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Improving Communication Between Cancer Patients and Providers During a 15-Minute Office Visit: A Systematic Review of the Literature

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Walden University

College of Health Sciences

This is to certify that the doctoral study by

Tammy E. Manganelli

has been found to be complete and satisfactory in all respects,
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Walden University
2016

Abstract

Improving Communication Between Cancer Patients and Providers During a 15-Minute Office Visit: A Systematic Review of the Literature

by

Tammy Elizabeth Manganelli

FNP, University of Phoenix, 2008

BSN, Delaware State University, 1997

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

June 2016

Abstract

Patients undergoing chemotherapy treatments for cancer often experience adverse side effects, including cognitive deficits. These deficits impact the patient's ability to communicate effectively with their oncology provider. Ineffective communication can adversely affect patient outcomes and decrease patient-provider satisfaction. The resulting poor communication can contribute to poor patient outcomes. This systematic literature review focused on assistive communication tools that could be used in an outpatient oncology setting to improve patient-provider communication. The literature review findings led to the development of a resource for providers that includes 15 communication tools that can be used to assess and improve communication in cancer care. Initially 4, 533 articles were identified using the search terms; cancer patient/providers, communication tools, chemo brain, and improving/ineffective communications. Articles were selected for inclusion that included communication tools, which assisted oncology providers in improving cancer care. Articles were excluded if they were not specific to cancer patients and did not contain communication tools. Analysis of the systematic review of the literature utilized Bandolier's hierarchy levels of evidence. The Health Promotion Model serves as the theoretical framework to guide the project. Oncology providers that utilized communication tools with patients found a 116% improvement in documentation of symptoms, adverse effects and corresponding medical management compared to providers who did not use communication tools. Implementation of communication tools in outpatient oncology settings can result in a positive social change in the patient-provider relationship during cancer treatment.

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Dedication

I would like to dedicate this scholarly project to all of my patients who I have been blessed to care for in my clinical practice. I have truly enjoyed every patient-provider moment together. You have made me bite my tongue, smile, laugh, and cry. For that, I will be forever grateful.

Extending my deepest appreciation, especially to Arthur, Bob, Debbie, Dorothy, and Michael, on behalf of contributing to the vision of this scholarly project. May this endeavor better serve patients who suffer from cancer by advocating for the highest quality of life possible and empowering their overall well-being. May God find you in cancer remission, for forever and ever.

Acknowledgments

Completion of my doctoral degree has been a life-long dream come true; however, my success has been a result of people who have enriched my life so that I may influence the lives of others. I would like to express my love and gratitude for the support of my husband Paul L. Manganelli, who saved me when I was a little girl and has sacrificed his life to provide our family a lifetime of devotion and fidelity. Paul, my success is a reflection of you as a man, a friend, and a husband. Without you, I would not be complete. I love you more than you will ever know. Thank my children Nicholas, Kendra, Josh, George, Jessica, Jeremy, Sam and my granddaughters Skyler and Cattleya for tolerating my time away from you and for bringing me sweet tea while I finish my homework. Please let my life be an example for what ya'll should and should not do in yours. To my sister Susan Boyce, when I prayed for strength, God sent you to me. Never give up on your dreams regardless of what path your life may lead you down. Equally important, I would like to thank Lara Casillas for always encouraging and supporting me when I faltered and lost my mind. My deepest gratitude to Dr. Deborah Lewis who is an angel sent from God to see my vision. Lastly, thank you, Dr. Cheryl McGinnis, Dr. Janice Long, Dr. Scott Gulinson, Dr. Ruben Aguilera, and Dr. Parmjeet Banghar, for your wisdom, experience and your never-waving guidance in my endeavor. As healthcare providers, we are not always certain if we have impacted the lives of those we serve. The impact you have had on this doctoral candidate is one of everlasting.

Table of Contents

List of Tables

List of Figures

Section 1: Nature of the Project

Introduction

The nature of this quality improvement project is to provide a systematic review of the literature to contribute to the proficiency of effective communication by providing oncology providers with information about communication tools available for implementation in outpatient clinical settings. This quality improvement project is a systematic literature review of the causes of ineffective communication and the tools that have been established to assist oncology patients and their practitioners. Nurse practitioners can use this systematic literature review to identify similar problematic issues in clinical practices to improve patient satisfaction in all oncology settings. The foundation for social change is to excel in establishing an effective approach of communication in which the highest levels of health requirements are comprehensively addressed throughout the treatment of chemotherapy.

In this project I will discuss the background of cancer and the affects cancer has had on American society in the twenty-first century. In Section 1, I will discuss the cause of the practice problem and the purpose of the systematic literature review. The quality improvement question, as well as the framework used, definitions, assumptions and scope of the systematic literature review, the limitations that exist and significance of the systematic literature review will provide potential implications for positive social change necessary to advance the delivery of healthcare for cancer care.

Background

According to the American Cancer Society [ACS] (ACS, 2015), nearly 2 million patients were diagnosed with a form of cancer in the United States of America in the year 2015. Fortunately, cancer research has led to extraordinary medical advances; 14.5 million cancer survivors are alive today as a result of advancement in research (ACS, 2015). Today, 68% of cancer patients are living longer lives with the advancement of medical management of cancer compared to the earlier days of cancer care. Despite these advances, the researchers have suggested a trend among cancer patients reporting dissatisfaction when communicating with their practitioners pertaining to patient care (Bergenmar, Nylen, Lidbrink, Bergh, & Brandberg, 2006). Chemo-brain affects between 30-50% of cancer patients depending on the length of treatment and the medication used in chemotherapy (Hess & Insel, 2007) producing mild to moderate cognitive deficits and significant life-altering symptoms (ACS 2015; Raffa, Lam, & Shah, 2006; Staat & Segatore, 2005). Further review of the literature indicates the quality of life is likely to be negatively affected for many years after chemotherapy has discontinued (Raffa, 2010). Patients who are compromised need a comprehensive strategy to compensate for the cognitive deficits they experience (Butow et al., 2002; Grunfeld, Earle, & Stovall, 2011; Schagen et al., 2014).

Evidence-based research has proven as a result of the side effects of chemotherapy, time restraints, lack of healthcare provider training, and increased patient caseloads directly affecting the ability for cancer patients to effectively communicate with their providers and the quality and quantity of care patients receive (Sloan &

Knowles, 2013). Patients who are diagnosed with cancer are most vulnerable after the initial diagnoses, when cancer advances or metastasizes, or prognosis becomes a death sentence (Griffiths, Wilson, Ewing, Connolly, & Gunn, 2015). During this time communicating with cancer patients can be extremely difficult for even the experienced nurse practitioner. Cancer patients have stated their providers do not listen to their concerns jeopardizing therapeutic relationships needed during the treatment of cancer (Hudson et al., 2012; Talen et al., 2008). Practitioners who engage with cancer patients on a higher quality level of communication enable the patients to cope better with managing their cancer and efficiently address side effects of chemotherapy (Furber, Cox, Murphy, & Steward, 2013). Researchers have indicated cancer patients who are satisfied with the care they receive are less likely to avoid scheduled appointments, are compliant with the patient plan of care, and experience effective communication with their practitioners (Landen, Younger, Sharp, & Underwood, 2003). In short, patients who are satisfied with the quality of care will continue preventative treatment and necessary follow-up care.

The HealthyPeople 2020 called for providers to build trusting relationships with patients, to improve communication practices, and offer quality in healthcare delivery (HealthyPeople.gov, 2015). This suggests that future research should focus on communication between the patient and healthcare providers. To achieve the HealthyPeople 2020 recommendations, Shields et al. (2010) suggested further directional observational studies to enhance effective communication between cancer patients and practitioners based on the results of their randomized pilot trial. Schagen et al. (2014) concurred with Shield et al. and recommended additional research for development of tools to assist cancer patients who exhibit progressive decline in cognitive function. Nurse practitioners can improve communication by promoting a clinical environment that delivers quality care.

Problem statement

When cancer patients struggle to communicate with their oncology practitioner it directly affects the quality of care they receive. Ineffective communication fundamentally creates unfavorable patient outcomes that can potentially cause significant distress among cancer patients.

Currently the medical community is aware that while advancement in treatment and medications has increased the survival rates throughout the preceding decade the toxic effects give way to more severe cognitive deficits (Rowland, Hewitt, & Ganz, 2006). Depending on the stage or the burden of management of the cancer, some patients experience temporary or long-term communication deficits that affect their quality of life. Ineffective communication between oncology patients and their practitioners is primarily associated with cognitive impairment, often described as chemo-fog by patients or chemo-brain by medical professionals (Raffa, 2013). Cognitive changes occur causing patients to struggle with memory, concentration, and to articulate their needs with practitioners. Oncology literature has extensively documented the long-term devastating, cognitive effects of cancer treatment (Raffa, Lam, & Shah, 2006). These difficulties result in apprehension, cognitive deficits, memory loss, and speech impairments (Munir et al., 2010). For patients who have chemo-brain, routine office visits become complicated.

Extended appointment times often end in a breakdown of communication between cancer patients and practitioners.

Researchers do not understand what effects perception, nonverbal communication, or how the communication skills of cancer patients play a role in the miscommunication in the patient-practitioner relationship (Stewart et al., 2007; Talen, Grampp, Tucker, & Schultz, 2008; Van Vliet & Epstein, 2014). Researchers have consistently referenced the lack of evidence-based research in ways to improve effective communication between cancer patients and practitioners (Anderson et al., 2001; Travado et al., 2005). Four key areas of concern were (a) lack of communication skills; (b) increasingly large volume of cancer patients; (c) lack of time practitioners spend with cancer patients; and (d) practitioner burnout.

Oncology practitioners reported they were insufficiently trained in communication skills, which ultimately lead to patient and practitioner dissatisfaction (Ben-Ami, 2014; Shields et al., 2010; Stewart, 2007; Van Vilet & Epstein, 2014). Practitioners who lack communication skills may become easily frustrated especially with patients who have chemo-brain.

Practitioners in oncology treat large volumes of cancer patients in the clinical setting on a daily basis directly impacting communication efforts (Brown, Butow, Dunn, & Tattersall, 2001). Oncology practitioners are forced to meet the increasing demands of cancer patients by hastening office visits and partaking in minimum communication interactions with patients (Travado et al., 2005).

Overextended office visits coupled with the demands of meeting rigorous schedules eventually cause provider burnout. Cancer patients are given an average of 15-minutes to discuss health concerns. Frequently practitioners are rushed for time and patients may not be given ample time to communicate their health needs effectively which can decrease patient satisfaction (Butow et al., 2002; Shields et al., 2010; Springer, 2014; Talen et al., 2008;). As a result of the breakdown in the practitioner-patient relationship, patients experience anxiety, frustration, and miscommunication (National Cancer Institute, 2015).

The greatest threat to ineffective communication between cancer patients and practitioners is practitioner burnout (American Society of Clinical Oncology [ASCO], 2014) and this is the most common complaint reported in the oncology outpatient setting (Association of Community Cancer Centers [ACCC], 2015). Practitioner burnout occurs when a disproportionate demand for patient care exists overwhelming healthcare providers. In Arizona this is particularly noted compared to other territories within the United States (ACS, 2015). Nurse practitioners should be mindful to identify colleagues and themselves at risk for provider burnout. Measures taken to intervene and prevent practitioner burnout will directly impact patient satisfaction.

Purpose Statement

The purpose of this systematic literature review is to examine the cause and effect of ineffective communication between cancer patients and providers and the tools available to providers to assist this vulnerable population who have been diagnosed with cancer in an outpatient oncology setting within the United States.

To thoroughly understand the meaningful gap in current nursing practice in relation to this proposed systematic literature review one must consider the following: researchers have suggested 18 million cancer survivors will require continued follow-up cancer care by the year 2022 (ASCO, 2014). The increase in cancer survival rates considerably impacts nurse practitioners in the continued collaboration in the care of this population during the treatment throughout the remission of cancer. The gap in nursing knowledge exists in implementing evidence-based practices that identify and facilitate effective communication for cancer patients who suffer with cognitive deficits associated with chemotherapy. Effective communication continues to promote increased patient satisfaction from initial diagnosis until death.

Project Question

The systematic literature review will evaluate:

- Question: Will implementing a communication tool in an outpatient oncology setting improve communication between cancer patients and oncology providers?
- Population: All cancer patients currently receiving treatment for cancer and the providers who diagnose and treat this population
- Intervention: Communication tools
- Outcomes: To improve effective communication, keep the appointment time on task and on schedule, and to improve cancer patient-provider relationships.
- Study Design: The synthesis of the literature review research will consist of systematic reviews, pilot studies, and qualitative and quantitative studies.

Framework for the Project

The theoretical framework chosen for this quality improvement project is one that advocates for stakeholders to promote comprehensive quality healthcare for cancer patients and cancer survivors. The health promotion model (HPM) developed by Dr. Nola Pender aligns perfectly with Dorothea Orem's self-care theory to support this quality improvement project. Dr. Pender designed the HPM theory in 1982 focusing on three objectives: (a) Distinctive experiences and personalities; (b) Behavior-specific affect and perceptions; and (c) Examinations of behavioral outcomes to promote well-being in the environment to achieve the highest optimum level of health (Miller, Williams, Short, & Corbo, 2014)

The Institute of Medicine (IOM) report described cancer survivors as having complex healthcare needs that require future and potential research possibilities (Hewitt, Greenfield, & Stovall, 2006). Van Vliet and Epstein (2014) suggested the careful implementation of a well-chosen framework promotes patient well-being and stimulates evidence-based practices. The HPM is relevant as the goal of the project is to focus specifically on improving the quality of care cancer patients receive (Petiprin, 2015b). Pender's framework can easily be applied throughout nursing research to initiate future evidence-based practices.

