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## The Synchronicity of Hope and Enhanced Quality of Life in Terminal Cancer

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THE SYNCHRONICITY OF HOPE AND ENHANCED QUALITY OF LIFE  
IN TERMINAL CANCER

by

BRIANNA TERRY

A thesis submitted in partial fulfillment of the requirements  
for the Honors in the Major Program in Nursing  
in the College of Nursing  
and in the Burnett Honors College  
at the University of Central Florida  
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Thesis Chair: Dr. Susan Chase

## **Abstract**

Cancer is the second leading cause of death in the United States and a leading cause of death worldwide. The rate of mortality is currently approximately 171.2 out of every 100,000 individuals with a terminal cancer diagnosis annually. Individuals with terminal cancer diagnoses facing probable mortality utilize various coping mechanisms or internal resources in an attempt to maintain an internal sense of well-being, commonly referred to as quality of life (QOL). The purpose of this literature review was to investigate themes prevalent in the literature pertaining to internal coping mechanisms and analyze any correlation or causation linking these resources to a change in QOL in individuals with a terminal cancer diagnosis. The secondary purpose of this review was to interpret and define the healthcare provider's role in supporting this relationship.

A systematic review of the literature was conducted from multiple online databases. Multiple studies related to the overarching themes of internal resources and QOL for individuals with a terminal cancer diagnosis were selected for the review. Results revealed major themes pertaining to correlation between hope and QOL. Studies which analyzed the relationship between hope and QOL found a positive correlation. The literature suggests that healthcare providers are capable of facilitating this relationship between hope and QOL. Healthcare provider facilitation of the relationship between hope and QOL is valuable in the clinical setting, and can aid an individual in achieving a desirable QOL.

## **Dedication**

For my family, I love you all! Especially for my father, Darren Terry, for being the inspiration for my thesis and inspiring me every day to live life to the fullest. My mother, Dianne Terry, thank you for encouraging me to do great things and to push myself farther than I could have ever imagined. My love, River Cox, thank you for believing in me, and helping me to keep writing even when it was challenging. For my friends who have been so understanding and supportive of my thesis, especially Autumn Smalley. Above all, for my Lord and Savior, Jesus Christ. Thank you for blessing me beyond words, for your mercy and forgiveness, and for instilling in me my passions to serve others and make a difference in this world.

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## **Introduction**

The prognosis for an individual who is diagnosed with a terminal illness or disease, ultimately includes limited remaining days of life. One of the most common and brutal forms of terminal illness is cancer. Cancer is defined by the American Cancer Society as “a group of diseases characterized by the uncontrolled growth and spread of abnormal cells” (American Cancer Society [ACS], 2016, p.1). Spread or metastasis of the cells to crucial organs of the body inevitably results in death (ACS, 2016). Individuals diagnosed with cancer experience psychological and physical responses to the diagnosis, and begin the process of coping with impending loss of life (ACS, 2016). Through this process, individuals typically utilize internal resources and strengths (Rotegard, Fagermoen, & Ruland, 2012). One of the most noteworthy internal resources is hope. Healthcare providers can enhance the quality of their care by seeking to understand the importance of, and learning how to support hope in individuals diagnosed with terminal cancer. Possessing an understanding of how to facilitate hope for individuals with a terminal cancer diagnosis is instrumental in implementing hope fostering strategies and positively impacting the lives of these individuals.

The American Cancer Society (2016) predicts 1,685,210 new cases of cancer to be diagnosed in 2016, and of all cases of cancer, 595,690 persons are expected to die from cancer this year. Despite this large prediction of mortality, the 5-year rate of survival for all cancers rose to 68% between the years 2004-2010. This increased rate of survival, up 21% from previous years, may be due to the new capability for early detection and treatment of cancer (ACS, 2016). As of 2011 the most prevalent cancers of all races in the United States include prostate, breast, lung, colon and rectum, endometrium, bladder, melanoma, kidney, thyroid, and non-Hodgkins



lymphoma (Centers for Disease Control and Prevention [CDC], 2011). The three most common cancers are breast, prostate, and lung cancers (National Cancer Institute, 2015).

Cancer is staged in a variety of ways. There are 4 different methods of cancer staging, these are Clinical Staging, Pathologic Staging, Post-Therapy or Post-Neoadjuvant Therapy Staging, and Restaging (American Joint Committee on Cancer, 2015). Clinical staging determines how much cancer there is, as well as if and where it has metastasized. The clinical staging system is the most widely used in the United States for communicating the nature of prognosis to individuals and families. Receiving a terminal prognosis is seen to directly negatively affect levels of hope and overall quality of life (Eustache, Jibb, & Grossman, 2014). Therefore, healthcare providers can anticipate a negative impact on hope and QOL in individuals with a terminal cancer diagnosis and be prepared to combat this effect with strategies and interventions that will positively impact hope and QOL.

