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Patient Navigation Program in Oncology Clinical Practice

Mercy George
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Walden University

College of Health Sciences

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Mercy George

has been found to be complete and satisfactory in all respects,
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the review committee have been made.

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Walden University
2018

Abstract

Patient Navigator Program in Oncology Clinical Practice

by

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MS, Thomas Jefferson University, 2006

BS, Thomas Jefferson University, 2003

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

May 2018

Abstract

Cancer diagnoses affect millions of people in the United States each year. Today, cancer patients face many challenges when trying to navigate the complex healthcare system. Patient navigation programs were developed to address and overcome barriers patients may face as they make their way through the healthcare system. The purpose of this project was to provide an analysis and discussion of the current published literature to provide evidence for improving care coordination and patient satisfaction in the oncology clinical setting with a patient navigator program. The practice-focused question for this project asked if a patient navigator program for adult cancer patients improved patient outcomes. The systematic review, guided by Watson's theory of caring, included 11 studies published between 2010 and 2017 identified through Cochrane Library, CINAHL, ProQuest, PubMed, and Joanna Briggs Institute. Initially a total of 679 articles were identified; however the number reduced by removing duplicates and after review of titles and abstracts. The remaining articles were then evaluated by the level of evidence based on the Manly and Fineout-Overholt's guide on hierarchy of evidence. The results identified in this systematic review showed patient navigation can improve care coordination and patient satisfaction. This review offers findings on the impact of cancer care coordination and patient satisfaction, which may be used by healthcare leaders when determining how to improve cancer care and as a result may provide positive social change. If the organization implements a patient navigator program, it is expected that this change would benefit patients, families, healthcare providers and the organization.

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Dedication

I would like to dedicate this systematic review to all healthcare providers, my friends, and family.

Acknowledgments

A special thanks to my families and friends for supporting me to take this journey.

Thank you to Dr. Long for her continued support, guidance and encouragement. Also thank you to Dr. Valdez and Dr. Nixon for their guidance and support.

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Section 1: Nature of the Project

Introduction

The oncology patient navigator program has had a significant impact on the delivery of cancer care over the past few decades (Pagan, 2015). Cancer diagnoses affect millions of people in the United States each year, often leading many patients to face difficult cancer treatment options. In addition to the millions of people already diagnosed, approximately 1.5 million Americans were newly diagnosed with cancer in 2012 (American Cancer Society, 2012). Due to the complex care needed for oncology patients, a patient navigator is required to help patients navigate the healthcare system. The amount of time spent on services and the type of services for cancer patients are expanding across screening, diagnosis, and treatment (Pagan, 2015).

My practicum site is a busy, hospital-based oncology clinic in the Northeast United States. According to nurse manager the clinic provides care for 30-40 cancer patients per day with approximately three to four patients seen daily who are new to the clinic. Patient navigators are recommended by the National Comprehensive Cancer Network (NCCN) guidelines and national benchmark recommendations (Pagan, 2015). At present, this clinic does not have a patient navigator program. Through this systematic literature review, the healthcare system and the practicum site will have an analysis of the current published literature to provide evidence-based recommendations for improving care coordination and patient satisfaction with a patient navigator program.

The nature of this doctor of nursing practice (DNP) project was to provide a systematic review of the literature to contribute the evidence to develop a patient

navigator program in a busy oncology clinical practice in the United States. For the purposes of this project, *systematic review* refers to a synthesis of the current literature on a topic, including but not limited to other systematic reviews. This systematic review of the literature can help the practicum site to accomplish the Institute of Medicine (IOM) mandate for safe, efficient, effective, timely, and patient centered care in a complex environment (American Association of Colleges of Nursing, 2006). The focus of this systematic review of literature was to provide an analysis of the current published literature to provide evidence-based strategies to improve care coordination and patient satisfaction through a patient navigator.

This DNP project is a systematic review of the literature, providing insights to the nursing leadership on patient navigation programs and the benefits of such programs. A patient navigation program can help connect patients to resources and supportive services, possibly leading to better patient outcomes across the continuum of care. If this review has the intended effect, the nurses at the oncology practice site for whom this review was conducted may better manage their time for direct patient care and improve quality of care after a patient navigator program is implemented.

Problem Statement

A problem exists when a patient is not receiving appropriate care in a timely manner due to lack of coordination of care (Case, 2011). In this systematic review, the problem addressed was the need for information that the site administration could use in determining whether to develop a patient navigator program for cancer patients. Although the primary interest at the clinical site was gastrointestinal cancers, I did not find

published studies or systematic reviews on gastrointestinal cancers and patient navigator programs. Because of the presence of numerous systematic reviews done for breast cancer and patient navigation programs, I chose to broaden my search to include search terms of cancer and patient navigation. Cancer patient navigation programs have been shown to improve coordination of care and timely access to care, thus improving the overall patient satisfaction with care (McMullen, 2013). Therefore, the findings of this review will still be useful for the current practice setting.

Based on an interview with the staff, I learned that the existing strategies to coordinate care for cancer patients are not effective at the practicum site. Lack of information and coordination of care during the complex phases of cancer care can create serious consequences such as delays in the initiation of treatment, which has led to poor patient outcomes at the practicum site. The coordination of care and patient outcomes may improve at the practicum site as a result of this project. The most common form of care coordination, patient navigation, was developed to address barriers to care; it has grown to address the psychosocial and physical support systems that directly improve quality of care and patient satisfaction. Gorin et al. (2017) suggested that care coordination approaches led to improvements in 81% of outcomes including increased patient outcomes, quality of life and patient satisfaction. According to the IOM (2011), cancer patients often receive poorly coordinated care in multiple settings. Poor coordination is associated with poor symptom control, high costs, poor patient outcomes and decreased patient satisfaction (Gorin et al., 2017).

Local Relevance

At the practicum site, due to the busy nature of the oncology clinic, nurse manager has expressed that the healthcare providers are unable to efficiently coordinate care in a timely manner and organize the needed care for cancer patients. Therefore, patients may not receive appropriate care in a timely fashion and may miss follow-up services due to lack of coordination. At the practicum site, the nurses are responsible for coordinating care and identifying local resources with appropriate support for the patients. Some of these aspects of care, according to nurse manager are often unattended or not done appropriately due to competing care demands on nurses' time. Because studies have shown that a patient navigator can improve timeliness of care (Cantril & Haylock, 2013), the practicum site is considering a patient navigator program to coordinate appropriate care for cancer patients.

The area of concern that this systematic review covered includes the coordination of care for cancer patients and a patient navigation program. The patient navigator's role is to ensure that patients' needs are met through individualized support, care coordination, empowerment, and advocacy (Case, 2011). The patient navigator acts as a liaison between patients, families, and healthcare providers. As a liaison, a patient navigator helps the patients and families to coordinate appointments and schedules while keeping them actively involved in the plan of care (Pagan, 2015). The patient navigator works with the patients and other interdisciplinary healthcare members within the social network of the organization and the community where the organization resides. Patient

navigation programs are patient-centered healthcare services that are effective in improving the timeliness of care (Paskett, Harrop, & Wells, 2011).

Significance to Nursing Practice

In 2013, approximately 500,000 Americans died of cancer, while another 1.5 million were faced with a cancer diagnosis (American Cancer Society, 2013). The prevalence of cancer throughout America necessitates a reevaluation of comprehensive care. Today, cancer patients face many challenges when trying to navigate the complex healthcare system. Patients are more vulnerable after the initial diagnosis of cancer (Baik, Gallo & Wells, 2016). Understanding their diagnosis and treatment options should be the priority on their minds. Due to a complex healthcare system and the multiple treatment options that patients have during the process of diagnosis and treatment, many patients either wait for a long time or do not seek treatment at all (Riley & Riley, 2016). A systematic review of literature on patient navigation programs can provide strategies to decrease delays in treatment initiation and improve patient satisfaction. The project may help the practicum site to accomplish the IOM mandate for safe, efficient, effective, timely and patient centered care in a complex environment (American Association of Colleges of Nursing, 2006).

