR review occurred from October 1, 2021, through December 31, 2021, to obtain baseline data for the number of ADs documented. A prospective EHR review occurred from February 1, 2022, through April 30, 2022, after implementation of the project.

Setting

The setting was a 28-bed adult inpatient oncology unit located in a medium-sized, suburban Midwestern hospital serving 70,000 residents. The hospital has over 300 beds and employs approximately 1,500 staff members. Approximately 400 of these staff members are registered nurses and 10 are chaplains with pastoral care. Typically, one chaplain is present in the hospital each day.
Sample

A convenience sample of inpatient adults with cancer was used. Inclusion criteria were at least 18-years of age and admitted to the oncology unit with a cancer diagnosis. Exclusion criteria were those younger than 18-years or those admitted to the oncology unit who did not have a cancer diagnosis.

Procedures

In collaboration with the executive nursing management and the PC nurse specialist at the site, a need for additional PC support for oncology patients was identified. Nurses interested in learning more about PC were provided with a narrated PowerPoint presentation. Tip sheets created by the primary investigator (PI) were also provided for reference and the information was communicated in daily huddles on the unit. Nurses were encouraged to screen every patient admitted to the unit for documentation of an AD in the EHR. If the patient did not have an AD, the nurse was instructed to place a consultation with pastoral care for assistance in filling out AD forms, which is a standing order for nurses. Charge nurses filled out an audit sheet designed to maintain focus on the project goals.

Data Collection/Analysis

The PI collected deidentified data by submitting a request to the site’s data informatics team. A report containing the deidentified data was generated for data analysis. The demographic data requested included gender, ethnicity, and age. Patient-specific data included AD documentation in the EHR, and whether pastoral care and/or palliative care were consulted. Beginning on February 1, 2022, all patients admitted to the oncology unit were screened by the PI via review of the deidentified data set for
inclusion in the study. An Excel spreadsheet was used to organize the data, and Intellectus Statistics was used to analyze the data.

Approval Processes

The executive nursing management at the site supported this QI project. Formal, written approval was obtained from the organization, the doctoral committee of graduate studies, and the Institutional Review Board (IRB) of the University of Missouri-St. Louis. The project was determined to pose no risks to participants and there were no ethical considerations to be addressed.

Results

The pre-implementation retrospective EHR review from October 1, 2021, through December 31, 2021, included 70 patients (N=70). The sample was 52.9% female (n=37) and 47.1% male (n=33). The most common ethnicity was Caucasian, comprising 75.7% (n=53) of the sample (see Table 1). In the pre-implementation group, 30% (n=21) of patients had an AD documented and 60% (n=42) were screened for AD paperwork at the time of admission to the unit. Pastoral care consultations were placed for 75.7% (n=53) of these patients and two (2.9%) patients were referred to palliative care.

The post-implementation prospective EHR review from February 1, 2022, through April 30, 2022, included 80 patients (N=80). The sample was 53.8% female (n=43) and 46.2% male (n=37). The most common ethnicity was Caucasian, making up 78.8% (n=63) of this sample (see Table 2). In this post-implementation group, 41.3% (n=33) of patients had an AD documented and 91.3% (n=73) were screened for AD paperwork at the time of admission. Pastoral care consultations were placed for 91.3% (n=73) of these patients and 5.0% (n=4) were referred to palliative care.
Chi-square tests of independence were performed to examine the relationships between pastoral care consultation, palliative consultation, and AD documentation. An alpha value of .05 was used for all statistical testing. The results of the Chi-square test of the pastoral consultation and AD documentation variables were significant, $\chi^2(1) = 6.85$, $p = .009$. The results of the Chi-Square test of the palliative consultation and AD documentation variables were not significant, $\chi^2(1) = 2.55$, $p = .110$. A Chi-square test was also performed on the variables of screened for AD and AD documentation. The results of this Chi-square test were significant, $\chi^2(1) = 11.96$, $p < .001$ (see Table 3).

**Discussion**

In this QI pilot study, documentation of ADs was used as an indicator of the effectiveness of the tools implemented. The project aimed to increase the number of documented ADs by 20% over three months. The results showed an increase in the percentage of patients with ADs in the EHR from 30% ($n=21$) in the pre-implementation group to 41.3% ($n=33$) in the post-implementation group. Although the aim was not reached, the increased number of patients with documented ADs is clinically significant. Additionally, the data did not capture any patients who may have completed AD paperwork after being discharged from the hospital.

The question of study sought to compare the effects of pastoral care and palliative consultations on AD documentation. A greater percentage of patients were referred to pastoral care in the post-implementation group than in the pre-implementation group, suggesting that visual aids, daily reminders, and audits improved nurses’ abilities to identify patients without AD paperwork and refer them to pastoral care. The results of the Chi-square test of independence between pastoral care consultation and AD
documentation were significant \((p = .009)\), which implies a relation between the two variables. Conversely, the results of a Chi-square test between palliative consultation and AD documentation were not significant \((p = .110)\), suggesting these two variables are likely independent of one another.

An unexpected finding of this study was the 31.3\% increase in patients who were screened for AD paperwork at the time of hospital admission. Post-implementation, nearly all newly admitted patients were asked about ADs. These results suggested that the interventions effectively raised awareness of the importance of completing AD paperwork and keeping a copy on file in the EHR. The results of the Chi-square test of independence between screening for AD and AD documentation were statistically significant \((p < .001)\), which supports a correlation between nurses asking about ADs and documentation of ADs.

Limitations to this QI study included difficulty obtaining necessary data throughout the study due to changes within the organization. In addition, staffing changes during implementation resulted in challenges. Recommended next steps include offering all patients with chronic illness palliative care before reaching the end of life. Offering ADs to all oncology patients admitted to the emergency department could increase the number of ADs documented. Improving the number of ADs aligns with the National Cancer Institute’s recommendation that all adults have AD paperwork completed. Another cycle of data collection, preferably for longer than three months, would be beneficial to determine the effects of documented ADs on patients admitted to an oncology unit.
Conclusion

This QI pilot initiative was successful in raising nurses’ awareness of the importance of ADs, evidenced by improved screening and increased pastoral care referrals. Nurses were provided with visual aids, daily reminders, and audit tools to encourage screening and documentation of ADs. Following the implementation, an 11.3% increase in AD documentation was observed. Furthermore, the percentage of newly admitted patients screened for AD paperwork increased from 60% of the baseline comparison group to 91.3% of the post-implementation group. The findings of this study suggest several approaches could be implemented by nurses regarding PC services and the importance of ADs.
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Table 1

Pre-Implementation Demographic Characteristics

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Note. Output obtained using Intellectus Statistics.
Table 2

*Post-Implementation Demographic Characteristics*

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*Note.* Output obtained using Intellectus Statistics.
Table 3

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*Note.* Values formatted as Observed[Expected]. Output obtained using Intellectus Statistics.