## **Background**

Health care providers, specifically nurses, care for individuals with a terminal cancer diagnosis in numerous ways from the onset of diagnosis. These include aiding the individual in coping with shock and fear, relieving physical symptoms, and maintaining open communication. These influential and highly trusted individuals combine compassion with skill, knowledge, and resources to create the best plan of care for individuals diagnosed with cancer. According to a study by Radwin & Cabral (2010) exploring trust in nurses, on a score of 1-6 (1 meaning never, 6 meaning always) individuals' trust in nurses (from knowledge of the individuals' cancer to how often the nurse was there when the individual needed them) averaged in a rating of 5.41, reinforcing the significant position nurses have in the course of their care of individuals with cancer. Nurses have the opportunity to utilize the trust that individuals have in them to support the development of the individual's strength. In a study of individuals with a cancer diagnosis, these individuals identified strengths they had or wished they had during their care. They included "good mood, mindfulness, willpower, positive relationships, hopes and beliefs, protection, and taking action and control" (Rotegard, Fagermoen, & Ruland, 2012, p. E8).

In a study of internal resources as expressed by community dwelling individuals with a cancer diagnosis, hope was identified as a useful resource for individuals with cancer because of the impact it can have on self-image, health status, and future outcomes. Hope is a resource that can be utilized to encourage strength for individuals with cancer, and is fluid enough to restructure into a source of peace and comfort in the last days of life (Rustoen, Cooper & Miaskowski, 2010). According to the same study hope has been found to mediate the relationship between health status and psychological distress often associated with terminal

illness where hope had a strong, significant correlation of 0.547 with satisfaction with life in individuals with a terminal cancer diagnosis (Rustoen et al., 2010). Hope has many outlets including faith, religion, inner strength, and even peace with what is to come.

Quality of life has been defined in a plethora of ways including “health status, physical functioning, symptoms, psychological adjustment, well-being, and life satisfaction” (Rustoen et al., 2010, p. 259). QOL, defined as an individual’s perceived level of well-being, is extremely significant to the healthcare field because an individual’s QOL is directly related to their health status (Wilson & Cleary, 1995). QOL as a concept is highly subjective. In their study of the impact of hope on the relationship between psychological distress and QOL, Rustoen et al. measure QOL using a 7-point scale that they designed for individuals to rate how satisfied they were with their lives. The use of questionnaires is a simple and cost effective tool to evaluate and yield statistical data, and is therefore widely used in research studies evaluating both hope and QOL. Other tools available include questions to evaluate the impact of cancer on relationships, finances, exercise, physical distress, health awareness, worry, body change concerns, altruism, physical, sexual, and cognitive function, spiritual aspects, social aspects, and life as a whole (Muzzatti & Annunziata, 2013).

## **Purpose**

There is a need for increased provider understanding of internal resources, specifically hope, including an understanding of the variations of hope, as well as the role of hope in psychosocial client outcomes. “Hope is definitely not the same thing as optimism. It is not the conviction that something will turn out well, but the certainty that something makes sense, regardless of how it turns out.” – Vaclav Havel (as cited in Toh, 2011, p. 54). This perspective on hope is important to healthcare providers due to its focus on promoting psychological well-being rather than expecting positive physical outcomes.

The current established cancer care model does not focus on hope, but instead primarily enforces aggressive, new, and expensive treatment due in part to the financial benefit these treatments provide to physicians, even if the treatment may have a low likelihood of success and carries a heavy symptom burden of its own (Mattes & Sloane, 2015). There is a need for greater healthcare provider focus on care of the individual’s quality of life due to its importance in overall well-being. Encouraging an individual to share his or her desires for the course of treatment and outcomes can support and encourage hope. An increase in communication about hope and end-of-life issues between members of the interdisciplinary health team and the individual, can spare the individual and family from unnecessary suffering, and improve QOL (Rustoen et al., 2010). There is a need for greater clinician understanding of the relationship between hope and QOL, in order to better develop supports for enhanced QOL and death.

The basis of this review of the literature is to increase awareness to the concepts of hope and QOL, and of the relationship between the two. Further, this study will present strategies which can be implemented to facilitate this relationship in order to increase healthcare provider

knowledge and understanding of this dynamic and critical relationship. This study is intended to encourage healthcare providers to consider implementing these strategies in order to positively impact the lives of the individuals under their care.

## **Research Questions**

- What role do the concepts of hope and quality of life have for individuals with a terminal cancer diagnosis?
- If there is a relationship between hope and QOL, what is its nature, and do varying degrees of hope predict QOL?
- Is there evidence on how nurses and other members of the interdisciplinary health team can intervene to support varying degrees of hope for individuals with a terminal cancer diagnosis?

## **Methods**

A literature review of primary research articles from the databases MEDLINE - EBSCOhost and the Cumulative Index of Nursing and Allied Health (CINAHL) using the key terms “Hope”, “Quality of Life”, and “Cancer” was conducted. Inclusion criteria consisted of peer reviewed primary research studies, written in the English language, and inclusive of articles published during or after the year 2005. Certain key primary articles published prior to 2005 were included due to their relevance to the subject matter. Articles were further narrowed down based on synthesis of the three main topics “Hope”, “Quality of Life”, and “Cancer”, and included both qualitative and quantitative research articles. When articles were obtained, they were first examined for the variety of definitions of the three main topics. After grouping studies with compatible conceptual models, a synthesis of findings related to the relationships among the concepts was constructed.