Purpose

The purpose of this systematic literature review was to examine the benefit of a patient navigation program in outpatient oncology settings within the United States. The focus of this systematic review of the literature was to provide an analysis of the current published literature to provide evidence for improving care coordination and patient

satisfaction in the oncology clinical setting with a patient navigator program. Developing strategies that promote care coordination with the use of a patient navigator will help bridge the gap in practice, which can lead to increased patient satisfaction and patient outcomes. The results of this project may encourage nursing leadership to develop patient navigation positions and allow for improve care coordination. At present at the study site, nurses and nurse practitioners coordinate the care for cancer patients. According to nurse manager, due to lack of time the coordination and organization of care are not effective. A patient navigation program can reduce gaps in practice by improving access to care as well as provide support and guidance to patients and families through coordination of care (Riley & Riley, 2016). This project may provide insight into strategies to improve patient care and may also be a resource to other healthcare leaders who are evaluating the role of the patient navigator.

Practice-focused Question

The guiding practice-focused question for this doctoral project was: In adult cancer patients, does care management by a patient navigator improve patient outcomes?

Addressing the Practice Gap

The gap in nursing practice is due to the busy nature of the oncology clinic; the coordination of care is poorly coordinated, causing delays in treatment initiation and leads to poor patient outcomes and decreased patient satisfaction. The healthcare providers are unable to efficiently coordinate and organize the needed care in a timely manner for newly diagnosed cancer patients. At present, the care is coordinated by nurses and nurse practitioners. Due to lack of time, the coordination of care is not effective as it should be.

This project addresses the gap in practice by synthesizing relevant evidence and provides insights and suggestions on care coordination and patient satisfaction with the use of a patient navigator program. The increases in cancer diagnosis rates considerably impact the healthcare providers in the collaboration of care in the oncology population during the beginning phase to the treatment and post treatment period (Case, 2011). This project may assist in providing strategies for improving care coordination and patient satisfaction, leading to the potential for developing a patient navigation program with the result of the systematic review.

Nature of the Doctoral Project

The nature of the doctoral project was to evaluate the evidence on the benefits of a patient navigation program for newly diagnosed adult cancer patients and patients undergoing treatments such as chemotherapy. Sources of evidence used for this systematic review of literature include studies from Cochrane Library, CINAHL, Pub Med, ProQuest, and Joanna Briggs Institute (JBI). Studies on the patient navigation program for cancer patients from the years of 2010 to 2017 were included in the review. The studies used for this systematic review of literature were screened for care coordination and patient satisfaction with the use of a patient navigator. The studies that were used for this systematic review were checked for appropriateness, reliability, and validity by using the JBI's critical appraisal form. These articles were grouped into two categories of inclusion and exclusion categories.

The terms I used for the searches of pertinent databases included *cancer patients*, *patient navigation program*, *care coordination*, and *patient satisfaction*. Articles were

excluded if they were not in English, not peer reviewed, and if they were published prior to 2010. Abstracts were reviewed to determine the inclusion or exclusion status based on their relevance towards the topic. Inclusion articles were read and analyzed. All inclusion articles were subjected to JBI's critical appraisal checklist for systematic reviews.

Systematic Review of Literature

A collection of evidence-based articles for the preparation of the literature review consisted of peer-reviewed nursing and health database electronic resources. Databases and repositories including Cochrane Library, CINAHL, ProQuest, Pub Med, JBI evidence-based practice (EBP) database, and references of studies were used to search relevant studies. The data were searched from the years between 2010 through 2017.

Summarized Approach

The incorporation of best practices generated from research promotes EBP to help with guiding decision-making and implementing healthcare programs (Schaffer, Sandau, & Diedrick, 2012). After a review of the literature, I determined that there is enough evidence to support the patient navigation program as an effective intervention to improve coordination of care and increase patient satisfaction in cancer patients. The literature was organized using the Walden University Literature Review Matrix (Walden University, 2010).

The purpose of this DNP project was to provide a review, analysis, and discussion of the current relevant literature for evidence that may improve care coordination and patient satisfaction in the oncology clinical setting. The objective of this systematic literature review was to synthesize the best available evidence on the effectiveness of a

patient navigator program on patient satisfaction and care coordination. This project may help with coordination of cancer care and improve patient outcomes and were presented to the clinical practice site for use in the development of a patient navigator program.

Significance

Through this systematic literature review, I identified gaps in practice by synthesizing the best available evidence on the effectiveness of a patient navigator program on patient satisfaction and care coordination. Several stakeholders may be impacted by this project. This literature review provides guidance for the healthcare providers and how providers are able to deliver high quality care with the support of a patient navigation program. The primary stakeholders are the healthcare providers in the oncology clinic including physicians, physician assistants, nurse practitioners, and nurses. Other stakeholders are the administrator, social worker, and pastoral care at the practicum site. A patient navigation program may benefit healthcare providers and patients by promoting improved communication and coordination of care (American Nurses Credentialing Center, 2016). Patient navigators evaluate the individual needs of patients to coordinate educational and psychosocial support. Patient navigators also provide education and resources so that patients are not overwhelmed with complex matters. If patients are guided through diagnosis and their educational needs are met, the healthcare providers can provide safe and quality care services know that patients will have the coordination of care. The patient may receive timely access to quality health and psychosocial care throughout all phases of the cancer continuum. Patients' adherence to

treatment programs and satisfaction may improve with patient navigation programs (Case, 2011).

Potential Contributions

The potential contributions of this project include strategies that the local practice healthcare organization and nursing administrators can use to improve care coordination and patient satisfaction with a patient navigation program. A patient navigation program can contribute to nursing practice by allowing the nurses at the clinic to better focus on quality care and promote the culture of patient safety (Riley & Riley, 2016). Additionally, this may improve the coordination of care during the complex phase of cancer care and provide needed education for cancer patients. The potential contributions of this project may provide information toward patient navigation programs for similar practices. The patient navigator program has the potential to improve patient outcomes by creating a seamless flow for patients as they journey through the care continuum (Riley & Riley, 2016).

Potential Generalizability

The outcome of this systematic literature review on patient navigator programs may provide a positive example for other cancer clinics, including the hematology oncology clinic. This project focus was only for the oncology clinic setting, however, it may be transferable to other similar settings. In conjunction with other clinics, this project may help healthcare providers identify different ways to increase patient satisfaction like formulating a support group or survivorship program for cancer patients. This project

may be able to serve as a guiding force in promoting timely care of patients throughout the complex healthcare system.

Potential Implication for Positive Social Change

This project has potential implications for positive social change within the practice environment. The short-term benefit is that the clinic will have the information immediately available to inform decisions about patient navigation program development and as a result facilitate the development of such program. The long-term benefit is that the flow of information between providers and patients may be improved. Furthermore, the program may lessen the burden of patient education and permit the healthcare providers to focus on quality patient care. In 2011, the American College of Surgeon's Commission on Cancer included patient navigation services as part of its credentialing process to assure quality and comprehensive patient care (Esparaza, 2011). This program may ensure that patients receive timely information regarding diagnosis and follow up on any abnormal tests or results. Patients may be better able to navigate complicated multimodality treatment schedules and improve compliance with treatment program (Riley & Riley, 2016). Outcomes of patient navigation programs include shortened timelines from screening to diagnosis and treatment initiation and increase patient satisfaction (Cantril & Haylock, 2013).