Pender's HPM (1982) is used as fundamental framework throughout the world in diverse research studies including the following models:

- Cancer prevention (Oliver-Vazquez et al., 2002)

- Health promotion in the community (Boyce, 2002; Fisher, Dowding, Pinckett, & Fylan, 2007),
- Improving physical well-being (Thomas, Hart, & Burman, 2014)
- Interventions to improve current clinical practices (Meraviglia, Stuifbergen, Parsons, & Morgan, 2013)
- The frameworks role in medical research (Heydari & Khorashadizadeh, 2014)

The HPM specifically applies to the systematic literature review by encompassing current and future cancer care of patients. The ultimate goal is for the framework to result in evidence-based practices (Grove, Burns, & Gray, 2013). The cogency of the research methodology identifies patterns of behavior driven actions to advance existing research (McDaniel, Lanham, & Anderson, 2009). Complex adaptive systems allow for different perspectives of evidence in practice to produce new approaches to diverse learning and is the ideal theoretical framework promoting collaboration in future research.

Definitions

Cancer: An opportunistic genetic disease of abnormal division of damaged cells which randomly invade and destroy normal cells at a rapid rate systematically within the body (National Cancer Institute, 2015). Cancer is named from the region of the body it originates from having the potential to spread or metastasize to other organs or systems (Mayo Clinic, 2016). Although the advancements of cancer research have significantly increased cancer survival rates, cancer remains the second leading cause of death among Americans (Mayo Clinic Staff, 2016).

Chemo-Fog or chemo-brain: Chemotherapy-induced deficits affecting memory limitations lasting up to twenty years in which 10-80% of patients receiving chemotherapy are affected (Schagen et al., 2014). The extent of cognitive impairment is contingent on (a) the chemo-agent; (b) the dosage of the agent; and (c) the location of cancer treated (Raffa, 2010, 2013). Chemotherapy causes damaged hippocampal cells primarily affecting the frontal lobe of the brain resulting in a cognitive decline of cancer patients undergoing chemotherapy (Raffa, 2010, 2013).

Health promotion model: A working framework method used to alter behavior or the environment with the primary purpose of improving the delivery of healthcare to achieve the most optimum level of well-being in the lives of patients and the community (Pender, 2011). The theory assumes four main concepts of human behaviors: (a) attempts to control destiny of one's behavior; (b) strives to improve self and surrounding environment; (c) healthcare providers are influential in altering patient behaviors; (d) lastly, one must initiate change within themselves or the environment in which they exist or change will not occur (Ricketts, 2003).

Nurse practitioner: Highly qualified registered nurses possessing advanced skills to practice nursing autonomously from physicians, in a diverse range of medical positions contingent on the laws of the state in which they practice (AACN, 2006). Nurse practitioners have equivalent capabilities to those of physicians in the assessment, diagnosis, and treatment of acute and chronic diseases (AACN, 2006). Nurse practitioners perform high-quality healthcare, promote holistic health, and advocate well-being within the community.

Self-care deficit theory: A conventional theory developed by nurse Dorothea Orem consisting of three similar components (a) theory of self-care; (b) theory of self-care deficit; and (c) theory of nursing system (Petiprin, 2015a). The self-care theory promotes the phenomenon of self-care behaviors towards improving the quality of care for patients to maintain optimal self-care throughout one's life span (Renpinning & Taylor, 2003).

Systematic literature review: "Is a structured, comprehensive synthesis of the research literature to determine the best research evidence available to address a healthcare question" (Grove et al., 2013 p.28). A systematic review is the highest level of evidence used to implement evidence-based practice by identifying, appraising, and analyzing quality research (Terry, 2015).

Assumptions

The assumptions are if practitioners implement communication tools in oncology settings (a) there will be minimal breakdown in communication between cancer patients and providers; (b) office visits will stay on task; (c) office visits will be completed within the allotted appointment time; and (d) patient satisfaction will improve. These assumptions are necessary to influence the way in which practitioners provide healthcare. The systematic literature review indicates a remarkable relationship of improvement in care exists based on evidence-based research among providers who implement communication tools during the treatment and management of cancer.

Scope and Delimitations

A systematic literature review was chosen for this doctoral study as a result of the overwhelming need to advance the interaction efforts of cancer patients and their practitioners. The empathetic plight drives this systematic literature review for the continued efforts of medical professional and the patients who fight this disease. Office visits in today's outpatient setting customarily occur within a 15-20 minute or less timeframe. Practitioners are often inundated with patients who require more time to discuss health concerns and personal issues, which can be over whelming for the practitioner who has a full schedule. When cancer patients struggle with chemo-fog they require more time to discuss their care, which can cause a chain of adverse events to occur. Appointments run late, patients have to wait longer times, tempers flare, and the providers become overwhelmed. As a result of extended wait times patients may leave and not return to the practitioner for treatment affecting the financial welfare of the practice and patient outcomes. Searching for a new provider is a hardship and is distressing to a majority of patients. This lapse in time between care practitioners can be dangerous to the patient's health outcomes. In addition, the quality of care is compromised when practitioners are rushed and assessments have not been completed (National Cancer Institute, 2015). For example, if a patient is anxious or confused and fails to express they have pain in a new area, the provider may have lost the opportunity to catch cancer metastasis at an earlier stage. As a result, of the breakdown in the practitioner-patient relationship, patients experience anxiety, frustration, miscommunication, and inadequate care (National Cancer Institute, 2015).

Limitations

The systematic literature review has the potential to improve the way healthcare is delivered not exclusively for cancer patients but all patients. Problematic limitations include conducting the systematic literature review based on research studies published specifically within the past ten years. One could argue limitations exist based on incorporating an all-inclusive literature review search on all cancers compared to specific cancers such as breast or brain cancer. During the systematic literature review very few tools are used to assist cancer patients and practitioners in effective communication during cancer treatment. This limitation narrows the availability of communication tools for practitioners. Clinical settings that are specialized would be able to use tools and evidence-based suggestions recommended by this systematic literature review. Review of the literature will be confined to the most significant causes of ineffective communication. The researcher acknowledges communication is a multifaceted dimension that cannot be encapsulated with a few causes of failure to communicate on behalf of cancer patients and nurse practitioners. Unpredictability of human behavior is a limitation that is dreaded during this systematic literature review. The research studies do not take into account if human behavior on the part of the cancer patients in their studies directly affected communications therefore validity of the research studies may have been altered and should be mentioned as a possible limitation in this systematic literature review.

Significance

Gaining an enhanced understanding of the systematic literature review will support the implementation of communication tools in oncology settings and will facilitate the exchange of essential healthcare information to minimize ineffective communication that can negatively impact patient care. Practitioners can reassure patients chemo-brain is real and become a catalyst for patients to engage their plan of care. Nurse practitioners can also initiate preventative measures to limit the progression of chemo-brain that directly influence communication outcomes. The systematic literature review will identify gaps in research that are needed for the strategic development of methods to assist cancer patients through their disease and treatment of cancer by providing evidence-based research simply applied in hands-on clinical settings

The systematic literature review is relevant to the nursing discipline through contributing to the nursing practice by advocating clinical modification to close the gap in the manner in which nurse practitioners view cancer patients with cognitive dysfunction and self-care deficits (Staat & Segatore, 2005). The systematic literature review brings to the forefront the lack of nursing knowledge within the medical community and the potential for poor quality care as a result of the cancer patient's inability to verbalize or remember basic needs (Ganz & Hahn, 2008). The systematic literature review would provide guidance, for the practitioners; in the way cancer patients receive medical care and how providers will be able to deliver that quality care.

To ensure practitioners provide high quality care to cancer patients they can implement communication tools into their clinical settings to improve communication.

Practitioners who identify cancer patients who have cognitive deficits caused by chemotherapy can use prompt questionnaires, checklists, or communication tools to assist patients by prompting discussions of health concerns or medical needs. The relevance to nursing practice is to ensure all cancer patients receive the highest quality of medical care available (Hewitt, Greenfield, & Stovall, 2006). Ineffective communication facilitates a fragile and unsure state of disease affecting all patients psychologically and spiritually (Arnold, 2003).

This systematic literature review will advance policy by contributing to the knowledge gap in nursing by evaluating obtainable evidence-based research for oncology practitioners to implement effective communication tools in his or her individual clinical practice setting. The goal of this quality improvement project is to forward the nursing discipline by bridging the gap of causation of ineffective communication. This quality improvement project purports to diminish consequences of aggravating factors by minimizing the struggles encountered by oncology practitioners by changing the methods they use in the clinical setting to enhance the medical care they provide for their patients.

Summary

In summary, most cancer patients struggle with ineffective communication for a variety of reasons with their oncology practitioners that directly affects the quality of care they receive. The diagnosis of cancer is a life altering experience in which patients may suffer short and long-term cognitive deficits negatively impacting the patients’ ability to communicate. In addition, nurse practitioners often struggle with ineffective communication with cancer patients for various reasons. The purpose of this systematic literature review is to examine the causes of ineffective communication and identify tools available for nurse practitioners to implement in clinical practice. The systematic literature review will be an assistive tool for practitioners who provide treatments for patients diagnosed with cancer within the United States to be completed by May 2016. The theoretical framework used in the systematic literature review is the Health Promotion Model (HPM) to guide the scholarly project. Nurse practitioners can use this systematic literature review to identify similar problematic issues in clinical practices to promote effective communication in all oncology settings. The foundation for social change is to excel in establishing an effective approach of communication in which the highest levels of health requirements are comprehensively addressed throughout the treatment of chemotherapy.

Section 2: Background and Context

Introduction

Many cancer patients are more likely to be treated by nurse practitioners in collaboration with oncologists (Cooper, Loeb, & Smith, 2010); therefore, the contributions made by nurse practitioners in the continuity of care of cancer patients has notably influenced long-term outcomes for cancer patients and survivors. In Section 2 the literature search strategy will be discussed in great detail along with the concepts, models, and theories that will guide the literature review (National Cancer Institute, 2015). The systematic literature review will draw on sources of evidence no less than 60 peer-reviewed research studies on the topic of improving communication between cancer patients and practitioners.

The strongest evidence is in the plethora of research identifying similar themes of why a breakdown in communication exists between cancer patients and practitioners. Understanding the cancer patients and the providers' perspective through documented research studies will give the quality improvement project a foundation in which to begin to close the gap in nursing knowledge (Maynard & Heritage, 2005; Raffa, 2010). The evidence will recommend implementation of communication tools and the importance of practitioners' fundamental responsibility in the care of cancer patients (Ben-Ami et al., 2014).

Literature Search Strategy

A collection of evidence-based sources for preparation of the literature review consisted of an abundance of peer-reviewed nursing and health database electronic resources. Publications used for references were taken from the years between 2001 and 2016.

Searching the Walden University database Proquest and Allied Health with the keyword chemo-brain resulted in 109 peer review articles. Keywords patient-provider relationships and cancer resulted in 229, also cancer distress yielded an impressive 1,678 peer reviewed articles for consideration. Cancer patient's perception of healthcare produced 118 topic related issues. The keywords patient-provider relationships produced 27 related articles. Twenty-four articles were available using the keywords oncologist communication checklist tools, however, four fascinating articles using healthcare provider stressors were available.

The Ovid Nursing Journals database produced the most useful literature for the QI project. The keywords cancer and improving communication generated 77 journal articles. In addition to, imputing chemo-brain noted 13 peer review journals.

PubMed produced 958 literature articles using the keywords cancer patient and healthcare provider relationships. The effects of healthcare providers lack of communication on cancer patients yielded 23 articles.

Searching the CINAHL Plus database using, improving communications with cancer patients produced 25 research articles while keywords chemo brain and cancer distress produced the largest source of literature available for review at 1,274 articles.

Google scholar was used as the search engine for cancer-related websites as well as, two textbooks were also used for references.

Keywords cancer, improving communication, ineffective communication, communication tools, chemo-brain, patient-provider relationships, cancer survivors, cancer patient perception of healthcare, oncology checklists, communication checklists, cancer distress, psychosocial needs of cancer patients, healthcare provider stressors.

Concepts, Models, and Theories

Dorothea Orem's contemporary self-care theory provides a comprehensive foundation of self-care in nursing. It is appropriate for this scholarly project as it strives to foster higher levels of communication between cancer patients and providers. Middle range theoretical frameworks such as Orem's approach address communication deficit because of the effects of chemo-brain. One's individuality varies on the cognizance relationship of knowing what is best for themselves at any given time. The loss of one's identity among cancer patients is predominantly evident during treatment of the diseases (Mystakidou et al., 2012). Cancer patients are at an increased risk for self-care deficits resulting from the side effects of chemotherapy. The treatment of cancer physically and psychologically alters the management of daily life for patients (Mystakidou et al., 2012). Chemotherapy especially alters the thought process and the ability to communicate with others. All people strive for growth, independence, freedom, and resolution (Grove et al., 2013).

Incorporating Orem's theory when assisting cancer patients and is a powerful tool for the providers to engage in a more holistic, more positive, and less judgmental approach (Grove et al., 2013). Orem's impact theory acknowledges the uniqueness of the patient's needs, promotes health, and responsibility of care (Petiprin, 2015a). Orem's theory approach stimulates growth and development by enhancing the patients' self-care knowledge.

Systematic Literature Review Related to Methods

Researchers have found that oncology visits increased by 48% in 2014 and that they are projected to increase an additional 42% by the year 2025 (ASCO, 2014). However, the population of practicing oncologists will only increase 14% by the year 2014 and a mere 28% by the year 2025 (ASCO, 2014; Parker et al., 2010). According to the ASCO (2014), 10,000 oncologists, 2,700 nurse practitioners and 1,100 physician assistants are currently practicing in oncology settings across the United States of America. The ASCO predicts 2.3 million new cancer cases will be diagnosed annually by 2030, a 45% increase from the 1.6 million cancer diagnoses in 2014 (ASCO, 2014). An increased volume of cancer patient demands has exceeded the availability of practitioners with the potential future threat to the medical discipline. To successfully meet the increase patient demands and improve patient satisfaction nurse practitioners must understand why a gap exists in addition to, how the role of perceptions of oncology practitioners affects the quality of care. The research literature offers multiple reasons why ineffective communication is not synonymous with superior efforts achieved in the fight for cancer in oncology care with the current healthcare. Aggravating factors include: (a) the effects of chemo-brain; (b) rushed office visits; (c) practitioner burnout; and (d) a lack of communication between cancer patients and practitioners (ACS, 2015; Travado et al., 2005).