## **Results**

Fifteen studies related to hope, quality of life, and terminal cancer were included in this review of the literature. Twelve studies were published within the past ten years. Three studies were published prior to 2007 and were included in this review of the literature for their direct relation to the central question of this study. Four articles were a review of the literature which included studies from 1982-2014. These articles were reviewed separately. Eleven articles consisted of original research. Six studies conducted quantitative research. Of these six articles, one was a randomized controlled trial testing the intervention of individual meaning-centered psychotherapy, one was a quasi-experimental study testing a hope-enhancing group intervention, and all six included the utilization of published, well-known, and highly tested self-report questionnaires to conduct their research. Of these self-report questionnaires, three were utilized in more than one article, and the Herth Hope Index (HHI) was the most often utilized, including its precursor the Herth Hope Scale (HHS). Five studies conducted qualitative research utilizing interviews of between 12 to 26 participants. Of these five articles, three utilized semi-structured interviews, two utilized focus group interviews to collect their data, and one article utilized a self-report questionnaire in addition to the interview. Interviews were conducted by the researchers.

The literature reviewed revealed major themes pertaining to hope, QOL, and terminal cancer. These themes include tools to measure hope and QOL, varying views on hope, that QOL is as diverse as hope, and the relationship between hope and QOL. The literature revealed that further research is imperative to fully grasp the true nature of hope as well as to understand the



relationship between hope and QOL. The findings of this literature review will be synthesized in full in the discussion section.

### **Reviews of the Literature**

The following review articles were selected for inclusion in this study due to their pertinence in exploration of the topic of hope and its relevance to end-of-life and palliative care, and in constructing an analysis of hope measurement systems. All four of these articles cited the 1985 study by Dufault and Martocchio which was a foundational article which most current research on hope stems from. Hope is defined by Dufault and Martocchio as “a multi-dimensional dynamic life force characterized by a confident yet uncertain expectation of achieving a future good which, to the hoping person, is realistically possible and personally significant” (Dufault & Martocchio, 1985, p. 380). This definition of hope created by these researchers, has been utilized in many of the measurement systems to describe hope, particularly the HHS and the HHI (Dufault & Martocchio, 1985). The HHS and/or HHI are utilized by all 5 of the articles that utilized a hope measurement system.

A literature review of hope in the palliative care setting found that hope is viewed as an important coping strategy often associated with a dignified death (Alidina & Tettero, 2010). They listed precipitating, cultivating, and threatening factors which affect levels of hope. They utilized a clinical scenario to allow the reader to consider these factors. The authors acknowledged that there is not one definition that fully encompasses hope. They found hope to be linked with QOL in dying individuals. Specifically, the results of their literature review found hope to be viewed as an important coping strategy that can enhance QOL in dying individuals. The authors’ use of a clinical scenario assists in understanding this relationship between hope

and QOL. The authors state that the individual in the clinical scenario possessed a “fighting spirit” and hope, and that this maintained his QOL.

A review of the literature designed to analyze the relevance of theories of hope to palliative care nursing practice found similarities and differences in the various theories of hope (Penz, 2008). Similarities include focus on a negative event, cognitive processes or actions necessary to maintain hope, and the relationship between hope and coping. Differences include the philosophical foundation of different theories, empirical adequacy and testability, and theoretical parsimony.

A literature review reflecting on hope and its implications for end of life care found that there is a distinction between generalized and particularized hope as themes within the literature (Mattes & Sloane, 2015). The authors explain the former as an attitude or state of mind, and the latter in reference to a specific outcome. The authors share their experiences in radiation oncology. Particularized hope for a cure is identified as a “false” hope that persons with cancer experience as a result of misleading or lack of information by healthcare providers pertaining to prognosis and treatment.

A literature review intended to provide an understanding of the role of hope in individuals with cancer found that hope is not related to cancer stage, and that participants in most studies desired help finding or increasing their hope regardless of cancer stage (Chi, 2007). High levels of coping was related to high levels of hope. They also identified strategies prevalent in the literature to promoting and supporting hope, including religion and prayer, living in the present, relationships with family and friends, control over symptoms and situations, positive thoughts, and memories. These strategies vary in effectiveness on an individual basis, as

certain strategies are of greater importance to some individuals and cultures than others. The author discovered conflicting results in the relationship between hope and QOL in two of the studies included in their literature review. One intervention increased levels of hope for less than 6 months post treatment and did not display an effect on QOL. The other intervention displayed a more long term increase in levels of hope as well as increased QOL.

### **Tools to Measure Hope and Quality of Life**

The Herth Hope Index (HHI) is one of the most utilized and accepted measurement systems of hope. The HHI contains 12 items on a 4 point likert scale, and results range from 12 to 48 with higher scores indicating higher levels of hope. It has been tested for construct validity and proven to be an effective condensed measurement system version of its predecessor the Herth Hope Scale (Herth, 1992). It is utilized in the majority of studies which use a hope measurement system, and in this current study is utilized by every study measuring levels of hope.