Summary

At the practicum site, the providers are unable to efficiently coordinate and organize the needed care for cancer patients due to the busy nature of the oncology clinic. The purpose of this DNP project was to examine the benefit of a patient navigation

program in outpatient oncology clinic. This systematic review literature was an assistive tool for the development of an evidence-based patient navigation program to coordinate and organize the needed care for patients and lessen the burden of patient education and permit the nurses and healthcare providers to focus on quality patient care. A patient navigation program may contribute to nursing practice by allowing the nurses at the clinic to better focus on quality care and promote a culture of patient safety. Patients may receive timely quality care, guidance, and support through coordination of care. This project may help coordination of care that delivers the highest quality care and improves patient satisfaction.

In Section 2, I will discuss the literature search strategies along with the concepts, models, and the theories that were guided the review of the literature to outline the development of navigation programs. I will also explore the relevance of nursing practice, local background and context leading to the review of literature.

Section 2: Background and Context

Introduction

EBP is key for promoting patient health, safety, and positive outcomes. Despite continued advances across the spectrum of cancer care, the distribution of these advances remains uneven (Freund et al., 2014). Inequitable outcomes may result from delays in accessing diagnostic and treatment services by the most at-risk populations. Patient navigation programs have evolved as a strategy to improve outcomes and increase satisfaction by eliminating barriers to timely diagnosis and treatment of cancer (Freeman, 2012).

The practice problem at the oncology clinic is that due to the busy nature of the clinic the healthcare providers are unable to efficiently coordinate care in a timely manner and organize the needed care for cancer patients. Lack of coordination and organization of care can cause delays in treatment initiation and poor patient outcomes at the practicum site. The practice -focused question was “In adult cancer patients, does care management by a patient navigator improve patient outcomes?” The purpose of this systematic literature review was to examine the benefit of a patient navigation program in an outpatient oncology clinic.

Concepts, Models, and Theories

EBP improves the quality of patient care and increases patient satisfaction. There are many EBP models that exist to assist healthcare providers to integrate the best evidence into clinical practice. The primary model used to guide this systematic review is JBI’s model of evidence-based healthcare. This model is used to consider evidence-based

healthcare as decision-making that includes the feasibility, appropriateness, and effectiveness of healthcare practices (Lockwood & Munn, 2016). This process informs the best evidence available, the context in which care is delivered, and the professional expertise of the healthcare professionals.

Nursing theories help to define nursing practices, establish boundaries within the profession, and contribute to distinguishing it from other professions in caring (McEwen & Wills, 2011). The cornerstone of the nursing profession is the concept of caring (Watson, 2009). Watson's theory of caring was developed from Dr. Jean Watson's initial attempt to bring meaning to nursing. Watson's theory of caring provides the core and essential aspects of caring in nursing. Watson described a caring relationship can promote growth and accepts an individual as he or she is. Watson's theory of caring continues to evolve and expand upon the earlier works on caring (Watson, 2009).

The goals of patient navigation programs are to connect patients and families to primary care services, specialist care, provide patient centered care, identify and resolve patient barriers to care, and coordinate and organize needed care for patients (Woods & Magyary, 2010). Patient navigators have been used significantly with cancer patients. According to Woods and Magyary (2010), patient navigators have demonstrated excellent communication skills with patients, families, healthcare providers, organized coordination of care across the care continuum, and assessed patient's needs and addressed them in a timely manner to improve patient outcomes.

Robinson and Watters (2013) identified that a lack of communication and care coordination for cancer patients hindered their care and the patients did not receive the

high-quality care they needed. These patients' outcomes were poor and satisfaction level was below normal. With the implementation of a patient navigator program for cancer patients, the outcomes were improved, and patient's satisfaction with care was also improved (Robinson & Watters, 2013).

Hendren and Fiscella (2014) conducted a cluster-randomized trial of a navigator program for patients with breast and colorectal cancer. This study focused on new patients diagnosed with gastrointestinal cancers, not targeted for poor and minority patients. The outcome measures were patient-reported outcomes. Patient navigation was associated with improvements in the care experience, coordination of care, timeliness of care and support. Pedersen and Hack (2011) suggested that the use of a patient navigator can help patients and families to overcome the possible obstacles they faced during their journey through the healthcare system. Patient outcomes and overall quality of care have been improved with the use of a patient navigator (Pedersen & Hack, 2011). The careful implementation of a well-chosen framework promotes patient well-being and stimulates EBPs (Grove, Burns, & Gray, 2013). The caring theory is relevant to the goal of this project, which was to focus on improving the quality of care cancer patients receive.

Clarify Terms used in the Doctoral Project

The following terms are not commonly known to a reviewer or may have multiple meanings.

Centers for Medicare and Medicaid Service (CMS): Part of the U.S. Department of Health and Human Services that administers healthcare programs including Medicare, which is the health insurance program for seniors (CMS, n.d.).

Joanna Briggs Institute (JBI): Recognized as the global leader in evidence-based healthcare and was established in Adelaide, South Australia in 1996 (JBI, 2013).

Institute of Medicine (IOM): Also known as the future of nursing, leading change, and advancing health, is a thorough examination of how nurse's roles, responsibilities, and education should change to meet the needs of an aging, increasingly diverse population and to respond to a complex, evolving healthcare system (IOM, 2013).

Navigator: A navigator is "the one who provides information and emotional support, and link patients to other support services, and develops community support" (Riley & Riley, 2016).

Project/Program: Interchangeable term to describe this doctoral study.

Patient navigator/Nurse navigator: Interchangeable term that refers to someone who act as a liaison between patients, families and healthcare providers.

Relevance to Nursing Practice

Patient navigation is the future of care coordination, particularly within the oncology realm. The services of a patient navigator are becoming increasingly necessary to coordinate the multidisciplinary providers and complexity of care across the disease trajectory inherent in cancer treatment (Valentinio, 2013). The density of an oncology diagnosis goes far beyond the oncology clinic and often requires a multitude of steps to aid the patient in completing the treatment process. Patient navigators act as a bridge between a complex and diverse medical culture and patient cultures and help expedite diagnostic workups and provider's visits, initiate treatment, and provide emotional support (Valentino, 2013). A patient navigator may be able to connect patients and

families to primary and specialty care services, coordinate care, and identify and resolve patient barriers to care. The patient navigator may be able to help enhance the relationship between patients and healthcare providers by increasing patient satisfaction and by promoting patient centeredness in the care process (Hibbard & Greene, 2013).

Broader Problem in Nursing

In the early 1990s, patient navigation programs were introduced in the United States of America (USA) to address the barriers to cancer care. The structure and purpose of patient navigation programs vary considerably regarding patient population, program design, and implementation (Battaglia et al., 2016). There is often a lack of care continuity and comprehensiveness, and limited consideration of the broader problems of health that have profound impacts on patients' access to care and patient outcomes (Freund et al., 2014). The most important role of patient navigators is to ensure that patients are receiving timely diagnosis and treatment.

In 2015, the Commission on Cancer implemented standards specifically for the oncology patient navigation process (ASCO, 2017). However, the patient navigation program should not be implemented to only fulfill a standard, but also it is the right process to do for the patient to improve satisfaction. Riley and Riley (2014) explained the importance of patient navigation programs and their benefits of care coordination and adherence to treatment plans. Patient navigation programs are not only being applied to the broad spectrum of oncology care. They are also being applied to a variety of diseases across the United States and globally (Battaglia et al., 2016).

The Current State of Nursing Practice

The patient navigation program is an intervention designed to improve and overcome different barriers patients may face as they make their journey through the complex healthcare system. By design, the patient navigation program is a context driven intervention, but the navigators provide specific services according to the needs of their patients (Hendren & Fiscella, 2014). Cancer care and treatment is often complex, as many patients do not understand the need for prompt care. Many of these patients lack knowledge in their diagnosis as well as missing follow up appointments due to lack of education and coordination. These patients need support, coordination of care and timely initiation of treatment. Patient navigators can coordinate appointments with providers and specialists to ensure that patients receive timely diagnosis and treatment initiation. A study was done by Ali-Faisal, Colella, Jaudes and Scott (2017) found that patient navigation is an effective intervention to improve patient outcomes and completion of recommended care events. In addition, patient navigator programs increase adherence to recommended treatment.