In an independent pilot study, physicians (*n* = 372) were given a questionnaire on their perceived barriers to compassion (Fernando et al., 2014). The study reported 34 possible causes of lack of physician compassion with the top four noted as: (a) burnout; ($\alpha = 0.89$); (b) external distractions ($\alpha = 0.91$); (c) disrespectful patients ($\alpha = 0.91$); and (d) complex patient care ($\alpha = 0.92$) (Fernando et al., 2014). The physician barriers compromised the integrity of the provider's ability to effectively treat patients and promote positive patient outcomes (Fernando et al., 2014). In a comparative pilot study of resident physicians (*n* = 15) the results mirrored the previous study conducted by Martin et al. (2005). The results of the study indicated the inability of physicians to effectively communicate with their patients negatively influenced patient self-efficacy in relation to cultural differences (Martin et al., 2005).

Butow, Dunn, Tattersall, and Jones (2002) implemented a *prompt* questionnaire to cancer patients before provider exam appointments. The prompt questionnaire was given to stimulate the cancer patient into remembering what they would like to discuss with the practitioner prior to the office visit. The patient would write or check off a series of questions or symptoms they were having prompting the patient to communicate their needs to the practitioner. The results reported lower anxiety among cancer patients when the prompt questionnaire was used to discuss health concerns. Shields et al. (2010) expanded on this research concept with breast cancer patients by implementing a similar prompt sheet before the office appointment to monitor the effectiveness of self-efficacy based on the patient and the practitioners' use of the questionnaire. The results noted a decrease in anxiety among patients when the questionnaire was used. Deshields, Zebrack, and Kennedy (2013) suggested future research should focus on communication between the patient and practitioners.

The results of a similar randomized trial the previous year using a prompt sheet indicated 48% of patients (*n* = 318) asked questions about their prognosis compared to 39% of patient who were not given the prompt tool (Brown, Butow, Dunn, & Tattersall, 2001). In a newer research study, Yeh et al., (2014) implemented a patient-provider tool questionnaire, the Question Prompt List (QPL) to patients (*n* = 30) with advanced metastatic head/neck cancer finding 90% of participants recommended the QPL. The QPL is an easy to use questionnaire focusing on the most common aspects of cancer treatment concerns prompting cancer patients to discuss health concerns with practitioners to improve communication. The participants were encouraged to share the QPL with their providers, however; no members included the QPL with their providers (Yeh et al., 2014). A similar interactive patient-provider tool known as Chemotherapy Patient Monitor (CPM) studied advanced colorectal cancer patients (*n* = 26) to improve patient-practitioner communication. Implementation of the CPM resulted in 95% participant satisfaction; 83% of oncologists found the tool useful, and 84% of the providers indicated interest in including the communication tool in clinical practice (Anderson et al., 2001).

The Therapy-Related Symptom Checklist for Adults (TRSC) (*n* = 282) is utilized specifically in the oncology unit to improve the treatment cancer patients received. The tool captured 90% of common symptoms reported by patients undergoing chemotherapy in a more patient friendly tool (William, William, & Williams, 2014). The TRSC was tested extensively through “statistical analysis using correlation, epidemiologic, and qualitative methods” and found to have validity and reliability (William, William, & Williams, 2014, p 298). Concluding research noted patients and providers were highly satisfied with the use of the TRSC and there was a remarkable improvement in quality of life. The research also indicated no financial increase accrued as a result of implementation of the TRSC. A sequential checklist was developed for children as a result this instrument.

The American Cancer Society has acknowledged cancer patients experience increased stress from the moment of diagnosis and throughout life (ACS, 2015). To assist cancer patients in coping with stress the American Cancer Society has adopted the Distress Screening Tool another communication tool available to practitioners.

Summary

In summary, significance of improving satisfaction of care that impacts cancer patients is multifaceted. Review of the literature emphasizes the relation of cancer care satisfaction with consistency of patient compliance and willingness to actively partake in the management of their disease (Talen, Grampp, Tucker, & Schultz, 2008). Evidence-based research has shown cancer patients who maintain effective communication relationships with practitioners have improved patient outcomes (Quinn et al., 2011). However, research does not show what relation the lack of time practitioners spends with cancer patients promote ineffective communication. Routine care and preventative management of cancer patients are no longer considered adequate standards of care (Cooper, Loeb, & Smith, 2010). Ineffective communication between cancer patients and nurse practitioners directly affects patient outcomes and quality of healthcare. Crucial elements of increasing the quality of attention patients receive through the use of an effective methods and approach to promote effective communication is critical for success to occur.

Section 3: Methodology

Introduction

The purpose of this systematic literature review is to examine the causes of ineffective communication and the tools available for practitioners who provide treatments for patients diagnosed with cancer in an oncology setting in the United States. In this section, further discussion will include the strategy to be used to analyze the current literature and the inclusion and the exclusion criteria used. Furthermore, section three will discuss the approach and rationale utilization and integration of the tools; (1) the exhaustive review method in which pivotal articles will be selected for this systematic literature review, (2) the hierarchy of evidence for intervention study levels, and (3) the use of the melnyk critical appraisal guide.

Project Design and Methods

The systematic literature review will be formulated and guided using the seven steps of evidence-based practice (Melnyk, Overholt, Stillwell, & Wiliamson, 2010). The Melnyk Critical Appraisal Guide (2010) will be utilized to appraise literature to create a systematic review that would produce a comprehensive collection of research data for review.

The Melnyk approach was chosen based on clear, detailed guidelines developed by the authors that were straightforward and meshed well with this quality improvement project. Proposing the question, if ineffective communication altered the quality of care by applying the steps to determine if insufficient information exists in clinical practice to warrant the need for change to further evidence-based research on the topic. Sufficient evidence was recovered during the initial literature review to continue with the systematic review. The approach of the systematic literature review will begin with the following word combinations entered in the search engine databases to gather research articles for the systemic literature review**:** *communication/*AND *nurse practitioners, communication/*AND *doctors, improving communication/*AND *cancer patients, improving communication/*AND *nurse practitioners, improving communications/*AND *doctors, cancer patients/*AND *communications, cancer patients/*AND *ineffective communications, nurse practitioners/*AND *ineffective communication, doctors/*AND *ineffective communication, cancer, cancer patients/*AND *physicians, cancer patients/*AND *nurse practitioners, cancer patients/*AND *provider communication, communication tools/*AND *nurse practitioners, communication tools/*AND *physicians, communication tools/* AND *doctors, improving communication/*AND cancer patients/AND *nurse practitioners, improving communication/*AND cancer patients/AND *doctors, improving communication/*AND *cancer patients*/AND *communication tools, communication checklists/*AND *cancer patients, communication checklists/*AND *nurse practitioners, communication checklists/*AND *doctors, ineffective communication/*AND *doctors, ineffective communication/*AND *cancer patients, ineffective communication/*AND *nurse practitioners, facilitating communication/*AND *oncology, facilitating communication/*AND *cancer patients, facilitating communication/*AND *nurse practitioners, facilitating communication/*AND *nurse practitioners/*AND *chemo brain patients, facilitating communication/*AND *doctors/*AND *chemo brain patients, Chemo brain/*AND *cancer patients, Chemo brain/*AND *communication, Chemo* *brain/*AND ineffective *communication, Chemo brain/*AND *communication tools, Chemo brain/*AND *checklists*, *patient-provider relationships/*AND *cancer.*

Exclusion Criteria

The systemic literature review will require peer-reviewed journal publications for consideration and cited research references of articles to be evaluated for further potential eligible studies. Articles will be excluded if they are (a) not specific to cancer patients; (b) addressed in the inpatient/hospital oncology setting; (c) do not offer communication tools or checklists; (d) do not engage nurse practitioners or physicians in effective communication; or (e) include specific communication areas. The excluded articles will be listed in a table format labeled: Table 1 articles of exclusion.

Inclusion Criteria

The strategy for the systematic literature review will continue by selecting research studies based on inclusion and exclusion criteria consisting of articles that are unique to the subject. Studies in this systemic literature review were included: (a) if the article discusses improving communications between providers and cancer patients; (b) if communication tools such as checklists or questionnaires are discussed or implemented; (c) if the research studies are specific to the outpatient oncology clinical settings; or (d) if the articles suggest causes of ineffective communication. Inclusion criteria will also include the type of study method, systemic literature reviews, randomized controlled trials, pilot studies, qualitative studies and descriptive correlational studies for the systematic literature review will be represented and labeled as Table 2 labeled articles of inclusion.

Data Analysis

Analysis of the identified research articles will begin with utilizing a scoring system of each research study that based its findings on the highest level of evidence-based research. There are several different versions of the levels of the hierarchy of evidence with some having more complex levels and sub-levels compared to others. For example, McNair & Lewis (2012) discuss seven similar levels of evidence in which research studies are ranked according to the degree and the strength of evidence obtained from the critical evaluation of published research. Level one being the most significant to social change in altering clinical practice based on evidence-based findings of systematic reviews and at the bottom level seven represents information based on expert opinion. For this systematic literature review, Bandolier's five level methods will be used to signify the quality of the research studies critically analyzed. Level's one through four are considered scientifically, the highest quality research data for evidence-based practice for clinical implementations and will only be considered for this systematic literature review. Bandolier's hierarchy levels of evidence include:

Level 1 consists of the highest level of evidence-based research available including: systematic reviews, meta-analysis, multiple randomized controlled trials, and systematic reviews of non-randomized clinical trials

Level 2 Pertaining to the evidence gained from at least one randomized study population, quality prospective and retrospective cohort studies

Level 3 Evidence produced from primary literature trials, nonrandomized, cohort studies, case-controlled studies, time series, correlational & descriptive studies

Level 4 Non-experimental case series studies, mixed methods, and systematic reviews of qualitative and quantitative studies

Level 5 Consists of the lowest quality information background and expert opinion

(Burns, Rohrich, & Chung, 2011; Grove, Burns, & Gray, 2013)

The articles that meet the inclusion criteria will be analyzed for the hierarchy level of evidence and assigned a level number based on Bandolier's level five guidelines. The lower the numeral value, the more significant rigor occurred within the parameter of the research study. Bandolier's method is preferred because the internal scientific validity is tested for strengths and susceptibility to prevent research bias (Burns et al., 2011). Therefore, the greater the quality of the data results the greater the patient outcome is expected to produce evidence-based practice.

Critical appraisal of the systematic literature review will begin with grouping the articles together based on the level of evidence. The research articles will be evaluated to identify relevant content to be critically compared to studies comparable to similar levels of data. The research data of each article will discuss the following:

- Research purpose
- Design
- Population
- Data Analysis
- Interpretation of findings
- Weakness and Strengths of the study

- Gap in knowledge
- Forward Nursing Discipline (Grove, Burns, & Gray, 2013)

Protection of Human Subjects

Evaluation of the systematic literature review was conducted by the Walden University Institutional Review Board (IRB) to facilitate the well-being and protection of all human and vulnerable populations that may be involved in the doctoral candidate's project (Terry, 2015). The literature review does not require the participation of a research population. The academic criterion was anticipated as the continued process of the DNP quality improvement proposal requirements. Data for the systematic literature review does not contain sensitive information and will be stored on a home personal computer. The application for Walden University IRB will be completed along with the required certification of completion issued by the National Institutes of Health web-based training course: Protecting human research participants for review.

Summary

In summary, the inclusion and exclusion criteria narrowed the field of applicable articles for utilization in the systematic review of the systematic literature review. The rigor of quality research must be critically appraised by thoroughly evaluating all aspects of data analysis. Using a systematic approach to logically comparing and extracting valuable, manageable data will generate the highest level of evidence-based research to forward the nursing discipline. This process is imperative to support evidence-based practice for implementation for clinical use in the medical community. The nature of this quality improvement project is to provide evidence-based research for practitioners to improve the patient satisfaction of the care cancer patients receive.

The systematic literature review will involve a comprehensive search of research studies that will identify the causes of ineffective communication and the tools that have been established to assist oncology patients and their practitioners to improve communication in the outpatient setting. The institutional review board is essential and a pivotal part of the systematic literature review necessary to forward the DNP quality improvement project. Nurse practitioners will best serve this vulnerable population by identifying gaps in oncology settings that could cause conflict. Nurse practitioners can use this quality improvement study to identify similar problematic issues in clinical practices to improve cancer patient-provider communication in all oncology settings.

Section 4: Findings and Recommendations

Introduction

Section four will evaluate the search of the systematic literature review. The author will show how research article was deduced and chosen according to the exclusion and inclusion criteria. Detailed discussion will elaborate on the findings of the selected twenty-four articles, divided into a systematic literature review according to the levels of the hierarchy of evidence. A comprehensive arrangement of the communication tools available from the systemic literature review was written in chart form for the readers' consideration. This section of the quality improvement project will also discuss the implications for nursing practice, strengths, and limitations of the project and a brief analysis of the author. The systematic review of literature will validate the continued need for improvement in cancer care beginning with the relationship between cancer patients and their providers in the way they communicate with each other.

Evaluations Findings and Discussion

Using these combinations of search words, the literature search produced 4,533 articles. The literature search was narrowed to peer reviews providing 1,274 articles and again significantly narrowed. Upon Walden University's institutional review board's approval, review of the literature began with a broad consideration of the psychosocial burdens of patients who undergo cancer treatments, which was specifically narrowed to include significant causes of ineffective communication between cancer patients and practitioners. Currently, a total of fifty-one studies published after the year 2001 were reviewed for consideration, Thirty-eight of the fifty-one studies met the inclusion criteria for possible sources of evidence including six pilot studies, 10 systematic reviews of literature, eight randomized controlled studies, four descriptive correlational studies, seven quantitative and qualitative studies, and three expert research articles. Fifteen communication checklist tools resulted from the 38 articles. The strongest evidence is in the plethora of research identifying similar themes of why a breakdown in communication exists between cancer patients and providers. Understanding the cancer patients and the providers' perspective through documented research studies will give the quality improvement project a foundation in which to begin to close the gap in nursing knowledge (Mayer et al., 2011, Raffa, 2010).