Unlike measurement systems of hope, where the HHI is well-known, well-recognized for its validity, and is utilized by the majority of researchers measuring levels of hope, there is not one specific tool utilized to measure levels of QOL. However, this is not reflective of an insufficiency of the measurement systems available. Rather it indicates the diversity of QOL measurements that is reflective of the multiplicity of the subject matter itself. In the current study three different trademarked QOL measurement systems were found to have been utilized, the Cancer Rehabilitation and Evaluation Systems, Short Form (CARES-SF), the McGill Quality of Life questionnaire (MQOL), and the European Organization for Research and Treatment of Cancer QOL Questionnaire version 2.0 (EORTC QLQ-C30v2). Each of these systems have been

recognized as valid and effective tools for measuring QOL (Cohen, Mount, Strobel, & Bui, 1995; Osoba, Aaronson, Zee, Sprangers, & teVelde, 1997; Schag, Ganz, & Heinrich, 1991). Author Herth (2000) utilized the CARES-SF to measure levels of QOL in her study “Enhancing hope in people with a first recurrence of cancer”. The CARES-SF contains 59 items on a 5 point likert scale of 0-4, and subjects complete a minimum of 38 items and a maximum of 57 items. Higher scores indicate lower QOL. Authors Breitbart, Poppito, Rosenfeld, Vickers, Li, Abbey, . . . & Cassileth (2012) utilized the MQOL to measure levels of QOL in their study “Pilot randomized controlled trial of individual meaning-centered psychotherapy for patients with advanced cancer.” The MQOL contains 16 items on a 10 points likert scale where higher scores indicate better QOL. Authors van Laarhoven, Schilderman, Bleijenberg, Donders, Vissers, Verhagen, & Prins (2011) utilized the EORTC QLQ-C30v2 to measure levels of QOL in their study “Coping, quality of life, depression, and hopelessness in cancer patients in a curative and palliative, end-of-life care setting”. The EORTC QLQ-C30v2 contains 30 items on a 4 point likert scale in which higher levels indicate higher QOL. Two other QOL measurement tools were found to be utilized: Rustoen et al. utilized an unnamed QOL questionnaire with one item on a 7-point likert scale and Sjoquist et al. utilized an unnamed questionnaire with one item on a 7-point likert scale. This diversity in measurement systems utilized, may result in different outcomes in clinical trials. It is plausible that the establishment of additional hope measurement systems would be extremely effective in measuring hope by accounting for its multiplicity as a concept.

### **Varying Views on Hope**

Thirteen articles contained the use of hope as a major theme, and three articles contained this as a minor theme. In the articles that have been reviewed, various internal resources are

mentioned, such as knowledge, endurance, vitality, spirituality, peace, humor, and most notably and consistently, hope. Hope as an internal resource has been described as a valuable precursor to coping, a coping mechanism, and also as a response to successful coping. Hope has been regarded as a valuable tool that can be utilized in response to a perceived threat to a person's well-being and, in the case of this study, the perceived threat of a terminal cancer diagnosis.

### ***Hope as a Precursor to Coping***

The following three studies yielded results in which hope was classified as a precursor to coping. The first study, a qualitative semi-structured interview conducted to explore hope and emotional healing in individuals with non-small cell lung cancer, found emotional healing to be consistent with successful coping (Eustache, Jibb, & Grossman, 2014). The study developed a description of the process that individuals reported as they faced a cancer diagnosis. These steps were: confusion associated with destroyed view of hope, hesitantly approaching a new view of hope, restructuring hope around a terminal diagnosis, and creating stronger bonds between hope and overall well-being. They found that at the time of and surrounding diagnosis, participants expressed feeling devoid of hope. After this time the participants described falling into old patterns of hope, realizing a need for a new restructured hope, and transitioning towards this new way of hoping. Finally, the authors identified 3 links between hope and emotional healing: the lack of hope hindering emotional healing, the start towards emotional healing once acceptance has occurred, and hope seeming to be built on the key elements of emotional healing, which are order, purpose, and meaning. This means that order, purpose, and meaning facilitate hoping, which results in emotional healing.

A qualitative study, which utilized focus group interviews to determine the strengths through illness and recovery of individuals with cancer, found the major strengths to be good mood, mindfulness, positive relationships, hopes and beliefs, protection, will power, and taking action and control (Rotegard, Fagermoen, & Ruland 2012). Hope was experienced as always important, and various beliefs provided individuals with a sense of hope and strength. These beliefs include religious, fatalistic, ethical, and health beliefs.

A quantitative study, conducted to determine the importance of hope as a mediator of psychological distress and life satisfaction in individuals with cancer, found that hope is an important resource and precursor to effective coping (Rustoen, Cooper, & Miaskowski, 2010). The study utilized the definition of hope as a belief that current circumstances can be positively altered, that difficult situations do not last forever, and that a more positive future may lie ahead. Levels of hope were measured with the HHI. The results of the study showed that hope mediates the relationship between health status and psychological distress. Findings also suggest that hope is a valuable resource for individuals with cancer because it can affect how one views oneself, one's health status, and one's future possibilities.

### ***Hope as a Coping Mechanism***

The following two studies yielded results in which hope was classified as a coping mechanism. The first study, a qualitative study conducted via semi-structured interviews to investigate and identify hope fostering strategies in which the authors utilized the HHI in their mixed methods research, found that participants viewed hope in six key ways. These include being positive or optimistic, as a love of family or friends, hope for a cure, living in the present, coping with the end stages of illness, and even as the absence of depression (Buckley & Herth,

2004). Participants identified seven categories that foster hope, and also identified categories that hinder hope. Ultimately the authors identified hope as love, inner resources and spirituality, the presence and flexibility of goals, and maintaining independence.