Previous Strategies

The first navigator program was developed in response to seeing a disproportionate number of African American women presenting with the late stage of breast cancer, which Dr. Freeman attributed to the inability to access an array of cancer care service (Ali-Faisal et al., 2017). The purpose of the patient navigator program was to decrease the various barriers patient face as they make their way through the complex healthcare system. Patient navigation programs evolved from utilization review

(Shockney, 2010). In the 1970s, a nurse reviewed medical records to identify barriers to treatment or timely discharge. This identification led to hospital and professional fees being denied (Shockney, 2017). Utilization management revolved into case management by the late 1990s. Nurses identified barriers to care and were in a position to resolve these obstacles in real time. By the end of the century, case managers evolved into patient navigators. Patient navigators play a significant role in oncology care. The first patient navigators were laypersons. Their responsibilities included providing emotional support, basic patient education, and ensuring appointments and tests were completed in a timely manner.

Present Doctoral Project

Oncology care has become increasingly complex as early detection screening approaches and treatment continues to evolve. Understanding and navigating the cancer care delivery system structures can be challenging. Patient navigation programs are increasingly recognized as an essential component of comprehensive cancer care for facilitating a coordinated experience for cancer patients (Blaseg, 2015).

Local Background and Context

At the practicum site, the nurses and the nurse practitioners are responsible for coordination of care and identifying appropriate support for cancer patients. Due to lack of time and the busy nature of the clinic some of these aspects of care are not done appropriately or in a timely fashion (personal communication, April 21, 2016). The focus of this DNP project was to identify evidence-based strategies to improve cancer patients' outcome through a patient navigator. This project endeavors to make a significant impact

in patients diagnosed with cancers and will likely ease the healthcare provider's worry of coordination and organization of care to improve patient outcomes.

Institutional Context

The practicum site is a hospital-based oncology clinic in the Northeastern part of the US. There are seven physicians and three nurse practitioners in the oncology clinic that work in close collaboration with the physicians. The clinic provides care for 30-40 cancer patients per day with approximately five newly diagnosed cancer patients, who are new to the clinic (personal communication, April 21, 2016). The mission and strategic vision for the organization are "we will reimagine the organization, health education and discovery to create unparalleled value and to be the most trusted healthcare partner" (personal communication, March 30, 2017).

State or Federal Contexts

Cancer care is often complex, with many patients facing complicated cancer treatment regimens. Harold Freeman initially developed the concept of a patient navigation program in 1990 (Freeman, 2012). The fundamental goal of navigation programs is to facilitate timely access for all to quality standard care in a culturally sensitive manner.

The federal government has supported three major patient navigation initiatives. In 2005, "the Patient Navigator and Chronic Disease Prevention Act added section 340a of the Public Health Service Act (PHSA)". The National Cancer Institute's center and the ACS provided \$25 million in funding for the Patient Navigation Research Program (PNRP) to reduce cancer health disparities in 2005. In 2006, the Centers for Medicare

and Medicaid Services funded six projects through which navigation services were offered to their beneficiaries with suspected or diagnosed with cancers (Varner & Murphy, 2010). Patient Navigators are recommended by NCCN guidelines and National benchmark recommendations (Pagan, 2015). Developing this project may help the practicum site to accomplish the NCCN guidelines and National benchmark recommendations.

Role of the DNP Student

Advance practice nurses can play a critical role in the development and implementation of Evidence Based Practice across the healthcare system. Doctor of Nursing Practice (DNP) prepared nurses are ideally suited to fill the gap between supply and demand in providing high quality care to the oncology population. Patient navigators possess the experience, scientific knowledge and special skills to develop and implement EBP to improve quality of care and patient outcomes.

At the practicum site, I noticed patients were missing appointments, tests were not being done on time, and patients were often not satisfied with their care. After talking to my preceptor and other healthcare providers, I understood the clinic was lacking a patient navigation program. Nurses and nurse practitioners were responsible for the coordination of care. Due to lack of time, coordination of care was not being done appropriately or in a timely fashion. This issue motivated me to take the initiative to review literature to provide an analysis and discussion of the current published literature to provide evidence for improving care coordination and patient satisfaction in the GI clinical setting.

Professional Context

The field of nursing keeps evolving. Nurses are seeking advanced practice positions to further expand the roles of what nurses can do, whether it is developing policies, new projects or publishing research papers (Tiffin, 2012). I am a DNP student utilizing this oncology clinic as my practicum site and I am not employed at this clinic. I formerly worked in the oncology field and graduated from an oncology nurse practitioner program. I hold an interest in oncology nursing and developing a patient navigation program for cancer patients to improve their outcomes.

My Role

The role of the DNP student in this systematic literature review was researching the evidence, collecting data, and synthesizing the information into systematic review to deduce the evidence into a potential proposal towards the development of a patient navigation program.

Motivations for This Project

The motivations for this project include the need to improve the delivery of healthcare services, and to improve care coordination among services and sectors at the practicum site. Providers need to be mindful of the patient's background and tailor their information about coordination to the individual patient's needs. The Affordable Care Act (ACA) called for the establishment of a national strategy to improve the delivery of healthcare services, and patient health outcomes (Paskett, & Harrop, 2011). Patient satisfaction and outcomes are the very important measurement in any healthcare organization's success. The practicum site strives for quality healthcare to improve

patient outcomes and satisfaction. Through care coordination and patient education, I hope timely initiation of treatment, patients' outcome, and satisfaction will increase at the clinical site.

I do not believe that I have any biases towards this project nor do I have any conflicts or competing interests.

The Process to Present Information

The DNP student will present background information, evidence, and other forms of information through power point presentation, handouts and in-services to appropriate members. Oral presentations can be effective in delivering the findings of DNP projects. Formal and informal meetings are necessary throughout the initial planning and the implementation stage to promote open dialogue and elicit feedback (Schaffer, Sandau & Diedrick, 2012).

Summary

According to the American Cancer Society (ACS), approximately 1,688,780 new cancer cases were diagnosed in 2017 as well as 600,920 cancer deaths in the U.S. (Cancer facts & figures, 2017). Due to the complex care needed for these cancer patients, an oncology patient navigator is required to help patients navigate the healthcare system. In summary, significance of improving care coordination and satisfaction of care that impacts cancer patient is multifaceted. The background and context of this systematic literature review sets the foundation of the importance of patient navigation programs for cancer patients. At the practicum site, patients are missing appointments, tests are not being done on time, and patients are not satisfied with their care due to lack of

coordination. The purpose of this literature review was to examine the benefit of a patient navigation program in an outpatient cancer setting to improve care coordination and patient satisfaction.

The DNP prepared nurses possess the experience, scientific knowledge, and specialty skills to develop and implement the evidence based project to improve quality of care and patient outcomes. Section three explored the introduction, practice focused question, the source of evidence, analysis and synthesis. Additionally, section three explored the collection and analysis of evidence to develop the patient navigation program.

Section 3: Collection and Analysis of Evidence

Introduction

The purpose of this systematic literature review was to examine the benefit of a patient navigation program on cancer patient outcomes. The problem at the clinical site is that due to the busy nature of the clinic, the healthcare providers are unable to efficiently coordinate care in a timely manner and organize the needed care for newly diagnosed cancer patients and patients receiving treatment. Lack of coordination and organization of care can cause delays in treatment initiation and poor patient outcomes at the practicum site. The nursing administrator established the goal of improving care coordination and timeliness of care to increase patient satisfaction and outcomes. Evidence from the literature was needed to inform nursing leadership's decision-making process to establish the patient navigation program.