Exclusion Criteria

Articles were excluded if they were (a) not specific to cancer patients; (b) addressed in the inpatient/hospital oncology setting; (c) did not offer communication tools or checklists; (d) did not engage nurse practitioners or physicians in effective communication; or (e) did not include specific communication areas. The excluded articles are listed in Table 1: articles of exclusion.

Table 1

Articles of Exclusion

Author, Year	Article of Exclusion: Titles	Rationale for Exclusion
Ben-Ami et al., 2014	Involvement of the family physician in the care of chemotherapy-treated patients with cancer: Patients' perspectives	Role of primary care in relation to cancer patients and oncology. Does not include tools to improve communication

(table continues)

Author, Year	Article of Exclusion: Titles	Rational for Exclusion
Bylund et al., 2011	Developing and implementing an advanced communication training program in oncology at a comprehensive cancer center	Focus on developing communication program among providers only
Epner, 2011	When patients and family feel abandoned	Level 7 scenarios of patient perceptions of ineffective communications
Fentiman, 2007	Communication with older breast cancer patients	This article was difficult to exclude however, this appeared to be a mixture of level 7 and level 3 therefore was excluded
Furber et al, 2013	Investigating communication in cancer consultations: What can be learned from doctor and patient accounts of their experience?	Communication of death and perception not in relation to topic
Foy et al., 2010	Meta-analysis: Effect of interactive communication between collaborating primary care physicians and specialists	Collaboration for effective communication between family care providers and oncologists
Ganz & Hahn, 2008	Implementing a survivorship care plan for patients with breast cancer	Focuses on communication and survivorship not specific
Hess & Insel, 2007	Chemotherapy-related change in cognitive function: A conceptual model	Systematic review of cognitive deficits of chemotherapy
Hudson et al., 2012	Adult cancer survivors discuss follow-up in primary care: Not what I want, but maybe what I need	Barriers in the care of cancer survivors very broad in relation to topic
Maynard & Heritage, 2005	Conversation analysis, doctor-patient interaction and medical communication	Not specific to cancer patients or addressing specific needs of oncology population
Mendick et al., 2015	How do surgeons think they learn about communication? A qualitative study	Does not offer ways to improve communication

(table continues)

Author, Year	Article of Exclusion: Titles	Rational for Exclusion
Newman & Helft, 2015	Reliability and validity of a tool to assess oncology nurses' experiences with prognosis-related communication	Examined the effectiveness of a communication tool in relation to prognosis not patient-provider effective communication
Parker, Aaron, & Baile, 2009	Breast cancer: Unique communication challenges and strategies to address them	Addressed communication related to treatment options in relation to communication not specific to topic
Pierre et al., 2007	Assessment of cancer-related fatigue: Implications for clinical diagnosis and treatment	A clinical tool to measure cancer related fatigue but does not improve communication
Raffa, 2013	Cancer survivor-care: Disruption of prefrontal brain activation top-down control of working memory capacity as possible mechanism for chemo-fog/brain	Addressed cause of cognitive deficits in relation to ineffective communication and the understanding of why but does not offer ways to improve communication
Raffa, 2010	Is a picture worth a thousand (forgotten) words? Neuroimaging evidence for the cognitive deficits in chemo-fog and chemo-brain	Addressed anatomy and physiological cognitive deficits in relation to ineffective communication and the understanding of why but does not offer ways to improve communication
Raffa et al., 2006	Is chemo-fog caused by cancer chemotherapy?	An exceptional article that evaluates the cause of chemo brain in relation to chronic illness and cognitive domains and the understanding of why but does not offer ways to improve communication
Sargeant et al., 2005	Responding to rising cancer caseloads: Family physician learning needs and challenges in cancer care	Discusses wide range of topics with minimal discussion on improving communication however, this article did discuss many of the concerns of why ineffective communication between providers and cancer patient's exits

(table continues)

Author, Year	Article of Exclusion: Titles	Rational for Exclusion
Shaven et al., 2014	Monitoring and optimizing cognitive function in cancer patients: Present knowledge and future directions	Did not discuss ways to improve communication
Shin et al., 2011	Discordance in perceived needs between patients and physicians in oncology practice: A nationwide survey in Korea	Primarily addressed the perceived supportive needs of cancer patients only mentioning the communication needs of cancer patients
Siminoff et al., 2000	Doctor-patient communication patterns in breast cancer adjuvant therapy discussions	Extremely useful information however dated in the year 2000
Staat & Segatore, 2005	The phenomenon of chemo brain	Well written article that offers little detail on how to improve communication for cancer patients and providers
Van Vliet & Epstein, 2014	Current State of the art and science of patient-clinician communication in progressive disease: Patients' need to know and need to feel known	Not specific to improving communication
Wagner et al., 2014	Surgeon-patient communication in oncology	Focused on Patients ability to effectively communicate recollection information prior to surgery

Inclusion Criteria

Studies were included: (a) if the article discussed improving communications between providers and cancer patients; (b) if communication tools such as checklists or questionnaires were discussed or implemented; (c) if the research studies were specific to the outpatient oncology clinical settings; or (d) if the articles suggest causes of ineffective communication. Inclusion criteria also included the type of study method, systemic literature reviews, randomized controlled trials, pilot studies, qualitative studies and descriptive correlational studies for the systematic literature review and are described in Table 2: articles of inclusion.

Table 2

Articles of Inclusion

Author, Year	Level of Evidence	Study Design	Setting	Participants	Outcome
Anderson et al., 2001	Level 2	RCT	United Kingdom (19) Spain (7)	*n* = 26 colorectal cancer patients undergoing chemotherapy *n* = 9 Oncologists	95% of cancer patients and 74% of oncologists reported CPM improved visit with oncologist. 84% of patients suggested checklist should be used to improve communication. 3 oncologists reported they would not use the CPM in clinical practice
Arora, 2003	Level 1	Systematic Literature Review	Bethesda, MD	*n* = 12 communication tools/scale/ Checklists	Systematic review of implementation of communication tools positively impacts the quality of care cancer patients receive from providers
Bergenmar et al., 2006	Level 2	Randomized Clinical trial	7 Outpatient breast cancer specialist clinics Greater Stockholm	*n* = 316 cancer patient (first study, Winter 2001) *n* = 287 cancer patient (second study, Spring 2004)	Significant proportions of patients reported increase satisfaction with reduction in waiting time of 15 minutes with the use of 12-questionnare

(table continues)

Author, Year	Level of Evidence	Study Design	Setting	Participants	Outcome
Bernacki, 2013	Level 3	Evidence-based design	Center for Palliative Care, Harvard Medical School	No participants	Serious illness communications checklist. End of life communication checklist for cancer patients.
Bibila & Rabiee, 2014		Pilot Study	Birmingham City University, Birmingham UK 2 & 3-day training course	*n* = 57 healthcare providers 44% doctors 40% specialized nurses 16% “other”	Evidence reflected effective communication centered on participant’s willingness to engage in change to improve communication between providers and their patients
Braddock & Snyder, 2005	Level 5	Empirical Literature Review	Stanford University School of Medicine	No participants were involved	Empirical review of the ethical significance of patient –provider communication, cause of inadequate time and strategies for providers
Brandes et al., 2014	Level 1	Systematic Literature Review	University of Amsterdam, The Netherlands	*n* = 15 RCT Study *n* = 1 CCT Study	The QPL positively affected cancer patient-provider communication during consultation while decreasing anxiety and increasing patient recall during follow-up office anxiety and increasing patient recall during follow-up office visits

(table continues)

Author, Year	Level of Evidence	Study Design	Setting	Participants	Outcome
Brown et al., 2001	Level 2	Randomized Trial	Sydney, Australia, Hospital outpatient clinics	*n* = 318 cancer patients *n* = 9 Oncologists (5 medical & 4 radiation oncologists)	48% of Cancer patients asked more questions when given a question prompt sheet compared 39% who were not given a prompt sheet
Butow et al., 2002	Level 4	Quantitative	Sydney, Australia, Hospital outpatient clinics	*n* = 298 cancer patients *n* = 9 Oncologists (5 medical 4 radiation oncologists)	Study was expanded based on Brown et al. 2001 indicated doctors are less observant of cancer patients verbal cues.
Clayton & Dudley, 2009	Level 4	Descriptive Correlational	Southeastern USA Private Oncology Practice	*n* = 55 breast cancer patients *n* = 6 oncologists	Patient perception alters patient-centered communication with providers. However, this study indicated providers can enhance survivor perceptions of communication between patients and providers
Davis et al., 2012	Level 1	Systematic Review	Harvard Medical School Boston Mass.	*n* = 21 Studies	Cancer patients using CAM 11%-95% with the prevalence among patients treated by Naturopaths 85%, Homeopathic 74%, Acupuncturists 71% and Chiropractic 47%. With data stating patients’ felt comfortable using CAM with these healthcare providers

(table continues)

Author, Year	Level of Evidence	Study Design	Setting	Participants	Outcome
Fagerlind et al., 2013	Level 4	Quantitative	Sweden Mailed Questionnaire	*n* = 537 Oncologists	Oncologists perceived short office visits, lack of resources, lacks approaches to evaluate psychosocial needs in practice as communication barriers
Landen et al., 2003	Level 3	Descriptive Design	Charleston, South Carolina	*n* = 48 cancer patients	The PMH-PSQ-MD questionnaire is a tool that can be used in a clinical setting by oncologists to evaluate the care they provide to patients to improve communication
Martin et al., 2005		Pilot Study	Birmingham, Alabama Gynecology Residency Program at a county hospital	*n* = 15 Residents	Pilot study indicated a gap in provider education pertaining to cultural differences directly impacted communication with African American Breast cancer patients altering the outcome of patient care
Quinn et al., 2011		Pilot Study	Moffitt Cancer Center Tampa, Florida	*n* = 72 Oncologists *n* = 91 Spanish speaking cancer patients	62% of oncologist concurred communication with Hispanic cancer patients was essential but required a more sensitive approach should be taken to improve effective communication

(table continues)

Author, Year	Level of Evidence	Study Design	Setting	Participants	Outcome
Sheldon, Hilaire, & Berry, 2011	Level 3	Descriptive Design Study	Comprehensive cancer center, ambulatory care	*n* = 20 Group 1 patients *n* = 10 Group 2	Both groups were given ESRA-C questionnaire prior to office visit. 57% of providers acknowledged patient distress cues and 22% addressed patients' cues. Findings indicate provider lack of knowledge, confidence, and time w/patients cause of low response
Shields et al., 2010		Randomize Pilot Trial	Private Practice Indianapolis, IN	*n* = 22 breast cancer patients	80% of breast cancer patients rated prompt checklist effective in improving communication and patient outcomes, reducing anxiety, and psychological distress
Sloan & Knowles, 2013		Pilot Study	Private Faith-Based University	*n* = 8 female cancer patients *n* = 3 male cancer patients	This pilot study found providers did not communicate enough information to meet ethical concerns for cancer patients to make significant choices in healthcare

(table continues)

Author, Year	Level of Evidence	Study Design	Setting	Participants	Outcome
Simon et al., 2013	Level 4	Qualitative Study	Safety Net Clinics, Chicago, IL	*n* = 41 English speaking women *n* = 37 Spanish speaking women	Spanish speaking patients reflected positive communication experiences with their providers & were satisfied with the office visit. 1/3 of English speaking women reported poor communication with providers, received a lack of information, and were more likely not to return for follow-up care
Stewart et al., 2007	Level 2	Randomized Controlled Trial	London Hamilton Toronto Canada	*n*= 17 PCP *n* = 16 Surgeons *n* = 18 Oncologists *n* = 102 Breast Cancer patients	Providers who took the 6-hour CME class did not change communication behaviors. Cancer patients reported greater satisfaction among providers who participate in CME class
Stubenrauch et al., 2012	Level 1	Literature Review	University Hospital of Freiburg, Germany	Not tested on patients or doctors in a clinical setting	The COM-ON-Checklist is a reliable checklist to improve communication between cancer patients and providers

(table continues)

Author, Year	Level of Evidence	Study Design	Setting	Participants	Outcome
Talen et al., 2008	Level 4	Qualitative Study	Midwest Residency Program in a clinical and Urban setting	*n* = 12 Family Medicine residents & *n* = 11 faculty *n* = 13 Internal Medicine Residents & *n* = 5 faculty	Providers believed effective communication begins with patients taking responsibility health, knowing health history, & accuracy of representing themselves with providers
Thorne et al., 2005	Level 1	Literature Review	Texas, USA & Canada	Empirical Literature	Poor communication significantly impacts quality of care patients experience causing unnecessary psychosocial distress and financial burdens
Williams, Williams, & Williams, 2014	Level 4	Qualitative Study	Philadelphia, PA, USA	*n* = 282 Adults *n* = 385 Children	The TRSC & TRSC-Checklist communication tool is extremely effective improving communication in the oncology clinical setting
Yeh et al., 2014		Pilot Study	Outpatient clinics at John Hopkins Sidney Kimmel Cancer Center	*n* = 30 cancer patients	QPL check list did aid cancer patients prior to the office visit with providers and recommended more physicians use the QPL check sheet during office visits

Systematic Review of Literature

The analysis of the systematic review of the literature was guided using Bandolier's hierarchy levels of evidence of thirty-eight critiqued articles meeting the criteria standards of the quality improvement project (Burns, Rohrich, & Chung, 2011). The systematic literature review is apportioned into binary segments. The first segment is a written systematic review of the literature according to Bandolier's hierarchy levels of evidence. The second segment is a systematic review of the literature pertaining to the communication tools available for providers in chart form for ease of reference. Of the thirty-eight research articles that were critiqued, the first group of articles consisted of pilot studies that were not ranked using Bandolier's hierarchy levels of evidence. The author believed the pilot studies would begin the systematic review of the literature, as pilot studies are research's preliminary studies to determine if further studies should be conducted based on analysis of findings. Therefore, it is a natural leap of knowledge for this systematic review of the literature to begin with the pilot studies of which there were a total of 15.7%, written portion (n = 4) and in the chart section (n = 2). Level I discussed the highest level of evidenced-based research, the systematic reviews of literature, Making up 26.3% of the majority of the research articles; in the written portion (n = 2) and in the chart section (n = 8). There was no written portion (n = 0) in Level II, however, level II contained the second largest amount of articles 21%; the chart section form consisted of randomized controlled studies (n = 8). Level III consisted of descriptive correlational studies (n = 1) written portion and (n = 3) chart section with 10.5% of research articles collected for analysis. There was quantitative and quantitative studies (*n* = 4) written portion and (*n* = 3) chart section in level VI accounting for 18.4% of the systematic review of the literature. The last level of hierarchy of evidence completed 7.8% of expert research articles for the quality improvement project with written portion equating (*n* = 1) and the chart section (*n* = 2).