A quantitative study was conducted to determine if individuals were more likely to become depressed if their hopes associated with treatment were not met (Sjoquist, Friedlander, O'Connell, Voysey, King, Stockler, . . . & Butow, 2013). Hope was measured using the HHI and was defined as either a general multidimensional trait (trait hope), or as elemental hope which may be expressed as hope for symptom benefit from treatment, for example. Findings supported the authors' hypothesis that these two hope constructs are separate. Hope was shown to be correlated with psychological well-being, and inversely related with anxiety and depression prior to palliative chemotherapy. Presenting information honestly and sensitively may be the most effective tool in increasing an individual's understanding of prognosis and potential treatment benefits while maintaining levels of hope.

### ***Hope as a Response to Successful Coping***

The following two studies yielded results in which hope was classified as a response to successful coping. The first study, a quasi-experimental study, was conducted in attempt to enhance hope in persons with a first recurrence of cancer (Herth, 2000). The study utilized four attributes of hope (experiential, spiritual/transcendent, relational, rational thought) as the "Hope Process Framework" which served to identify the interventions selected to improve hope levels. The study featured therapy sessions conducted by the researcher which focused on utilizing each of these four attributes. Participants were divided into three groups, one hope intervention group which received the therapy in question, one control group which received only supportive

information but did not receive the therapy, and one control group which received no intervention at all. The members of the two control groups were offered to participate in the hope intervention after the completion of the study. Findings indicated that participants in the hope intervention group had higher levels of hope and QOL than the other 2 control groups over 9 months post intervention as measured by the HHI. These results will be discussed in further detail in the Relationship between Hope and Quality of Life section.

A qualitative study in a palliative care unit of a hospital in Hong Kong was conducted, where participants were interviewed to determine their perspectives on hope. Participants included physicians, nurses, social workers, occupational therapists, chaplains, and a physiotherapist working in the unit. The participants of the study identified the importance of hope for individuals and their families, and that hope is a necessary component of emotional healing. Four themes arose in the study, expected hopelessness, a dynamic process of hope, hope-fostering strategies, and peace as the ultimate hope. The participants of the study acknowledged the importance of remaining hopeful to in turn perceive and foster hope in the persons with cancer (Mok, Lau, Lam, Chan, L., Ng, & Chan, K., 2010).

The articles above describe hope as a powerful tool to mitigate the effects of psychological distress. Hope is seen as a precursor to coping, a coping strategy, and as a result of successful coping. Further research is needed to determine the exact nature of hope and to establish a definition which future hope measurement systems can be based on.



## **Quality of Life is as Diverse as Hope**

Five articles contained quality of life as a major theme, and three articles contained this as a minor theme. QOL was found to be a concept as elusive and multi-factorial as hope. Different strategies were identified to measure and positively impact levels of QOL.

QOL has become a key determinant of outcomes in oncology research (Rustoen et al., 2010). Primary factors that affect an individual's QOL include physiological and psychological factors, symptom burden, functional health, and general health perceptions. There are various definitions of QOL, most of which depict it as a multidimensional concept which encompasses these primary factors. In this study conducted by Rustoen et al. (2010) QOL was assessed based on the definition of QOL as overall life satisfaction. Satisfaction with life as a QOL determinant was measured through use of an unnamed questionnaire with one item on a 7-point likert scale. After running a correlation, QOL and hope were found to be highly positively correlated.

QOL is described in the literature as an important outcome of healthcare interventions, is being utilized in the analysis of the efficacy of cancer interventions, and is defined in many different ways (Herth, 2000). The study measured QOL through use of the CARES-SF. Similarly to hope, QOL was seen as complex and multidimensional. The author defines QOL as being a person's sense of well-being that originates from satisfaction with areas of life of importance to the individual.

A study conducted to assess the relationship of the coping strategies of individuals with cancer and QOL, depression, and hopelessness found that QOL is multidimensional, comprised of physical, psychological, and social well-being, and is highly subjective (van Laarhoven, Schilderman, Blejensberg, Donders, Vissers, Verhagen, & Prins, 2011). The authors utilized the

EORTC QLQ C30v2 to measure QOL, and define QOL in two ways, as global QOL and health-related QOL. Global QOL is the individual's well-being and life satisfaction as a whole, and health-related QOL encompasses the various effects of disease and treatment on well-being. In both curative and palliative participants, positive correlations were presented between acceptance and active coping strategies, such as active handling of the circumstances, and global and health-related QOL.

### ***Strategies to Positively Impact Quality of Life***

A randomized controlled trial was conducted to test the efficacy of individual meaning-centered psychotherapy (IMCP) in 120 individuals with terminal cancer (Breitbart, Poppito, Rosenfeld, Vickers, Li, Abbey, . . . & Cassileth, 2012). The authors state that interventions aimed at enhancing QOL and spiritual well-being are much needed in care of individuals with terminal cancer in the clinical setting. The control group received therapeutic massages to control for time and attention and ideally allow for a potentially beneficial clinical encounter. The goal of the IMCP was to improve spiritual well-being, meaning, QOL, and hopelessness. They measured overall QOL through use of the McGill Quality of Life questionnaire. Other less pertinent measurement systems utilized include the Functional Assessment of Chronic Illness Therapy (FACIT), Spiritual Well-Being Scale (SWB), Hospital Anxiety and Depression Scale (HADS), Beck Hopelessness Scale (BHS), Memorial Symptom Assessment Scale (MSAS), and a clinical status assessment. Spiritual well-being, QOL, and physical symptom distress improvements for IMCP recipients at the post-treatment assessment were significantly stronger than that of the control group who received therapeutic massage. Limitations of this study include that considerations of the accessibility to individual meaning centered psychotherapy are not

universal due to the costs of such interventions. Results of the study support individual meaning-centered psychotherapy as an effective tool in improving spiritual well-being, meaning, QOL, and physical symptom distress in individuals with terminal cancer.