EBP practice is key for promoting patient health and positive outcomes. Inequitable outcomes can result from delays in initiation of treatment and accessing diagnostic services by the most at-risk populations (McMullen, 2013). Patient navigation programs have evolved as a strategy to improve patient outcomes and increase satisfaction by eliminating the barriers to timely care across all segments of the healthcare continuum (Freeman, 2012). The American College of Surgeons Commission on Cancer now requires all cancer centers to have a patient navigation program to maintain accreditation (Commission on cancer, 2012). This new standard has led to an increase in the number of patient navigation programs nationwide.

Section 3 includes descriptions of the approach to review literature, including (a) the review method in which pivotal articles were selected for this systematic literature review, (b) the hierarchy of evidence, and (c) the use of the Melnyk level of evidence. In this section, the topics include the practice-focused question, sources of evidence, published outcomes and research, analysis and synthesis, and a summary of the section.

Practice-focused Question

The practice-focused question was the following: In adult cancer patients, does care management by a patient navigator improve patient outcomes?

The gap in practice is that due to the busy nature of the oncology clinic, the patients are not receiving appropriate care coordination. This issue is causing delays in treatment initiation and leads to potential poor patient outcomes and decrease patient satisfaction. At present, the care is coordinated by nurse practitioners and nurses for cancer patients. The coordination of care is not effective due to lack of time. The purpose of this systematic literature review was to examine the benefit of a patient navigation program in outpatient oncology clinical setting within the United States. This project addresses the gap in practice by synthesizing the relevant evidence/literature that can support the development of a patient navigation program for the oncology clinic. This project may also help the practicum site to accomplish the IOM mandate for safe, efficient, effective, timely, and patient-centered care in a complex environment (American Association of Colleges of Nursing, 2006).

Sources of Evidence

The sources of evidence include the best practices from the most recent research and peer reviewed literatures are used for this DNP project. Multiple databases were searched including CINAHL, Cochrane, JBI, ProQuest, and PubMed for relevant data on patient navigation program. The following search terms were used: *patient navigation program, cancer patients, patient navigator, nurse navigator, outcomes, delayed care, care coordination, timeliness of care, and patient satisfaction*. The purpose of this literature review was to analyze and synthesis the current best EBP practice on care coordination and patient satisfaction strategies that may be used by the nursing management to provide high-quality care for cancer patients

Exclusion Criteria

Articles were excluded if they were not specific to (a) United States or Canadian populations consisting of patients diagnosed with cancer or undergoing procedures for the diagnosis of cancer and/or receiving treatment for cancer, (b) the articles were not specific to oncology clinical settings, (c) if the articles were not related to care coordination and timeliness of care, or (d) if the articles were not published between the years of 2010-2017.

Inclusion Criteria

The following inclusion criteria were used for this systematic literature review: (a) studies conducted in United States or Canada, (b) written in English language, (c) studies that address patient navigation in the oncology field, (d) published after the year 2009, or (e) studies evaluating patient navigation outcomes. Studies included in the

systematic review were limited to well-designed pilot studies, randomized control studies, systematic literature reviews, and quantitative cohort, quasi-experimental, and descriptive studies.

Published Outcomes and Research

Sources of evidence used for this literature review include studies from CINAHL, Cochrane, JBI, ProQuest, PubMed and a search of references of studies on the topic of patient navigation program for cancer patients from the years of 2010 to 2017.

The terms used for this search include: cancer, patient navigation program, care coordination, patient satisfaction, patient navigator, nurse navigator, and patient outcomes. The approach for this systematic literature review began with the following word combinations: *patient navigation AND patient satisfaction, patient navigation AND care coordination, patient navigation AND delay in care, care coordination AND patient satisfaction, cancer patients AND patient navigation, cancer patients AND care coordination, nurse navigators AND care coordination, nurse navigators AND patient outcomes*. The terms cancer patients and patient navigation program were utilized for the primary search.

Looking at care coordination, Swanson and Kock (2010), Lee et al, (2011) identified that a lack of communication and care coordination for cancer patients delayed their care and the patients did not receive the high- quality care they needed. With the implementation of a navigation program, overall care was improved and patient satisfaction with care was also increased. These two studies were qualitative in nature and used chart reviews and interviews to obtain data. Robinson-White, Conroy, Slavish and

Rosenzweig (2010) suggested that the use of a patient navigator could provide high quality patient care through better communication and coordination.

Because patient navigators are used frequently with oncology patients, newly diagnosed cancer patients benefit from the use of a patient navigator soon after diagnosis and treatment begins (Thygesen et al., 2012). Freund et al. (2013) pointed out that patient navigation program/ navigator demonstrate a moderate benefit in improving timely cancer care for newly diagnosed cancer patients. This study also supported the adoption of patient navigation program in settings that serve populations at risk of being lost to follow up due to lack of care coordination.

According to Blaseg (2013), a patient navigation program is a key component of comprehensive cancer care. Patient navigators perform necessary tasks that reduce the elapsed time between cancer diagnosis and initiation of treatment.

Ethical Considerations

The necessary paper work was submitted to Walden University Institutional Review Board (IRB) for approval prior to the start of this project. Confidentiality is not an issue in this project as no patient information and no participants are included. The clinic will accept Walden's IRB approval.

Analysis and Synthesis

Several research articles have focused on the benefits of patient navigation program for cancer screening, diagnostic evaluation and initiation of timely treatment. There are seven levels in the hierarchy of evidence with some having complex levels and sub-levels compared to others (Byers, 2012, Pearson, Wiechula, Court, & Lockwood,

2005). The articles that met the inclusion criteria were analyzed for the level and grade of evidence. The lower the hierarchy level, the more significant rigor occurred within the parameter of the research article. The level of evidence used is based on the Melnyk and Fineout-Overholt's guide on hierarchy of evidence-based studies (Melnyk, & Fineout-Overholt, 2011).

Table 1

Level of Evidence

Level	Rating system for the hierarchy of evidence
Level I	Systematic reviews, meta-analysis of all relevant randomized controlled trials (RCTs)
Level II	Evidence from well-designed RCTs
Level III	Evidence obtained from well-designed controlled trials without randomization
Level IV	Evidence from well-designed case-control and cohort studies
Level V	Evidence from systematic reviews of descriptive and quantitative studies
Level VI	Evidence from a single descriptive and quantitative studies
Level VII	Evidence from the opinion of authorities and/or reports of expert committees

Note. Adapted from *Evidence-based Practice in Nursing and Healthcare: A Guide to Best Practice*, by B. M. Melnyk and E. Fiineout-Overholt, 2011, Philadelphia, PA: Lippincott, Williams & Wilkins.

The articles used for this study were organized in to a Microsoft Word Table. The articles were divided into columns with header titles of (a) first author and year, (b) aim, (c) sample and settings (d) method/design, (e) interventions, (f) findings, and (h) level of evidence.

Summary

In summary, the significance of improving care coordination and patient satisfaction of care that impacts cancer patients is multifaceted. Review of the literature emphasizes the relation of care coordination and patient satisfaction with consistency of improved patient outcomes. The research articles used for this systematic literature review provided a rigorous collection for analysis of care coordination and patient satisfaction with the use of a patient navigation program. The articles divided into the exclusion and inclusion criteria then further evaluated by the level of evidence based on the Melnyk and Fineout-Overholt's guide on hierarchy of evidence.

Section four will cover the introduction, findings and implications, recommendations, strength and limitations of the systematic review of literature.

Section 4: Findings and Recommendations

Introduction

Cancer diagnoses affect millions of people in the United States each year, often leading many patients to face difficult cancer treatment options (Pagan, 2015). Due to the complex care needed for cancer patients, navigating the healthcare system as a patient can be overwhelming experience. The amount of time required and the type of services that cancer patients are using are expanding across screening, diagnosis, and treatment (Pagan, 2015). Patient navigation is a healthcare intervention and patient navigators have become prevalent within cancer care (Robinson-White, Conroy, Slavish, & Rosenzweig, 2010). Patient navigators are recommended by NCCN guidelines and national benchmark recommendations (Pagan, 2015).