Pilot Studies

Bibila and Rabies (2004) conducted a pilot study of a 2-day alternative didactic training course versus a 3-day alternative training communication skills training course to explore the effective communication of practitioners and the behaviors that cause barriers of effective communications between cancer patients and providers using role play. The 2-day training course evaluated (a) the self-reported confidence levels of providers using a questionnaire in 17 discussion areas; (b) evaluate the participant's thoughts of the training course; (c) examine perspectives of strengths and limitations; (d) assess the implementation of learned communication skills after 3-months' time. The pilot study was to determine if the 2-day training course was as useful as the 3-days training course length in helping providers communicate with cancer patients to improve the quality of care patients with cancer receive in the outpatient setting. The pilot study was a mixed method research study consisting of participants (*n* = 57) and (*n* = 16) training facilitators. The study was divided up among 44% doctors (*n* =25) from different scopes of practices, 40% were nurse specialists (*n* = 23), 16% were listed as other professionals 7% therapists, and 9% consisted of care managers (*n* = 9). Of the participants assigned to the 2-day study (*n* = 33) agreed to take the post 3-month online survey. Random participants (*n* = 24) were allocated to the 3-day training course. A questionnaire of self-reported confidence levels of participants' opinions measured 17 different open-ended question areas incorporated a Likert scale for simple "yes" or "no" answers. Data analysis of the pre-and post-training scores was captured using the SPSS (v17) software with a level of significance of ($P = 0.05$). The results of the data noted the most significant changes occurred among the doctors reporting higher confidence levels before training. The pilot study noted doctors self-reported higher certain levels before the 2-day course in (a) awareness and recognition of patient cues; (b) verbalizing good news relating to cancer outcomes; and (c) eliciting informed consents from cancer patients. However, doctors had a decrease confidence level about (a) addressing behavior issues of colleagues; (b) informing patients of cancer diagnosis or reoccurring cancer especially if the poor prognosis was expected; and (c) address psychosocial needs of cancer patients. Nurse specialists reported before the 2-day course high levels of confidence when discussing psychosocial needs with patients and treatment outcomes. Evaluating the 2-day course 87% believed the 2-day course pacing was "just right." Of the study population, 70% agreed on the length of the course was "just right" compared to 21% of the participants stated the 2-day course was "too long." Results of the 3-day course noted 75% of participants believed no extra benefit was gained by the extended day course compared to 15% who agreed the 3-day course was beneficial, and 10% of the remaining participants made no comments. Overall, Bibila and Rabiee (2004) purported a positive evaluation of the pilot study. The 2-day course was favored among the facilitators indicating time restrictions as a result of being away from the office. The results of the 3-month post-survey questionnaire or the 2-day course showed 70% of the ($n = 33$) who answered the survey reported a change in clinical practice in 14 of the communication areas and 50% of the participants in the 3-day course said variations in the same 14 conversation areas in clinical practice. Further results of the study indicated that improving communication with a 2-day course directly affected changes in which healthcare providers practice in the clinical setting. Bibila and Rabiee (2004) stated the limitations of the pilot study were the time restraints of the facilitators to gather the data of the sample size. As well as, the use of secondary data in addition to the study design did not allow the authors to conduct a direct similarity comparing the 2-day course of the effectiveness of the 3-day course. Bibila and Rabiee (2004) suggested further research address the gap of knowledge surrounding view of training efficacy and effectiveness of communication between cancer patients and practitioners from theory to clinical practice. In the next research study, cultural differences are discussed, how culture impacts communication among cancer patients, and the importance of those differences to improve communication between cancer patients and providers.

Martin et al. (2005) developed a pilot study to enhance (a) effective communication; (b) teaching skills; and (c) cultural competence among resident doctors to motivate patient awareness among African American women to have mammograms to reduce cultural disparities. The pilot study was a joint partnership between Martin et al., and the Community Health Advisors and Research Partners (CHA-RPs). The study focused on residents during their 7-week rotation (n = 15) completed the pretest, (n = 9) completed the pre- and post-test at a gynecology clinic in which 90% of the population is African American women who 75% are uninsured. The residents took part in four 1-hour sessions consisting of (a) discussions of the relevance of patient- provider communication; (b) dialogue of African American cultural beliefs concerning cancer treatments; (c) feedback provided to residents; (d) providers exchanged feedback with one another. Martin et al. (2005) developed a 34-item to measure the self-efficacy of the residents to elicit mammograms from the African American population and the barriers that motivate the patients from obtaining breast care. The residents were provided with questionnaires incorporating a Likert scale "1 = not confident" to "5 = extremely confident." The Likert scale would generate data calculating 3-scores in confidence of the resident pertaining to (a) Discussing mammograms; (b) identifying the barriers to obtaining mammograms; (c) encouraging the women to test for mammograms (Martin et al., 2005). To acquire the data, the authors analyzed the data using paired *t* tests and to prevent any bias, compared the results against the residents who did not complete the assessment using 2-sample *t* tests (Martin et al., 2005). The results did not differ according to age, race, gender, or completion of the residency year. However, the improvement between the pre-test and the post-test results was noted. The greatest improvement occurred with (1) discussing mammograms (r = 4.38, sd = 0.69 - r = 4.28, sd = 0.88, $p = 0.71$), (2) Identifying barriers indicated (r = 3.2, sd = 0.75, - r = 4.10, sd 1.06 = 0.69 $p = <0.01$), and lastly, encouraging patients to test for mammograms (r = 3.03, sd = 0.74- r = 3.67 sd = 1.02, $p = 0.02$). The results indicated a positive in closing the gap of ineffective communication based on cultural differences between cancer patients and practitioners. The authors stated the limitations of the study as the small sample size, lack of controlled group, and the lack of a post-test after the research study to determine any differences in baseline data. The strength of the study was the co-partnership with CHA-RPs. Martin et al. (2005) believe further research should address the legitimacy of the reliability and validity of the authors' self-developed, 34-item scale of measurement. Similar to Martin's et al. (2005) need to identify cultures at risk for disparities as a result of ineffective communication, in another pilot study conducted by Quinn et al. (2011) addresses the cultural barriers of communication effectiveness among the Hispanic population.

Quinn et al. (2011) performed a research study with oncology providers (*n* = 72) and Spanish-speaking cancer patients (*n* = 91) to advance communications between Hispanic cancer patients and providers to reduce the communication barriers, which contributes to the disparities in Hispanic patients and their healthcare outcomes. Of the Spanish-speaking cancer patients 90% believed it was "important to be able to communicate in their preferred language with their physician" (Quinn et al., 2011, p 323). Using a survey questionnaire with 13-items, the authors examined the oncology providers (*n* = 72) communication cultural gap in knowledge to improve the quality of care among Hispanic cancer patients who have limited or do not speak the English language. Six of the thirteen questions focused on language translation with a "yes" or "no" response. Three of the thirteen questions pertained to interpreters, comfortable communicating with patients who only speak Spanish, and provider satisfaction using a Likert scale "1" to "5." The last four of the thirteen questions were open-ended responses with questions about the practitioner's background and interest in communication with Spanish-speaking patients. The results of the study indicated oncology providers used interpreting services 84.7% when caring for Spanish-speaking patients compared to 15.3%, 61.1% were aware if the pharmacy wrote the medications in Spanish compared to 38.9%, and 72.2% of providers have Spanish written literature available in the office for patients compared to 11.1%. The results in regards to provider satisfaction, providers who had available Spanish literature in the provider's office 41.7% compared to 22.3% of providers who did not. When asked if providers are comfortable with their communication skills conversing with Spanish-speaking patients only 81.9% responded positively compared to 17% who were not comfortable. Only 19.4% of providers were interested learning how to use interpreters compared to 80.6% who were not interested. Twenty-five percent of providers in the study were willing to have literature translated into Spanish for patients yet, 75% would not provide that service for Spanish patients. Sixty-six percent of providers were interested in learning a new language to communicate with Spanish-speaking cancer patients to discuss difficult topics compared to 33.3% who refused. Four weeks after the pilot study a workshop was offered in which healthcare providers (*n* = 55) attended and were given a pretest consisting of 7-item with a follow up 3-item post-test. Results of the seminar were 60% felt the workshop was helpful in implementing learned techniques in clinical practice to discuss poor prognosis with Spanish-speaking cancer patients. Analysis of the data had indicated 25% of the providers before the workshop claimed to have little knowledge about discussing poor prognosis with Spanish-speaking cancer patients. However, the results of the post-test the response were 0% to the same question. Authors reported the small sample size as the primary limitation of the research study. Quinn et al. (2011) stated that future research should address the evaluation of qualitative data in regards to experiences of the healthcare Spanish-speaking cancer patients receive about their illnesses and treatments. To improve communications practitioners must take into account all of the barriers that can prevent the breakdown between cancer patients and providers. In a more direct approach, Sloan and Knowles (2013) exposed the cancer patients' perception of communication improvement.

Sloan and Knowles (2013) investigated improving communication between healthcare providers and cancer patients using a pilot study incorporating voluntary cancer patients (*n* =11). The participants diagnosed with different types of cancers, women (*n* = 8) and men (*n* = 3) between the ages of 36 to 76. Interviews conducted in which 3-key themes became evident: "respecting the patient, informed decisions, and providing resources" (Sloan & Knowles, 2013, p 210). Patients reported they felt practitioners were respectful when they spent time with patients, listened to the patients' concerns, and did not rush the patient during office visits. Sloan and Knowles noted patients felt providers did not effectively communicate information related to their diagnosis or plan of care, or more importantly did not offer enough information about their diagnosis. Participants scored providers well on availability for their needs and questions but requested additional resources such as counseling and support groups which was reported by the participants as most often overlooked by practitioners. All of the participants were concerned about the financial impact of cancer care, yet none of the providers gave any guidance or supportive resources to help the cancer patients manage the financial aspect of the high costs of cancer treatment. The pilot study offered ways to improve communication between cancer patients and practitioners often overlooked. The authors agreed the small amount of participants in the research study was a limitation as well as focusing on one region within the United States. Sloan and Knowles suggested further research should investigate influences of financial decisions on medical treatment.

Level I: Systematic Review

Arora (2003) produced an extensive systematic literature review based on the significance of providers' communication behaviors concerning cancer patients. The systematic literature review identified two primary areas of focus: (a) techniques to evaluate provider behaviors and (b) the relationship of the provider's communication behavior concerning cancer patient outcomes. There are three critical phases providers must achieve before interaction with patients. In the first phase, providers must establish a trusting interpersonal relationship with patients. Cancer patients command a relationship with providers that involve the exchange of information, support, and treatment of their diseases. Without the development of the interpersonal relationship, cancer patients are more likely viewed as a disease and less likely to be perceived as a person. The second phase for effective communication provider behavior patterns is to facilitate an open, positive exchange of information with patients in regards to their health and medical needs. For an exchange of this magnitude to be successful providers must first listen to what the patients are communicating. The remarkable adverse effects of providers who do not listen to their patients are reported throughout the systematic review of the literature, impacting patient health outcomes, substantially (Arora, 2003). Cancer patients who suffer from cognitive deficits, depression, and whose psychosocial needs are not met are reluctant to discuss or volunteer health-related concerns to providers who do not hear their patients. Research has proven providers continue to struggle with patients who are not forthcoming with information as a result of their disease process or lack of trust of the providers, finding this population the most challenging to converse with (Arora, 2003). Providers who ask open-ended questions, listen attentively and show empathy can engage patients prompting more information necessary thoroughly to evaluate the medical needs of cancer patients. The last phase that has proven to decrease provider stress is engaging the cancer patient in decision-making. Providers often find the final phase more difficult as this phase requires providers to collaborate with the patients offering choices in the treatment of the disease. The literature review cautions providers not all patients are willing to take responsibility for their healthcare decisions causing frustration for the provider as the provider is then left to make medical decisions for the cancer patients. However, not all providers are willing to follow through giving cancer patients the option in shared decision-making (Arora, 2003). Arora examined two approaches to measuring providers' behaviors about communication, interaction analysis systems referred to as observational and the patient's perception of the providers' communication known as behavioral. Both approaches have flaws with the observational method as more reliable of the two. The patients' perception is not as reliable based on subjective interpretation of the current sentinel event. Arora listed a "summary of twelve measurements of physicians behavior" used between the years 1990 to 2002 in Table 1 of the systematic review of the literature. Within the literature review, Arora cited multiple research studies indicating the grave impact of the providers’ negative communication behaviors causing increase anxiety and distress for cancer patients. Those cancer patients who're providers implemented positive, engaging communicating behaviors with patients showed prosperity of health and well-being. The systematic review of the literature presented compelling evidence-based research for the positive healthcare outcomes and improved quality of life-based on the evidence of positive communication behaviors of providers. The author suggested conceptual refinement, measurement, and the research study design as limitations of the systematic literature review (Arora, 2003, p 799). The author offered multiple suggestions for future research such as larger sample size, extrinsic influences impacting communication between cancer patients and practitioners, the use of multiple interviews over longer durations of time, and a collection of the providers’ perceptions of communication behaviors.