In a physiologically oriented study, Sjoquist et al. (2013) reports that there is insufficient data on the effect of palliative chemotherapy on symptom burden and QOL, although it is being utilized in an attempt to positively influence QOL. The authors aimed to determine the aspects of health-related QOL that were most burdensome to participants as well as the most common symptoms associated. If a participant in the study indicated that their symptoms were lessened as a result of palliative chemotherapy, that participant then completed one item on a five-point likert scale inquiring as to whether this symptom improvement was associated in an impact on their QOL. The researchers also utilized the FACT-Ovarian Symptom Index (FOSI), a questionnaire that assesses symptom response to chemotherapy in which higher scores indicate worse QOL. The authors found no significant correlation between expectation of decreased symptom burden and impact on QOL. However, false hopes as a result of the administered chemotherapy did tend to occur due to insufficient provider explanation of the palliative nature of the chemotherapy intervention.

QOL is seen to be as diverse of a concept of hope. It is viewed as a general health perception, and as a determinant of overall satisfaction with life. QOL is also utilized as a measure of outcomes in oncology research. Interventions such as palliative chemotherapy were not seen to impact levels of QOL, however false hopes that may result from receiving a form of treatment will negatively impact QOL.

## **Relationship between Hope and Quality of Life**

Only two articles actually analyzed the relationship between hope and QOL as a major theme. This lack of analysis and understanding of the true nature of the relationship between hope and QOL has implications for future research and will be discussed in further detail.

A randomized controlled trial of a series of six group support sessions was conducted with topics including definitions of hope, including family members in the process, a focus on the spiritual aspects of hope, and thinking rationally about what the patients were experiencing (Herth, 2000). Data collection instruments included a demographic tool, the HHI, and the Cancer Rehabilitation and Evaluation Systems Short Form (CARES-ST) to measure QOL. Findings indicated that HHI scores were low at baseline. Levels of hope varied based upon illness related symptoms, and inability to engage in normal daily life and role functions. These predictors were related to a significantly lower level HHI score. Baseline CARES-SF scores were higher than levels reported in the literature for comparison groups. Mean hope scores for the intervention group were significantly higher than control group levels at 2 weeks and at 3 months after the study began. QOL, as an outcome variable in the study, was also significantly increased at 2 weeks post intervention and remained higher than the two control groups for 3, 6, and 9 months post intervention.

Specific results of the study are as follows: The baseline hope and QOL scores were relatively equal across each group. The hope intervention (HI) group had baseline HHI score of 34.3 (on a scale of 12 – 48, higher scores indicating higher hope) and CARES-SF score of 0.82 (on a scale of 0-4, higher scores indicating lower QOL). Whereas the information control (IC) and control (C) groups had HHI and CARES-SF scores of 35.1 & 0.83 and 34.6 & 0.85

respectively. Two weeks post intervention the HI group had HHI and CARES-SF scores of 43.1 and 0.68 respectively. These scores were improved from baseline and statistically significant with p values of  $< 0.036$  compared to the C group (HHI: 35.2 & CARES-SF: 0.82) and IC group (HHI: 38.3 & CARES-SF: 0.81). Three months post intervention the HI group had HHI and CARES-SF scores of 41.9 and 0.65 respectively. These scores, while slightly decreased from the prior evaluation, remained statistically significant with p values which remained at  $< 0.034$  compared to the C group (HHI: 34.9 & CARES-SF: 0.83) and IC group (HHI: 37.8 & CARES-SF: 0.80). Six and nine months post intervention the HI group had HHI scores of 40.8 & 39.7 respectively. The HI group had CARES-SF scores of 0.62 for both six and nine month evaluations. These scores remained consistent with prior measurements, and statistically significant with p values which remained at  $< 0.032$  compared to the C group (HHI: six months - 34.6; nine months - 34.3 & CARES-SF: six months - 0.85; nine months - 0.88) and IC group (HHI: six months - 36.5; nine months - 36.3 & CARES-SF: six months - 0.80; nine months - 0.82) (Herth, 2000).

Herth states that hope, as described in the literature, is a useful tool in healing, adaptive coping, and achieving QOL for individuals experiencing loss and illness. A loss of hope was related to decreased levels of QOL. The results of the author's hope-intervention study were supportive of the literature. Therefore hope may influence the outcome of QOL, as seen in the individuals who participated in the author's hope intervention group.

Lower levels of hope as measured by the HHI, were related to higher levels of psychological distress as measured by the Impact of Event Scale (IES) (Salsman, Schalet, Andrykowski, & Cella, 2015) and predicted lower levels of life satisfaction (Rustoen et al.,

2010) The univariate relationships between self-assessed health, psychological distress, and life satisfaction are as follows: Self-assessed health status was positively correlated with hope with a correlation coefficient of +0.31 and a p-value of less than 0.001. Psychological distress was significantly negatively correlated with hope with a correlation coefficient of -0.30 and a p-value of less than 0.001. Finally, life satisfaction was significantly correlated with self-assessed health status with a correlation coefficient of +0.56 and a p-value of less than 0.001. These variables impact how an individual evaluates their overall QOL. Hope was found to be a successful mediator of these variables which have been identified as core components to QOL. The authors state that hope is therefore an important resource for individuals with a terminal cancer diagnosis due to its positive impact on the variables seen to effect QOL. The results are substantial in that they indicate a correlative relationship between hope and QOL.