At one clinical site, patients were not receiving cancer care in a timely manner due to lack of coordination and communication of care. Lack of communication and coordination of care during the complex phases of cancer can create serious consequences. This creates delays in the initiation of treatment and leads to potential poor patient outcomes at the clinical site. The purpose of this systematic review of the literature was to provide an inclusive analysis of the current published literature to provide evidence for improving care coordination and patient satisfaction in the clinical setting with a patient navigator program.

The practice-focused question for this systematic review of literature was: In adult cancer patients, does care management by a patient navigator improve patient outcomes?

I gathered evidence using electronic databases and repositories including Cochrane Library, CINAHL, ProQuest, Pub Med, and JBI. Articles included were systematic reviews, a randomized controlled trial (RCT), an integrative review, and mixed method studies. Search terms used for this systematic review included *patient navigation programs, cancer patient outcomes, patient navigator, nurse navigator, delayed care, care coordination, timeliness of care, and patient satisfaction*. Once all selected articles were appraised, the articles were placed in a Microsoft Word table for review. I then scored the level of evidence (Appendix A). The level of evidence used was based on the Melnyk and Fineout-Overholt's guide on hierarchy of evidence-based studies. The intent of this review was to analyze the highest-level evidence available and make recommendations for practice.

The Walden University IRB approval number for this systematic review is 01-22-18-0436539

Findings and Implications

The literature search provided a total of 679 articles based on the search terms. From these 679 initial articles, 105 articles were screened using full text. Out of these 105 articles, a review of titles and abstracts were conducted, resulting in a total of 11 articles being included in this review. A total of eight articles were systematic reviews, the other three studies included one mixed methods, one RCT, and one integrative review. Figure 1 shows the breakdown of results used for this systematic review.

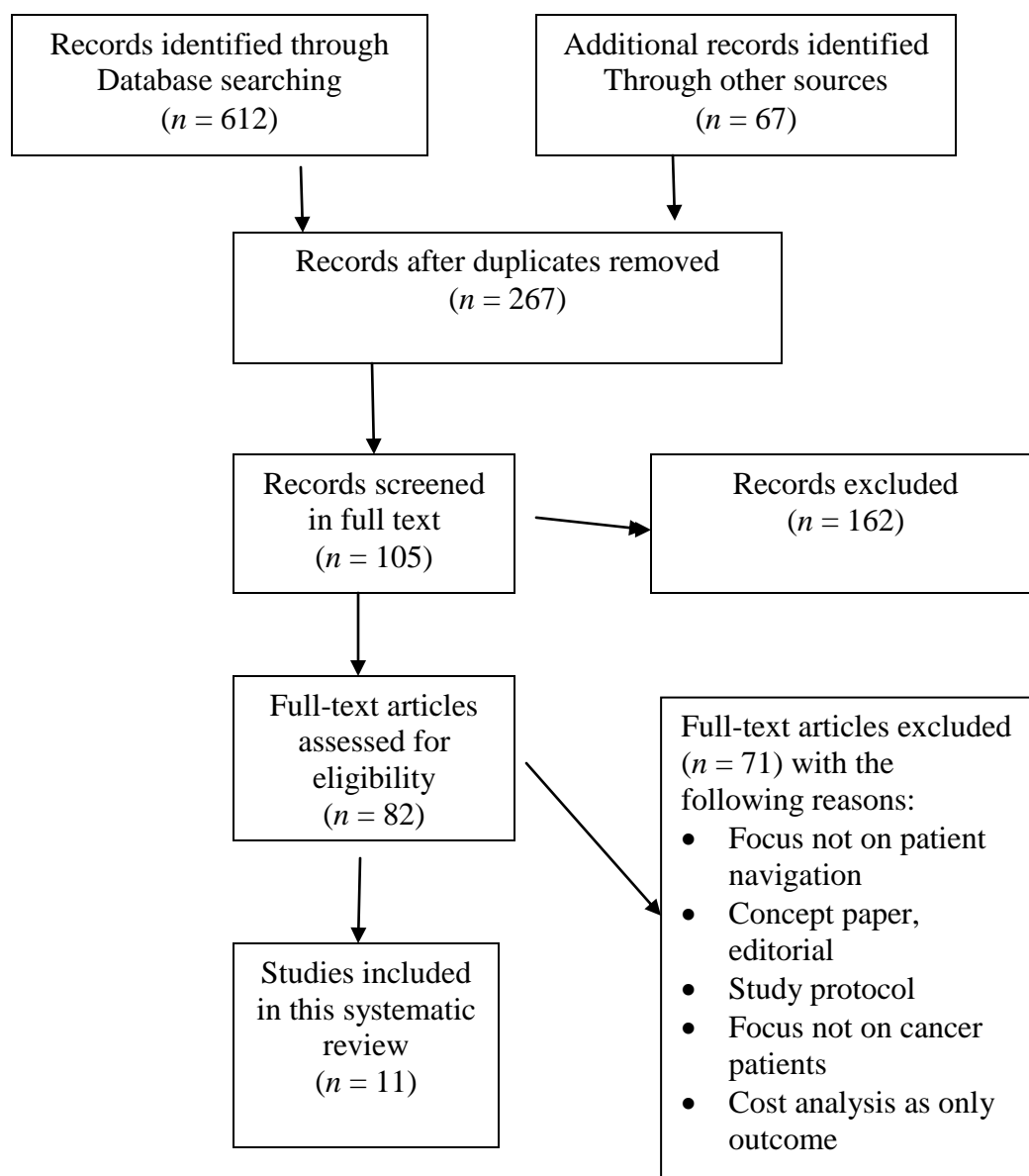


Figure 1. PRISMA flow diagram.

The total number of articles from initial search was 679. The total articles after duplicates removed were 267. From these 267 articles, 105 articles were screened using full text, then a review of titles and abstracts were conducted which decreased the articles to 11 for total inclusion.

Study Outcomes and Limitations

All the selected ($n = 11$) articles I reviewed indicated that patient navigation is recognized as an effective strategy to enhance the delivery of cancer care. Patient navigation programs have been shown to improve continuity and coordination of care and improving the overall patient experience of care and satisfaction. The common themes across the studies were associated with care coordination and patient satisfaction. From the literature review, it became evident that using a patient navigator can help a patient in multiple ways including providing support, guidance, improving timeliness of patient centered care, patient outcomes, and satisfaction. For example, Shockney (2010) pointed out that using patient navigators allows for the development of a real collaboration between the healthcare providers, patient, and family. Good collaboration increases patient satisfaction and the needed patient centered care allowing for a positive outcome for the patient.

Findings

The research of literature produced eight systematic reviews, one RCT, one meta-analysis, and one mixed method study. A summary of these study findings is listed below and organized by major categories of findings, which include effectiveness of patient navigation programs, timeliness and adherence to treatment, and patient satisfaction.

Effectiveness of Patient Navigation Programs

Jojola et al. (2017) conducted a systematic review on the efficacy of patient navigation in cancer treatment. The review was conducted for all English language, peer-reviewed articles on patient navigation for cancer patients from 1946 to 2014. Jojola et al. looked at 15 studies, including patients who underwent breast, gynecologic, lung, colorectal, and prostate cancer treatment. Patients receiving navigation, initiated treatment sooner than their non-navigated counterparts. The findings from the review suggested that use of patient navigation improves time to treatment in patients with cancer.

Ranaghan et al. (2015) conducted a systematic review on the effectiveness of a patient navigator on satisfaction in adult cancer patients. Four studies were included in this review, two were RCTs, one was a quasi-experimental study and one was a cohort study. The four studies showed that a patient navigator had clinical benefit for patient satisfaction, care coordination and patient access to timely healthcare services.