Thorne et al. (2005) presented a critical review of empirical literature of the effects of poor communication causing unfavorable outcome costs of healthcare for cancer patients and serious repercussions for providers. Results of the literature review imply providers are not adequately knowledgeable in communicating with patients or communication effectively information to satisfactory meet the medical needs of cancer patients. Cancer patients come away from their providers with a lack of clear understanding of their disease, treatment goals, and medical misunderstandings of the patient-provider encounter based on ineffective communication. The literature adopts the theory not all effective communication is based on evidence-based research rather clinical experience for example telling a cancer patient their cancer has returned. Finding the exact words to reassure a patient must be individualized and personalized which is improved upon behavior developed over time with experience. Poor communication has been linked to unnecessary medical treatment and excessive prescribing of medications. Poor communication is associated with decreased patient satisfaction, further demands on providers and an increase in provider stress. Also included in the literature review were the roles patients play in poor communication for example, providers' communication behaviors will often change when presented with patients who have demanding attitudes. Providers may inadvertently respond negatively to the verbal cues of demanding patients causing discord in the communication. The literature reflects the importance of providers to be well versed in recognizing the psychosocial needs of cancer patients, which is exceedingly associated with poor communication. The costs of unnecessary psychosocial distress have been associated with providers are neglectful in identifying psychosocial conditions. Oncologists often believe their primary medical role as a provider does not include assessing cancer patients for psychosocial needs. However, studies have shown vast reduction in the utilization of auxiliary medical services when providers address psychosocial concerns of cancer patients thus improving patient outcomes and healthcare costs savings. Poor communication also directly impacts the financial burden of stakeholders. Providers who experience difficulty conversing end-of-life decisions with terminally ill patients are more likely to offer false hope ordering further testing or additional chemotherapy, raising the costs of healthcare unnecessarily. Cancer patients who ineffectively communicate with their oncology providers are more likely to turn Complementary and Alternative Medicine (CAM) putting them at risk for serious health dangers such as drug interaction or worsening of the current disease state by foregoing conventional treatment options. Poor communication is not limited to patient adverse events but is also associated with provider stress and burnout. Providers are unable to meet the demands of the population because of lack of knowledge, training and experience in effective communication. Breakdown of communication usually spills over to staff member, quality of workmanship, and inter-office working relationships. Thorne et al., (2005) believe identifying the causes and effects of poor communication is the first step to the solution of the problem however, until providers are willing to accept their roles as holistic providers, patients receiving cancer care will continue to be inadequate cared for in which the costs of that lack of care is not justifiable.

Level III:

Clayton and Dudley (2009) conducted a secondary descriptive correlational analysis to investigate survivor-provider communications and the time spent during interactions. Audio recordings from a parent study of breast cancer survivors ($n = 55$) ≥ 2 years' post-cancer treatment and Oncologists ($n = 6$) addressed 25-communication categories significant to cancer survivors. Data analysis was conducted by entering the information into the SPSS database. The findings indicated cancer patients spent 55% of their time waiting for the provider, 9% of the time was spent discussing the patients' disease or current illness. Communication about the discussion of personal/social patient information occurred during 4%, of the office visit. Conversations about the plan of medical care and goals consisted of 2% of the office visit such as arranging for chest x-rays or labs. Two percent of the office visits accounted for reassuring cancer patients their cancer was in remission. Cancer patients were more appreciative of providers who took the time to get to know them as people not just a disease, that facilitated a confident relationship. The study alluded to cancer patient's follow-up visits with providers for emotional and informational support. The length of expected survival of the disease did not influence the time spent with cancer patients, in fact; the study found cancer patients were adaptable depending on the interactions of patient-centered concerns. The authors indicated the small sample size of providers of the study was the greatest limitation. Furthermore, not all 25-communication categories were discussed during each office visit limiting analysis of regression. The study presented significant findings of the communication behaviors of cancer patients and providers to recognize areas that necessitate change and interventions to improve communication. The multifaceted needs of cancer patients, as well as the complex behavioral approaches of providers, are intricately intertwined and more often unknowingly influencing patient outcomes. Clayton and Dudley demonstrated communication must be contingent remaining flexible, based on the perceptions of patient-centered conversations for providers to meet the expectations of cancer survivors.

Level IV

Butow et al. (2002) set out to produce a quantitative study to observe the cueing of heterogeneous cancer patients ($n = 298$) in which the participants of the study would signal the oncologists ($n = 9$) for additional information or emotional support. Participants were required to complete two questionnaires in regards to anxiety and involvement preferences. All sessions were audiotaped and transcribed followed by mailed questionnaires within 7 – 10 days measuring satisfaction and anxiety. The oncologists were scored according to how they responded to the patients' cues: "(a) responds immediately and appropriately;" (b) "responds immediately but inappropriately;" (c) "postpones;" (d) "ignores;" (e) "interrupts and ignores;" (Butow et al., 2002, p 51). Patient participant anxiety was measured with a 20-item Spielberger State-Anxiety form using "strongly agree" to "strongly disagree." A multiple-choice questionnaire measured information and involvement preferences using a 5-point Likert scale with choices from "to care for myself", "only good news", "all news", "the doctor only making the decision", "to collaborative decision making", "to the patient only making the decision" (Butow et al., 2002, p 51). The authors measured satisfaction using a 25-Likert scale choosing from answers, "the amount and quality of information presented", "the communication skills demonstrated by the physician", and "the level of patient participation in the consultation" (Butow et al., 2002, p 51). Results indicated 72% of oncologists responded appropriately to informational cues, 28% responded to emotional cues compared to 15% ignored informational cues and 38% of oncologists ignored the patients' emotional cues. Cues that were postponed amounted to 3.7% and 2.3% of oncologists interrupted the patients' cues. The study implied providers who responded to cancer patient cues did not increase office visit time however; cancer patients asked more questions and gave more cues when the office visit was longer. The findings of the study specified oncologists must take an active role in encouraging cancer patients to verbalize how they feel during time spent with providers. The emotional well-being and anxiety are overlooked by providers when cancer patients do not speak up.

Butow et al. forewarned the study was noted with multiple limitations. The authors did not videotape the sessions of the participants. The analysis was limited to the patient and provider interactions only limiting the exploration of complex interactions. The doctors' behaviors were not taken into account preceding patient cues. Butow et al. advocated for future research exploring provider behaviors that facilitated cues of cancer patients. In the next research study, similar themes emerge of ineffective communication between cancer patients and providers.

Fagerlind, Kettis, Glimelius, and Ring (2013) executed a quantitative, nonexperimental study to determine oncologist' ($n = 344$) perceptions of psychosocial barriers of communication between cancer patients and providers. Questionnaires were mailed to 537 Swedish Oncologists that included standard demographics, the Physicians Psychosocial Belief Scale (PPBS), 32-items, and 11 questions. The 32-items used a 5-point Likert Scale in which providers could choose from "1 = Strongly disagree" to "5 = Strongly agree" with low scores indicating positive provider attitudes of including psychosocial in clinical practice. High scores indicate negative provider feedback in which the provider does not feel addressing the patients' psychosocial needs is a part of the providers' role. The SPSS version 20 was used for data analysis and Cronbach's α checked the PPBS along with a stepwise regression data analysis representing the value of $p < 0.1$. The oncologists' perceived barriers were represented as affecting clinical practice as $p \leq 0.05$ validating the PPBS. Oncologists perceived barriers were inadequate office visit time with cancer patients, lack of feedback/resources concerning psychosocial needs of cancer patients, lack of approaches to assess cancer patients' psychosocial needs, and lack of support from colleagues (Fagerlind, Kettis, Glimelius, & Ring, 2013, p 3817). The results of the perceived barriers, 93% of oncologists felt at least one barrier existed compared to 79% of oncologists reported more than one barriers had an influenced on their medical practice. Thirty-three percent of oncologists felt they were not adequately educated to communicate with cancer patients about their psychosocial needs and 25% perceived the lack of knowledge directly affected their medical practice. The data indicated a connection concerning the PPBS and the amount of the perceived barriers ($r = 0.490$; $p < 0.001$) moreover, between the PPBS results and the amount of barriers impacting the oncologists' medical practice ($r = 0.421$; $p < 0.001$). The study indicated an unrelenting gap in clinical practice in which the providers who care for them are not medically assessing the psychosocial needs of cancer patients. As a result, cancer patients are experiencing emotional distress, anxiety, and rushed office visits. The authors cited statistical comparisons as the limitation of the study suggesting the audience interpret the data with warning due to the limitations of *P* and R-values. Fagerlind, Kettis, Glimelius, and Ring, (2013) suggested future research should focus primarily on how the perceived barriers affect the oncologist's medical practice. The following research study discusses the cancer patient's perception of patient-provider communication.

Simon et al. (2013) piloted a qualitative study involving the study of English and Spanish-speaking women ($n = 78$) diagnosed with cervical or breast cancer or an abnormal screening test that were receiving treatment. Simon et al. (2013) wanted to investigate the patients' perceptions of patient-provider communication. Participants of the research study, 53% spoke only English (*n* = 41) compared to 47% spoke only Spanish. The Spanish groups of women were divided up into 3-groups: the Spanish-concordant group made up 27% of the Spanish-speaking women (*n* = 10) was paired with Spanish-speaking providers. The Spanish-discordant group made up 38% of the Spanish-speaking women (*n* = 14) were matched with English-speaking providers and given an interpreter. The Mixed-concordant group made up 35% of the Spanish-speaking women (*n* = 13) were exposed to Spanish and English speaking providers and given an interpreter. Data collection consisted of face-to-face interviews, audio recordings of both English and Spanish-speaking women then translated into their perspective language and again in each language. Questions were asked following the office visit with the provider in regards to follow-up care, treatment of cancer, healthcare access, and patients' perceptions of communication barriers with providers. To generate statistical analysis, the Atlas.ti 6.2 software was used to analyze the qualitative data. Cohen's Kappa statistic code represented 0.8 or greater. Interpretation of the data results indicated 1/3 of the English-speaking women reported providers efficiently and thoroughly responded to their healthcare concerns. However, 1/3 of this population stated providers inadequately communicated in regards to explaining and offering information about their diseases. Many of the English-speaking women reported struggling to understand the medical terminology used by the providers preferring providers use lay terms when offering information to cancer patients. Spanish-speaking women were appreciative of the recourses and did not view the language barrier as a communication barrier but preferred Spanish-speaking providers. The mixed-concordant group reported having more trust with Spanish-speaking providers compared to providers who were not Spanish speaking, again preferring Spanish-speaking providers. During the study data collected reflected African American women struggled with comprehension of the providers' medical terminology that maybe overlooked to effectively improve communication. Contrary to the complaints reported by the African Americans during the study, culture differences among the Hispanic culture feel verbalizing negative comments as rude or confrontational going against their cultural belief. Therefore, the Spanish-speaking women may not have been entirely forthcoming during the study impacting the results of the data. Simon et al. (2013) suggest several limitations exist in the qualitative research. The authors considered the interpreters used during the study might have been influential in skewing the data. Furthermore, the authors did not analyze the language proficiency of the providers or the knowledge of the participants in regards to health literacy. Moreover, the participants' responses may contain bias statements. Simon et al. (2013) believe the strength of their study was the large sample size of participants. Future research recommendations should evaluate cultural values about the quality of improving communication between cancer patients and providers. In the last article of level IV in the systematic literature review, Talen, Grampp, Tucker, and Schultz (2008) focused a study from the perception of providers in regards to the causes of negative and positive communications with patients.

Talen, Grampp, Tucker, and Schultz (2008) initiated a qualitative study concluding what generates good patient-doctor communication from the providers' perspective. Group interviews asked eight discussion questions of internal medicine residents (*n* = 13) with faculty (*n* = 5), family practice residents (*n* = 12) with faculty (*n* = 11) using a focused methodology. The residents had 2 to 26 years' experience ranging from ages 27 to 58-years old. The authors used questions in sequence within a group discussion lasting 35 to 47 minutes. The sessions were videotaped generating 3-common themes: "patient knowledge, skills and attitudes" (Talen, Grampp, Tucker, and Schultz, 2008, p 61). The study acknowledged providers' valued patients who were aware their entire medical history and excellent historians about their medical history. Providers also appreciated patients who knew the medications they had been prescribed and why, as well as, the names of additional treating healthcare providers. Providers were less likely to engage in communication with patients who referenced the Internet for advice, were uneducated about their diseases or medications, and offered excessive amounts of irrelevant medical history. Providers believe that positive conversations regarding patient skills are those patients that come to the office visit prepared to discuss relevant concerns. The study noted providers viewed patients who were manipulative, who verbalized vague complaints, regularly complained, and exaggerated symptoms as barriers to communications. Providers specifically associated negative communication with, "Oh by the way syndrome" (Talen, Grampp, Tucker, and Schultz, 2008, p 62) referring to patients who wait until the conclusion of the office visit to discuss crucial concerns. The last perception of provider themes, patient attitudes are the most difficult to improve communication between patient and providers. Providers believed positive communication occurs when patients take ownership of their disease and follow-up care, are compliant with care, have realistic health expectations, and are honest about what is happening in their health. Negative communications are noted when patients are noncompliant and do not actively participate in the care of their health. Also, patients who are demanding of time, drug seekers, or hides medical information from the primary care provider. The authors consider this research study a gateway for future exploratory studies to understand and explore the communication skills of patients to facilitate effective communication between patients and providers. Limitations to the study consisted of inexperienced primary care residents and faculty. Limitations also included a lack of ethnic diversity in addition to, maintain focus and objectivity with in a focus group of participants.