A correlative relationship is noted within the literature between hope and QOL. This relationship, if studied in full, might yield further results on strategies to positively impact both hope and QOL. Therefore, increasing an individual's overall well-being.

## **Discussion**

An individual's utilization of his or her own internal resources is well-known to have substantial benefits on his or her overall emotional/psychological health and wellbeing (Rotegard et al., 2012). Hope, which is one of an individual's most pertinent internal resources, along with quality of life, is an elusive concept (Alidina & Tettero, 2010; Rustoen et al., 2010). While hope is an internal resource possessed by all, how one experiences hope is not universal, but rather highly subjective and individualized (Rotegard et al., 2012). There are a myriad of interventions and strategies to improve levels of hope and QOL in the clinical setting.

### **Hope**

Hope's relevance and importance to an individual with a terminal cancer diagnosis stems, in part, from the inherent need of an individual to create goals which they strive to achieve (Buckley & Herth, 2004). It is normal for an individual to experience a sense of hopelessness following a cancer diagnosis. This stage of hopelessness is then followed by a remodeling and restructuring of the goals in which the individual places their hopes. These hopes ultimately become more "mature" hopes as they transition from individual-centered to a focus on others, typically the individual's loved ones and for their loved ones' futures (Buckley & Herth, 2004; Eustache, Jibb, & Grossman, 2014). The hope fostering strategies of communication and collaboration with the individual and their loved ones in an empathetic and caring manner, and simply being present are easily implemented, useful, and highly effective methods in supporting the individual's hope.

Some studies have categorized hope as a precursor to coping (Eustache et al., 2014; Rotegard et al., 2012; Rustoen et al., 2010). Other studies have characterized hope as a coping

mechanism (Buckeley & Herth, 2004; Sjoquist et al., 2013). Still other studies view hope as a response to successful coping (Herth, 2000; Mok et al., 2010). The most widely used hope measurement systems, such as the Herth Hope Index (HHI) and its precursor the Herth Hope Scale (HHS) are based on Dufault & Martocchio's definition of hope (Herth, 1992). While this definition of hope is widely accepted as the most-precise in existence, it is also acknowledged to be far from all-encompassing (Alidina & Tettero, 2010). This requires further research on hope to more precisely determine its true nature, to work to establish a definition which is as close to all-encompassing as possible, and utilize this new definition to create even more accurate and sensitive hope measurement systems for use in the clinical setting (Chi, 2007).

### **Quality of Life**

QOL, similarly to hope, is a multidimensional and highly subjective measurement of an individual's overall satisfaction with life, and health and wellness (Rustoen et al., 2010; van Laarhoven et al., 2011). QOL is defined as an individual's sense of well-being directly related to areas of the individual's life which they view as most important (Herth, 2000). QOL is further divided into global QOL, or an individual's overall rating of satisfaction with life, and health-related QOL, or an individual's overall rating of satisfaction with health-care intervention specific satisfaction with life. Health-related QOL includes measurements of perceived treatment benefits and symptom burden, and is a standard of oncology practice in measuring and analyzing the efficacy of treatment (Herth, 2000; Rustoen et al., 2010).

Chemotherapy is sometimes utilized in the terminal oncology setting, with the aim of palliation and decreased symptom burden, although there is no indication of its effect on QOL. However, instances of false hope did occur due to insufficient provider explanation of the



palliative nature of the chemotherapy intervention (Sjoquist et al., 2013). Due to the lack of benefit, and risk of negatively impacted QOL if false hopes do occur, the author states that interventions aimed at improving QOL should be restricted to well-tested interventions with proven efficacy such as individual meaning centered psychotherapy (Breitbart et al., 2012).

The efficacy of interventions aimed at improving QOL, as well as overall levels of QOL, can be assessed by utilizing QOL measurement systems. These systems are similar in structure and function to those of hope measurement systems. Such systems include the Cancer Rehabilitation and Evaluation Systems, Short Form (CARES-SF), McGill Quality of Life (MQOL) questionnaire, and/or the European Organization for Research and Treatment of Cancer QOL Questionnaire version 2.0 (EORTC QLQ-C30v2) (Breitbart et al., 2012; Herth, 2000; van Laarhoven et al., 2011).

### **Relationship between Hope and Quality of Life**

Increased levels of hope are seen to run congruent with long-term enhancement of QOL for individuals with a terminal cancer diagnosis. Likewise, in the absence of hope, levels of QOL are seen to decrease (Herth, 2000). However, simply adding a short-term hope intervention alone is not enough to impact QOL (Rustøen, Wiklund, Hanestad, & Moum, 1998). Similarly when levels of hope are measured as lower an individual will also score lower on levels of life satisfaction (Rustoen et al., 2010).