Tho and Ang (2016) conducted a systematic review on the effectiveness of patient navigation programs for adult cancer patients undergoing treatment. The review focused on the effects of patient navigator programs on patient outcomes. Two randomized controlled trials and two quasi-experimental studies with a total of 667 participants were included in this review. This systematic review did not find any significant difference between the patients who had undergone navigation programs and who did not use the navigation programs in the quality of their life. ($p = 0.81$). However, the two studies that

assessed patient satisfaction as an outcome measure both showed significant improvements in patient satisfaction ($p = 0.03$ and $p = 0.001$).

Bellomo (2014) conducted a literature review on the effect of patient navigator programs on continuity of care and on satisfaction with cancer patient's care. This review looked at 10 studies published between 2008 and 2014, and the review was conducted for English language-published, full text, and peer reviewed studies. The findings from this review suggested that cancer patients who had access to patient navigation programs benefited from coordination of care, emotional support, resolution of barriers and greater satisfaction with their care.

Timeliness and Adherence to Treatment

Baik, Gallo and Wells (2016) conducted a systematic review on patient navigation in Breast cancer treatment and survivorship. This review looked at 13 studies and included experimental and quasi experimental studies of patient navigation programs that were published between 1990 and 2015. This review was focused on timeliness of initiation of treatment, adherence to cancer treatment and adherence to post treatment. This study showed that navigated patients had shorter times on average from symptom presentation to treatment initiation by a median of nine days.

A systematic review and meta- analysis conducted by Gorin et al. (2017) suggested that cancer care coordination led to improvements in 81% of outcomes including screening and measures of patient experience with care. Meta-analysis of these studies showed that cancer care coordination interventions were almost twice as efficacious in improving appropriate use of healthcare as usual care.

Robinson-White, Conroy, Slavish and Rosenzweig (2010) conducted a systematic review of patient navigation in breast cancer patients. The authors reviewed studies published between the years of 1990 and 2009. This review looked at 12 studies evaluating patient navigator efficacy in breast cancer. Results suggested that the role of patient navigation is diverse with multiple roles and targeted populations. Overall, patient navigation improves adherence to breast cancer care.

Patient Satisfaction

Jean-Pierre (2017) conducted a systematic review on the effects of patient navigation on satisfaction with cancer care. One randomized controlled study and four observational studies were included in this systematic review. Findings from the RCT showed a statistically significant increase in satisfaction with cancer care involving a patient navigator. (Standardized mean difference (SMD) =2.30; 95% confidence interval (CI): p less than .001. Non RCTs showed no significant association between patient navigation and satisfaction with cancer related care (SMD = 0.39, 95% CI, p =.06).

Ali-Faisal et al. (2017) conducted a meta-analysis of randomized controlled trials on the effectiveness of patient navigation to improve healthcare utilization outcomes. According to this analysis, patients who received patient navigator services were significantly more likely to access health screening and attend a recommended care event/program. Patient navigation was favored to increase cancer care follow-up treatment and patient satisfaction with care.

A mixed method evaluation was done by Gabitova and Burke (2014) on improving empowerment through breast cancer patient navigation. This study assessed

the effectiveness of patient navigation programs in an urban hospital's breast clinic. This clinic is an interdisciplinary medical setting where cancer patients often see a different provider at each visit. The study design included a patient self-administered multi-lingual questionnaires and interviews with patient and providers. The study population included 83 patients who were assigned to a navigator during their visit at the breast clinic. The participants were from different ethnic backgrounds including Chinese, Spanish, Russian, Cantonese and English. This study showed that the majority of patients across all ethnic backgrounds and age groups were highly satisfied with the patient navigation program and had a positive perception of their navigator.

Wells et al. (2016) conducted a RCT study on the effect of patient navigation on satisfaction with cancer related care. This study focused on patients who presented with abnormal screenings ($n = 1783$) and patients with definitive diagnosis ($n = 445$) of breast, cervical, colorectal or prostate cancer. Eight patient navigator research program sites were included for this study. Overall, patients reported high satisfaction with diagnostic care and cancer treatment with a navigation program.

Implications

Care coordination was the primary focus for this systematic review. Findings of this systematic review indicated that improving care coordination will result in increased effectiveness of care, timeliness and adherence to care, and patient satisfaction with care. This systematic review has implications for increasing patient satisfaction and the provision of timely, appropriate and efficient care through evidence-based strategies. By improving care coordination patients may have improved outcomes and improvements

may be seen in patient education and satisfaction (Pedersen & Hack, 2010). Healthcare providers can focus on treatment and clinical management instead of detailed patient education and spending time to find resources for patients. Collaboration among healthcare providers may also result in quality care for cancer patients.

Implications for Social Change

The intent of this systematic review was to provide information that might lead to positive health status change for the cancer patients, improving care coordination and patient satisfaction consistent with the findings of Gorin et al. (2017). If the organization implements a patient navigator program, it is expected that this change would benefit patients, families, healthcare providers and the organization. The social implications of this systematic review are the potential positive change in care coordination for cancer patients that will promote positive outcomes and patient satisfaction. By examining the research on care coordination and patient satisfaction, the local organization may implement a patient navigation program to improve outcomes and satisfaction for cancer patients. This program may permit the healthcare providers to achieve improved focus on quality care.

Recommendations

The following recommendations were formed, after careful analysis and synthesis of the researched articles. In providing for a successful patient navigation plan, a collaborative team approach is needed. According to Wilcox and Bruce (2010) to have a successful patient navigation program, the program / navigator needs support from the administration, and enhanced communication to build relationships within the healthcare

system. Management and leadership should look at care coordination and patient satisfaction strategies. There is limited evidence that patient navigation programs improve the outcomes of quality of life of cancer patients. However, there is strong evidence that patient navigation programs can improve patient outcomes and satisfaction, particularly across the continuum of cancer care (Ranaghan et al., 2015).

The key strategies for the management and leadership for the organization derived from this systematic review are: (1) implement patient navigation program for cancer patients, (2) develop positions for patient / nurse navigator, (3) reevaluate patient outcomes and satisfaction after three months of the implementation of the patient navigation program.

Strengths and Limitations

This systematic literature review utilized the last seven years of research studies to demonstrate the benefit of patient navigation programs for cancer patients. This review provided a compilation of the current published issues of care coordination and patient satisfaction outcomes so that the information could be brought to the attention of the local practice site and available for discussions for improvement in cancer patient care. This systematic review offers promising findings on the impact of care coordination on increasing patient satisfaction and outcomes for cancer patients. The limitations of this systematic review included the limited number of published studies that address specific cancer diagnoses. Of the 11 research studies examined in this review, five of the studies focused on breast cancer patients and/or methods to eliminate barriers to timely care and improving healthcare empowerment through patient navigation. Additional studies are

needed to examine the impact of patient navigators on care coordination of all types of cancer patients.

Summary

The focus of this systematic literature review was to provide an analysis of the current published literature to provide evidence-based strategies to improve care coordination and patient satisfaction through a patient navigator. The findings from the studies suggested that care coordination can improve patient satisfaction and outcomes in cancer patients. The organization and leadership at the practice site may be able to use these findings to develop appropriate strategies to improve care coordination for cancer patients. Based on the evidence, using a patient navigator can help patients in several different ways, including providing support, guidance, and continuity of care. The findings from this systematic literature review could contribute to the growth of evidence about strategies that can improve care coordination and patient satisfaction across the local healthcare system.

Section 5: Dissemination Plan

The purpose of this systematic review of the literature was to provide an inclusive analysis of the current published literature to provide evidence for improving care coordination and patient satisfaction in the clinical setting with a patient navigator program. The nursing theory used to guide this project was Watson's (2009) caring theory. The use of Watson's caring theory as a framework to guide the patient navigator program remained an important part of this project. Patient/nurse navigators care and provide advocacy and support for the cancer patient(s) when needed to help reduce the patient's burden through the complex healthcare system. The goal is directed at providing the care needed to improve care coordination and patient satisfaction.