Level V: Empirical Review

Level V articles are the lowest of the hierarchy of evidence, however; empirical reviews have their value a systematic consideration of the literature. Articles considered of lesser evidence are the accumulation of expert opinions based on their experiences in clinical practice. Researchers disseminate the findings of their analysis for clinical use for practitioners to incorporate into clinical practice as an evidence-based practice. Therefore, by actively implementing evidence-based practice in the clinical setting validates the result and importance of the data generated in research as evidenced by Braddock and Snyder's (2005) empirical defense of the ethical dilemma of the quality time spent with patients. The patient's perception of the quality of care they receive is equated to the time spent during office visits with their practitioners. Throughout the empirical literature review the practitioners' perceived patient well-being and satisfaction with the care provided by practitioners to patients with having adequate time to spend during office visits (Braddock & Snyder, 2005). Braddock and Snyder (2005) theorized the ethical significance of the quality of time must begin with effective communication focusing on patient-practitioner communication by creating a foundation of autonomy, beneficence, fidelity, and justice. The empirical literature review centered around minimizing patients' perception of inadequate time spent with their practitioners through specific patient-centered strategies that would eliminate the patient's fear of the practitioner not meeting their needs in allocated time during office visits. Patients who trust and feel validated by their practitioners will overlook the quantity of time spent during office visits and view the care they receive of quality and that of substance. Braddock and Snyder (2005) suggests strategies such as implementing respect and patient autonomy through encouraging active participation in the decision making of patient healthcare thus influencing patients to engage with practitioners to enhance the quality of time. A second suggested strategy is through the use of beneficence by validating and encouraging the patient's opinions of treatments and plan of care which offers a feeling of control and inclusion in one's decision making of their health. The last strategy is one of practitioner fidelity towards the patient-provider relationship. Practitioners who acknowledge and reassure patients who have been waiting to see the practitioner will receive his or her undivided attention even though the practitioner is running behind for the scheduled office visit offers justice and minimizes the patient's fears of equal and an adequate amount of time to discuss their concerns. Concern was raised within the empirical literature review was the use of concierge medicine or retainer fee-for-service. The authors warn against this type of practice as this could exclude uninsured or self-pay patient populations and can be considered discriminatory. Braddock and Snyder (2005) have shown throughout the empirical literature review the ethical significance of adequate time occurs as a result of efforts to improve communication between patient-practitioner relationships, engage patients, and promote patient-centered healthcare. The findings indicate the quality of care is the patient and practitioner's perception of the quality of information exchanged during the office visit which directly impacts the continuity of patient care, continued patient compliance, improved patient satisfaction, and enhanced patient outcomes.

Communication Tools

Communication in today's fast paced medical field and the proficiency in which medicine is practiced, is an essential element in cancer care. The value of a stethoscope as a tool for providers to hear a murmur of a heartbeat is objectively equivalent to the use of communication tools in one's clinical practice. For effective communication to exist between cancer patients and providers during cancer care, providers require an understanding of cognitive deficits compelling the integration of supportive communication tools (Raffa, 2010). The literature review focuses on 15 research articles featuring communication tools particular to assist the oncology provider to facilitate communication with cancer patients. Table 3 offers a summary collection of communication tools available for provider use to improve the quality of care cancer patients receive.

Table 3

Communication Tools for Implementation in Oncology Clinical Practice

Tool	Author, Year	Study Design	Participants of Study	Content of Tool	Purpose of Tool	Results of Communication Tool
CAM-Complementary and Alternative Medicine	Davis et al., 2012	Systematic Review	*n* = 21 studies using the CAM were critically analyzed	A score classing system. "0 = No Cam" "IA = Complimentary- likely harmless" "IIA = Complementary- potentially harmful"	Assistive screening tool for providers to initiate communication with cancer patients who are at risk when using unconventional medicine. To improve poor prognosis by ensuring patient safety who engage in alternative medicine in place of cancer treatment.	Cancer patients using CAM 11%-95% with the prevalence among patients treated by Naturopaths 85%, Homeopathic 74%, Acupuncturists 71% and Chiropractic 47%. With data stating patients' felt comfortable using CAM with these healthcare providers. Nondisclosure CAM users among cancer patients were 20%-77% stating patients did not disclose CAM use d/t patients perceived negative responses of providers. (Table continues)

						Cancer patients who choose unconventional medicine are at a higher risk for poor prognosis in addition to exposure to non-EBP medicine d/t desperation for cancer cure. Patients are less willing to communication with providers of their engaging in the use of alternative medicines
Checklist for Reporting Symptoms and Side effects	Ohio State University, 2013	Expert Literature review	Unknown	64 common side effects 10 “other areas.” Allows cancer patient to pen an “X” under the date, comments, and other concerns. Uses a Likert Rating Scale from “0 = No problem” to “5 = Moderate” to “10 = Worst possible”	An assistive tool for cancer patients to keep track of side effects related to treatment in which the patient will bring to the office visit to communicate severity of problems with oncologists	Improves the safety of healthcare by preventing further disability among cancer patients as well as supporting patient outcomes by prompting communication of side effects experienced during the treatments of cancer

(table continues)

CME-Continuing Medical Education	Stewart et al., 2007	Randomized Controlled Trial	*n* = 17 Physicians *n* = 16 Surgeons *n* = 18 Oncologists *n* = 102 Patients Providers were randomly divided into 1 of 2 educational groups. Group 1 the controlled group would take a 2-hour traditional educational course on communication behavior. Group 2 would take a 6-hour intensive course. Patients completed a pre and post-CME audiotape	Video feedback review for providers Engaging with real-time learning experiences with patients Questionnaires addressed patient perspective communication concerns Provider perspective barriers and effective communication Likert Scale “Not so good” to “Better” using questionnaires	To determine if a 2-hour or 6-hour CME would Improve patient-practitioner communication	82% of Cancer patients of the controlled group were satisfied and 88.2% felt better after communicating with the surgeons and oncologists compared to 77.7% of cancer patients were satisfied and 70% felt better with surgeons/ oncologist that took the 6-hour CME course. However, communication did not improve among the surgeons or the oncologist but the physicians improve remarkably 4 out of 7 significantly in objective communication compared to surgeons and oncologists,

(table continues)

						which showed no improvement. The CME training influenced physicians more. Only after patients expressed their perception did the surgeons and oncologists alter how they approached the patients enough for the patients to notice an improvement in the quality of care
CPM-Chemo Therapy Patient Monitor	Anderson et al., 2001	Pilot Study	*n* = 19 colorectal cancer patients in UK *n* = 7 colorectal cancer patients in Spain *n* = 8 Doctors *n* = 3 Nurses	Addresses 20 common side effects/concerns with 4 additional areas for patients to pen in concerns. Uses a Likert scale from “Not at all” to “A lot” and “Would you like to talk to your doctor or nurse about this?” and “Talked about with doctor or nurse”	Purpose of pilot study was to assess CPM usefulness to facilitate communication between cancer patients and oncologist from the users point of view	Office visits were not prolonged with the use of CPM. 73% of patients discuss topics during office visits compared to 2% answering not really. 14% of the patients felt the CPM improved the visit

(table continues)

						compared to 36% “a little” and 5% felt the CPM did not help the office visit at all. 40% of patients would use the CPM often compared to 20% “all of the time.” 33% of Oncologist found the checklist useful compared to 17% not at all. 68% of oncologists felt CPM improved office visits compared to 26% who states not at all. 63% of Oncologists would sometimes use the CPM again.
Distress Screening Tool and Problem List	ASC, 2015	Literature Review	Unknown	Addresses 33 common concerns and side effects using a Likert Scale to answer “Yes” and “No” Covers: practical, physical, family, emotional, and	The purpose to assist cancer patients in reducing stress caused by having cancer and communication with practitione	The literature reviews critically analyzed the distress-screening tool as communication tool providers can implement to improve healthcare

				spiritual problems In addition to, a distressing screening tool thermometer using a Likert Scale from “No distress = 0” to Extreme distress = 10”	rs if they experience stress in the oncology outpatient clinical setting.	outcomes for patients during the initial diagnosis and throughout the treatment of cancer to reduce patient burden
ESRA-C-Electronic Self-Report Assessment-Cancer Tool	Sheldon, Hilaire, & Berry, 2011	Descriptive Study	*n* = 660 Patients completed ESRA-C *n* = 590 Patients were on Audio recordings *n* = 20 Practitioners The Controlled Group 1 *n* = 11 Practitioners in Group 2 Received a printed ESRA-C results prior to visit with patient	Open-ended questionnaire	Patients filled out questionnaires pertaining to distress and socioemotional concerns. The practitioners were provided with 10 of 31 written summaries of the ESRA-C prior to visit w/patient to determine if knowing the patients answers to the questionnaires would the practitioner acknowled	57% of Practitioners responded to socioemotional cues from the patients with only 22% of providers in engaging in further conversation with the patient. Practitioners in group 2 acknowledged patients cues 62% but were less likely to engage in the patients concerns 11% compared to practitioners in group 1 acknowledged patients cues 55% of the time engaging 26% with patient concerns. The ESRA-C

(table continues)

					ge the patients cues, respond to patients’ cues, or do nothing	results indicated practitioners after reading the report generated about the patients answers of the questionnaire did acknowledge the cancer patients concerns but did not take the next step further to address the patients concerns. The ESRA-C will reduce the consequences of illness
The FACT-Cognitive Function (Version 3)	Joly et al., 2012	Mixed Qualitative and Quantitative Study	*n* = 35 in the pretested group of cancer patients undergoing chemo therapy *n* = 63 group of cancer patients undergoing chemo therapy in the final measurement of the tools validity	Addresses 37 common concerns and side effects using a Likert Scale from “Never = 0” to “Several times a day = 4”	Measures the cognitive function of cancer patients in the oncology outpatient clinical setting	Reliability of internal consistency are as follows: Perceived Cognitive impairment (α = 0.93) Abilities (α = 0.89) Impact QOL (α = 0.85 Comments from others (α = 0.70) Patients with Mild to

(table continues)

						moderate cognitive deficits can use this tool with ease. Cancer patients with Severely cognitively impaired will have difficulty. This tool is supportive in the care patients receive and eases clinical practice
OCPC- Oncology Clinic Patient Checklist 34	Richardson et al., 2005	Systematic Review of Literature	*n* = 15 articles	Addresses 86 common concerns and side effects plus 3 open-ended questions	Thorough assessment of the treatment and side effects/concerns of adult cancer patients in the oncology outpatient clinical setting	82% of cancer patients found OCPC improve commun. and improve patient-provider relationship/pt outcomes. Review of the literature discussed when tools are used throughout the treatment of cancer consistent clinical practice reduced patient burdens.

(table continues)

PMH-PSQ-MD--The Princess Margaret Hospital Satisfaction with Doctor Questionnaire	Landen et al., 2003	Descriptive Design	$n = 48$ patients	41 statements pertaining to the skills, quality of time spent, and empathy of their practitioners using a Likert scale from “Strongly agree = 1” to “strongly disagree = 4” in an outpatient clinical setting	Used to measure the patient’s satisfaction with the quality of care patients receive from their practitioners in the oncology outpatient clinical setting	Highest positive ranking patient responses: Dr. explained TX (mean=3.42-3.42) Dr. was honest (mean=3.42-3.42) Recommended Dr to friends (Mean 1.54 - 3.46) Dr considered individual (mean= 3.38 - 3.38) Dr DX condition w/o enough information (mean= 1.64-3.32) Top 5 negative findings reported by patients: Dr can do some things better (mean=2.54-2.46) Dr understand my pain (mean=2.71-2.71) Dr seems rushed (mean2.27-2.73)

(table cont)

						Dr should give more information about my condition (mean=2.20-2.80) Usually not enough time to tell dr. everything (mean=2.17-2.83)
Problems Checklist	Richardson et al, 2005	Systematic Review of Literature	*n* = 505	Addresses 16 areas of holistic life concerns. Uses a Likert scale "No difficulty = 0" to "severe difficulty = 3." A category of "does not apply to me" is an option for choice	Assesses the psychosocial issues cancer patients encounter during treatment and throughout the disease process in an outpatient oncology clinical setting. Encourages communication between cancer patients and practitioners to reduce the burdens of cancer treatment	Internal consistency is noted as (α = 0.70 - 0.82) *(table continues)*

Prompt Sheet	Shields et al., 2010	Randomized Controlled Trials	*n* = 22 Breast cancer patients	21 question Prompt symptoms and long-term side effects sheet and telephone advising to encourage breast cancer patients to communicate one week prior to follow-up appointments with practitioners	To identify breast cancer patients at risk for adverse quality of life by improving self-efficacy, increase mood, and lessen fears of breast cancer patients	50% of breast cancer patients felt the PS was "very helpful" where as 31% scored the PS was "helpful" Emotional Analysis of the language indicated 72% of the questions written by the patients used emotional wording 39 out of 54 questions. 12 patients wrote positive questions, 19 patients had negative emotions, and 15 patients had anxious questions indicating the patients were encouraged to communicate their feelings. Self-efficacy scored a T4 using ANCOVA indicating a predictor of depression (p = <0.05) (table continues)

QPLs- Question Prompt List	Brandes et al., 2014	Systematic Literature Review	*n* = 16 Articles	Discussed the differences in patient generated vs. EBP Questionnaires of QPLs	Neutral review of effectiveness of the implementation of QPLs in the outpatient clinical setting	Review of the literature indicated conflicting reports of increasing or decreasing the office visit when using QPLs, Evidence did not support QPLs influenced patient satisfaction. QPLs can cause anxiety and reports no change among patients who are depressed, anxious, influence psychological adjustment, reduce significant patient distress that use QPLs. QPLs suggest significant help with cognitive influence
QPS- The Question Prompt Sheet	Brown, Butow, Dunn, & Tattersall, 2001	Randomized Controlled Trials	*n* = 318 Patients with mixed cancer DX *n* = 5 Medical Oncologists *n* = 7	17 Commonly questions in which patients were instructed to circle the questions they would like to discuss with practitioners	QPS promotes communication between cancer patients and practitioner by	95% of Patients who were given the QPS asked more questions pertaining to their (table continues)

			Radiation Oncologists	15-minutes prior to office visit A 25- item questionnaire was used to measure the patient's satisfaction with the QPS	encouraging the exchange of questions, obtains information otherwise would be missed. The QPS reduces time provider time spent with patients as well as patient anxiety	prognosis (α = 1.60, CI = 0.98 - 2.60) compared to patients that did not use the QPS reported as (p=0.058). 52% of cancer patients using the QPS recalled more information compared to 44% who did not use the QPS. Practitioners who implemented the QPS and patient's w/PS had shorter office visits (x =28.50 minutes, SD = 9.87) compared to those patients w/only PS (x= 34.36 minutes, SD = 14.93), the control group the was slightly lower at (x = 32.09 minutes, SD = 13.13) Patients w/PS experienced more anxiety (md =, IQR= 28-46) compared controlled (table continues)

						group (md =32, IRQ = 25-43)
Serious Illness Communication Checklist	Bernacki & Block, 2013	Literature Obtained from Experts Sources	None	Systematic approach to develop treatment of care for the end of life	Improve care by facilitating communication through the initiation of end of life topics of discussion	Assistive tool for discussion to reduce burdens of death and consequences of illness patients may encounter for preparation
TRSC-The Therapy-Related Symptom Checklist for Adults	Williams, Williams, & Williams, 2014	Correlational epidemiological qualitative	$n = 282$ Adult patients undergoing chemotherapy $n = 385$ Children	Contains 90% of common complaints experienced by patients. 25 symptoms/items in a checklist format using a Likert Scale “0 = None” to “Very severe 4”	Improves communication by identifying patient concerns that could alter treatments if overlooked in the outpatient oncology clinical setting	Statistical analysis of the TRSC: ($r = 0.35$, $p < 0.001$) 79% of linear analysis indicated a variance of 78.8% within the sample population. Statistical analysis of the TRSC-C: Measured ($r = 0.32$, $p = 0.02$) the Variance accounted for 53% of the sample population. Study noted TRSC improves quality of care by efficiently managing side effects and safety of pt outcomes

Implications

Implications of the systematic literature review contributes to the medical community by educating oncology providers regarding the communication tools available as evidence-based resources for application in the outpatient clinical practice. Providers who identify cancer patients who are at high risk for ineffective communication can use the applicable communication tool that would best meet the need of the cancer patient and the provider. The communication tools are not intended to be used just for the purpose of enhancing patient health outcomes. Providers may identify a particular needy or difficult patient in which the provider is struggling to redirect during office visit or to stay on task. This opportunity is one of the many intended utilizations to facilitate the office visit with the patient to improve communication or address the sentinel behavioral concern. These tools can be used for many different reasons based on the needs of the provider and the cancer patient.

Further implications of this systematic literature review will play a critical role by enhancing clinical performance measured through the quality of successful patient outcomes of cancer care by engaging patients and their providers. Patient-centered care must refocus on patient-provider centered care to empower both entities to become key players in a partnership focusing on communication as the primary foundation of quality cancer care. Engaging practitioners in closing the gap in nursing knowledge through translating evidence into the clinical setting by reducing the burden of cancer patients and minimizes the practice burdens of oncology practitioners.

Strengths and Limitations of the Project

The strengths of this systemic literature review include peer-review articles of the highest level of evidence available including pilot studies, literature reviews, randomized controlled trials, qualitative and quantitative studies as well as descriptive research. Level five of the hierarchies of evidence are considered the least reliable resources of information in the medical community. Sources of literature founded on the expert opinions and experience of healthcare providers that may be regarded as a limitation of the study (Burns, Rohrich, & Chung, 2011; Grove, Burns, & Gray, 2013). This doctoral candidate considers communication a form of personal expression one that is developed through academics and life experiences. The literature review attempted to convey to the readers the implications of applying ineffective communication in the clinical setting. Therefore, the least level of the hierarchy of evidence was included in the systematic review of the literature to support and strengthen the quality improvement project through the application of evidence-based research applied in the clinical setting. Another strength of the systematic literature review includes the articles were taken from different countries to gain a cultural perspective of effective communication.

There are several limitations to the systematic literature review. First, there are numerous ways to improve communication between patients and providers. However, this study was limited to cancer patients and practitioners in oncology in an outpatient setting. Second, this study was limited based on the patient diagnosis of “cancer” and healthcare description of “practitioner/provider.” Third, limitations focused on how to assist cancer patients and practitioners with communication tools that may also help other healthcare providers who work with cancer patients.

Further recommendations of this systematic review would be to use these communication tools to help primary care practitioners communicate with cancer patients and their oncology practitioners. Another suggestion for future research should elaborate on 15-minute office visits with specific guidelines on how providers could perform this challenging task. Furthermore, cancer patients are a heterogeneous population with multifaceted medical needs. The practitioners are burdened with enormous stress and responsibility when caring for this population. Foundational guidelines with holistic, comprehensive quality care to decrease the practitioners' burden of stress would also be worthwhile for a further research study to expedite the quality of patient care.

Analysis of Self

The demand of necessity from within the medical community to improve communication between cancer patients and providers guided the systemic review of literature for this researcher. One provider may observe what is lacking in a clinical setting and assume the same behavior occurs on a larger scale throughout most clinical settings yet, very little change occurs to alter the way medicine is practice. For change to occur a provider must first analyze oneself and identify the need for change to exist to improve the care they provide to patients. This systematic review of literature validates the continued need for improvement in cancer care beginning with the relationship between cancer patients and their providers in the way they communicate with each other. By simply improving effective communication with communication tools in clinical practice practitioners profoundly improve patient outcomes while at the same time making practicing medicine easier, safer, and more thorough. All practitioners can implement this study in their clinical settings to bridge the gaps within the nursing discipline to improve healthcare and more importantly, improve the way they practice medicine.

Summary

In summary, the systematic literature review offered conclusive causes of ineffective communication and detailed understandings of why this phenomenon occurs between patients and providers. Providers who implement communication tools available to them in clinical practice expand evidence-based research data and promote health in cancer patient well-being. The significance of this groundwork surrounds forwarding the scope of practice for advance nurse practitioners while eliminating barriers that burden cancer patients. Implementing the highest level of evidence-based research in clinical practice to treat cancer patients ensures the highest quality of information is disseminated to healthcare providers, academic institutions, and medical societies.

Section 5: Scholarly Project: Dissemination

Introduction

The dissemination of research is a strategic approach that is the ethical obligation of all researchers to share high quality information that could potentially change how medicine is practice. Research has the potential to affect all medical disciplines depending on how the information is disseminated and whom the information reaches. All researches hope their hard work and dedication to the subject has some impact on the lives it was meant to change. Section five will discuss dissemination of the systemic literature review post-graduation and how the information will reach the intended audience.

Project Dissemination

The final process of the systematic literature review is the dissemination of the information to the stakeholders who hold the most interest in the project to improve the quality of cancer care Arizonians receive and those cancer patients across the United States of America. Reaching the largest audience and generating a realistic impact in which stakeholder will be willing to implement the information sent to them must begin with targeting a specific audience while keeping costs in mind, while making the most impact.

Dissemination of the systemic literature review will include the brochure (see below) that can be easily presented and handed out to oncology outpatient settings. Currently in the State of Arizona approximately 1,674 practicing oncologist across twelve counties provide health care services to cancer patients (Healthgrades.com, 2016).

Development of the simple easy to read brochure to reach this target audience over such a vast range of territory for practitioners to review at their leisure will be more inviting and more convenient while keeping the costs down to disseminate the information into the medical community (see Figure 1).

Post-graduation, this author also plans to work with an editor to prepare the systematic literature review for publication to disseminate the results of the literature review. Publication in the academic Journal of the Advanced Practitioner in Oncology is viewed worldwide by millions of the medical community as well as students. Reaching out to practitioners around the world would enable practitioners to determine if the information is applicable in their clinical settings. The greater the exposure of the research results has to a broader audience the more likely the potential success of implementation.

The ultimate goal of the literature review was to improve the life of one cancer patient by helping one practitioner. With the hopes that practitioner would pass his or her success on to another practitioner to help another and so forth and so on. Cancer is a devastating disease. As practitioners we are in control of how we treat our patients. Not always of the disease as we would like to think. Sometimes cancer wins. But as practitioners we never have to let cancer take our patients completely from us while they are still in our care. Talk to them while they still have time.

Figure 1. A Quick Guide to Communication Tools for the Oncology Provider

Cognitive deficits directly impact patient communication often causing stress on the patient-practitioner relationship

Ineffective communication is associated with poor cancer patient outcomes

Ineffective communication affects cancer patients socially, psychologically, emotionally, and financially

Cancer patients feel their practitioners are too busy to listen to their medical concerns

Practitioners struggle to meet the demands of high volumes of cancer patients

Ineffective communication creates a fragile and unsure state of disease for cancer patients and for practitioners. As practitioners it is our ethical responsibility to improve the quality of care we provide as representatives of the medical community for the populations we serve.

* * *

If you would are interested in more information about this exciting topic, *Improving Communication Between Cancer Patients and Providers During a 15-Minute Office Visit: A Systematic Review of the Literature* please email: tammy.manganelli@waldenu.edu

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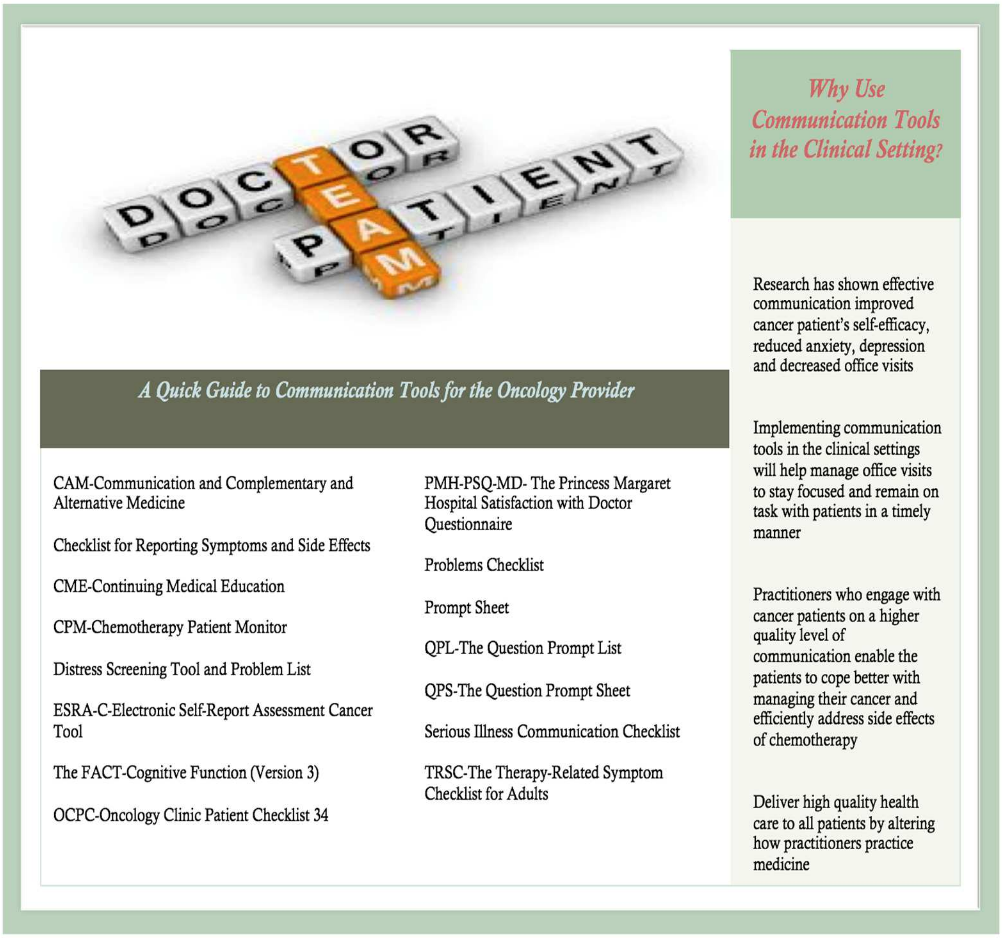
Improve Communication Between Cancer Patients and Practitioners Using Communication Tools



Why Use Communication Tools in the Clinical Setting?

A Quick Guide to Communication Tools for the Oncology Provider

CAM-Communication and Complementary and Alternative Medicine

Checklist for Reporting Symptoms and Side Effects

CME-Continuing Medical Education

CPM-Chemotherapy Patient Monitor

Distress Screening Tool and Problem List

ESRA-C-Electronic Self-Report Assessment Cancer Tool

The FACT-Cognitive Function (Version 3)

OCPC-Oncology Clinic Patient Checklist 34

PMH-PSQ-MD- The Princess Margaret Hospital Satisfaction with Doctor Questionnaire

Problems Checklist

Prompt Sheet

QPL-The Question Prompt List

QPS-The Question Prompt Sheet

Serious Illness Communication Checklist

TRSC-The Therapy-Related Symptom Checklist for Adults

Research has shown effective communication improved cancer patient's self-efficacy, reduced anxiety, depression and decreased office visits

Implementing communication tools in the clinical settings will help manage office visits to stay focused and remain on task with patients in a timely manner

Practitioners who engage with cancer patients on a higher quality level of communication enable the patients to cope better with managing their cancer and efficiently address side effects of chemotherapy

Deliver high quality health care to all patients by altering how practitioners practice medicine

A Quick Guide to Communication Tools for the Oncology Provider: References

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Figure 1.

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