The results of this systematic review showed patient navigation can improve care coordination and patient satisfaction. This review will be provided to the local organizational leadership and management for evaluation and dissemination. The review will include background information, evidence from the literature, and examples of successful patient navigator programs. The information in this review will be presented through a power point presentation, handouts or in-services to appropriate members and administration. It is important that the program be promoted so that organizational leadership becomes aware of the benefits that navigation programs have to offer for cancer patients and healthcare providers. Looking beyond the organization, the potential for other healthcare organizations to use the data from this systematic review could provide valuable insights and resources to develop their own navigation program and to encourage further research in to care coordination and patient satisfaction.

Analysis of Self

My journey through the Doctor of Nursing Practice (DNP) began in 2014 as a continuation of my Masters in the Science of Nursing. During the process of this systematic review, the knowledge I acquired in using the process was invaluable. Researching the literature for information on care coordination and satisfaction for cancer patients allowed me to gain a great deal of insights and information that I can use and share with the organization to implement the program. Making evidence-based practice changes in to nursing practice will be of importance to nurses, healthcare providers and organizations. A DNP prepared nurse should have the skills to implement an evidence-based practice changes and the ability to support the nursing staff and the facility as they work through the changes. My professional goal is to apply the knowledge and experience obtained through this program to improve nursing practice and profession.

Summary

Patient navigation is a healthcare intervention and patient/nurse navigators becoming an integral part of cancer care services. The role of a patient navigator has a positive impact on both healthcare providers and the patient by providing care coordination and improved satisfaction. This systematic review was conducted to provide an inclusive analysis of the current published literature to provide evidence for improving care coordination and patient satisfaction with a patient navigator program. I used Watson's caring theory to bring the caring aspects of nursing in to the care of cancer patients, allowing a positive outcome for the patient and family. The results of this review suggested that patient navigation can improve care coordination and patient satisfaction

for cancer patients. The healthcare organizations, leaders and managers can benefit from the evidence derived from this review.

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Appendix A: Data Analysis and Evaluation

Authors	Aim/Setting Samples	Design/Intervention	Results	Limitations	LOE
Ali-Faisal, Colella, Medina-Jaudes, & Benz Scott (2017)	To determine the effectiveness of patient navigation on healthcare use ($N = 25$)	Meta-analysis of RCT. Improve healthcare use outcomes with a patient navigator	Patient navigation is an effective intervention for increasing health-related screening such as cancer screening. Additionally, this study shows promise as an intervention to increase adherence to recommended cancer treatment	The restriction to English language publications and small sample size of studies. The random-effects model used to examine combined results due to anticipated clinical heterogeneity in the methodology of studies	1
Baik, Gallo, & Wells (2016)	To evaluate the efficacy of patient navigation in improving treatment and survivorship outcomes in patients with breast cancer ($n = 13$)	Systematic review included experimental and quasi-experimental studies	Results indicated that navigated patients had shorter times on average from symptom presentation to treatment initiation by a median of 9 days.	Most study participants were middle-age, however, this is consistent with national statistics. The searches were also limited to studies conducted in the United States and in English.	1
Bellomo (2014)	To examine the effect of a patient navigator intervention on the continuity of care and on cancer patient satisfaction ($n = 10$)	Literature review included quantitative and qualitative studies	This study showed the positive effect of patient navigator program on continuity of care and patient satisfaction	The search was limited to full text. For statistical analysis the researchers used standardized healthcare assessment/survey tools	V

(table continues)

Authors	Aim/Setting Samples	Design/Intervention	Results	Limitations	LOE
Gabitova & Burke (2014)	To assess the effectiveness of patient navigation program in breast cancer patients ($n = 83$)	Mixed method study. Survey and qualitative methods	The majority of patients were highly satisfied with the program and had a positive perception of their navigator	Used convenience sampling to select participants, which limited the generalizability of results to other clinics.	V1
Gorin et al. (2017)	To synthesize the findings of studies addressing cancer care coordination and describe study outcomes across the cancer continuum ($N = 52$)	Systematic review and meta-analysis	Cancer care coordination approaches led to improvements in 81% of outcomes, including screening, measures of patient experiences with care.	Limitations in the methodological quality of the cancer care coordination literature; studies had considerable heterogeneity in the measured outcomes. Two researchers independently applied a standardized search strategy, coding scheme, and online coding program to each study. Random effects estimation model was used for data analysis	1
Jean-Pierre (2017)	To evaluate the effectiveness of patient navigation programs to improve satisfaction with cancer related care. ($n = 9$)	Systematic review of whether patient navigation is associated with higher patient satisfaction with cancer care. Three RCTs and six observational studies were included in this study	Study showed statistically significant increase in satisfaction with cancer care involving a patient navigator.	Small sample size. Methodological quality ranged from weak to moderate to strong, with half rated as weak.	1

(table continues)

Authors	Aim/Setting Samples	Design/Intervention	Results	Limitations	LOE
Jojola et al. (2017)	To assess the efficacy of patient navigation in cancer treatment ($n = 15$)	Systematic review. The use of patient navigation and the effect on time from cancer diagnosis to treatment.	This review showed that patient navigation play an important role in cancer patients life and evidence supports use of patient navigation as a method to improve time to treatment in patients with cancer	All studies exhibited considerable heterogeneity; this limits the validity of comparisons and the ability to draw conclusions from the data. Sixty percent (9) articles were published within the past 5 years.	1
Ranaghan et al. (2015)	To synthesize the best available evidence on the effectiveness of a patient navigator on patient satisfaction in adult cancer patients ($N = 4$)	Systematic review to determine the use of a patient navigator as an additional intervention to usual care for promoting patient satisfaction. Two RCTs, one quasi-experimental and one cohort study	Patient navigator had clinical benefit for patient satisfaction, care coordination, and patient access to timely healthcare services.	Small sample size. Two researchers independently evaluated the studies using standardized critical appraisal instruments from the JBI.	1
Robinson-White, Conroy, Slavish, & Rosenzweig (2010)	To evaluate the outcomes of patient navigation in breast cancer care. Studies were conducted in predominantly minority and economically underserved areas. ($N = 12$)	Systematic review to determine breast cancer outcomes	Patient navigation improves adherence to breast cancer care.	Concentrated in early stage breast cancer and did not address the potential navigational needs of women with more advanced cancer and extent of navigation protocol was not well described. Literature search was conducted independently by two authors for results verification.	1

(table continues)

Authors	Aim/Setting Samples	Design/Intervention	Results	Limitations	LOE
Tho & Ang (2016)	To synthesize the evidence on the effectiveness of patient navigation programs in adult cancer patients undergoing treatments. (<i>n</i> = 667) (Two RCTs and two quasi-experimental studies with 667 participants).	Systematic review to determine the use of patient navigation programs to increase quality of life and satisfaction for cancer patients.	Patient navigation was not effective in addressing the quality of life of cancer patients; however, there was a significant difference in increasing patient satisfaction.	Only reviewed four studies. Two reviewers independently evaluated the quality of studies, using a standardized critical appraisal instrument from JBI	1
Wells et al. (2016)	To determine the effect of navigation on satisfaction with cancer related care. (<i>n</i> = 2,233). (Participants with symptoms or abnormal screening (<i>n</i> = 1788) and participants with definitive diagnosis of cancer (<i>n</i> = 445).	RCT. Navigators met with participants to assess and identify barriers to care and identify resources to address barriers to cancer care.	Patients reported high satisfaction with diagnostic care and cancer treatment with the use of patient navigators.	The study was done in 3 months. This study was a well-designed control trials	2