In the presence of a correlative relationship between two variables, there is often a third variable which acts upon both correlated variables (Bewick, Cheek, & Ball, 2003). This potential third variable may be causative, mediating, moderating, or possess some other relationship with both hope and QOL. It is possible that this third variable may be levels of psychological distress

due to its seemingly inverse relationship with both levels of hope and QOL (Rustoen et al., 2010). However, there is not enough research to substantiate the true nature of the correlative relationship between hope and QOL, and whether or not there is a third variable. For this reason, further research may be conducted in the near future to further examine this correlative relationship.

## **Implications for Practice**

The healthcare provider has a unique role in facilitating and promoting hope and enhanced quality of life in the individual with terminal cancer. The literature portrays the critical importance of healthcare providers in assessing levels of hope and analyzing this data, implementing hope and QOL enhancing intervention strategies, and ultimately evaluating for improved overall well-being (Alidina & Tettero, 2010; Buckley & Herth, 2004; Chi, 2007; Eustache et al., 2014; Hatamipour, Rassouli, Yaghmaie, Zendedel, & Majd, 2015; Mok et al. 2010; van Laarhoven et al., 2011). Contrary to the unanimous urge for increased sensitivity to hope and QOL in the individual with a terminal cancer diagnosis, there is a resounding lack of healthcare provider facilitation of hope and other internal resources in the clinical setting.

Achievements of health and wellness outcomes are more likely when collaboration takes place between the healthcare provider and the individual with a terminal cancer diagnosis, and the individual is informed of and encouraged to utilize their strengths. Healthcare providers must be aware of the role they play in facilitating the use of these strengths and must utilize sensitivity in discerning care strategies; these internal resources are vastly different for each individual and are highly subjective (Rotegard et al., 2012). Honest and realistic information, when presented compassionately and sensitively, is likely the most effective strategy at increasing an individual's awareness of what is entailed by a terminal cancer diagnosis, its' prognosis, and potential treatment benefits, while maintaining hope (Sjoquist et al., 2013).

### **Assessing and Analyzing Levels of Hope**

Nurses can utilize a well-known and trusted hope measurement system in everyday clinical practice, such as the HHI, to first establish a baseline level of hope to better understand

the individual under their care (Alidina & Tettero, 2010). The HHI can also potentially instigate conversations about hope with the individual who may be unwilling or unable to share otherwise (Buckley & Herth, 2004).

Prior to establishing a relationship with an individual under their care, healthcare professionals must first conduct a self-inventory to be aware of their own unique beliefs, morals, and ideals that may affect their practice, hopefulness, and the individual under their care. This awareness can benefit the healthcare provider's well-being as well as the well-being of the individual in the palliative care setting (Mok et al., 2010). Faith and trust in healthcare providers is diminished when providers communicate information to the individual thoughtlessly or inadequately, therefore a healthcare provider must be conscientious of everything they say and do prior to and while assessing levels of hope (Buckley & Herth, 2004).

Prior to assessing levels of hope, nurses and other healthcare professionals can recognize the holistic aspects of care, such as assisting individuals in understanding the clinical aspects of care and diagnosis, and the relationship that they form immediately with the individual under their care, which will have an impact on their levels of hope. Therefore, prior to assessing levels of hope, the nurse or other healthcare professional can make efforts to be aware of everything that they say and do in interacting with the individual under their care from the moment they meet (Eustache et al., 2014).

### **Implementing Hope-Fostering Strategies**

Hope and psychological healing are interrelated, and as healthcare professionals accept their roles as healers, they are in turn promoting hope in those under their care (Eustache et al., 2014). Furthermore, supporting hope is founded in the essence of nursing practice, and is not

something new, but rather a potential reminder of the hopefulness that a caring relationship can yield (Buckley & Herth, 2004). Strategies for nurses to act as sources of hope for the individuals under their care are typically based on Dufault & Martocchio's Multidimensional Model of Hope (1985). Such strategies include focusing on the individual's emotions and sensations, discussing hope and assisting in determining the individualized meaning of hope, clarifying any questions of the individual's disease or prognosis, working to enhance the self-esteem and comfort, and informing family, friends, and other healthcare workers on how to serve as a source of hope.

Still other strategies include being attentive to the individual's perception of time and how this relates to future goals and collaborating for a potential readjustment of plans (Alidina & Tettero, 2010). Promoting independence as often and for as long as possible, allowing for reminiscence of positive memories through use of photographs, playing the individual's favorite music, and encouraging loved ones to share their fondest memories with the individual can also foster hope. As well as welcoming children as visitors, supporting their parents in facilitating the children's coping with grief, being adept in the spiritual realm of care, and possessing or practicing exemplary communication skills. Failing to meet the spiritual needs of an individual can result in spiritual stress and ultimately negatively impact QOL among other things. Spiritual care is a matter of ethical concern as nurses are taught to provide care for the physical, psychological, social, and spiritual needs of individuals (Hatamipour, Rassouli, Yaghmaie, Zendedel, & Majd, 2015; Mok et al., 2010).

Furthermore, healthcare providers should assess the individual's expectations from treatment as well as other goals, and use this information to guide addressing the individual's expectation with likely outcomes, and direct them towards attaining realistic goals, while

maintaining hope. Strategies for sensitively addressing unrealistic outcomes include, relaying one negative statistic or fact when communicating about the diagnosis and its impact on the individual's future, and the use of descriptive aids outlining average treatment outcomes or various scenarios for prognosis (Sjoquist et al., 2013)

Ultimately communication and collaboration with the individual and their loved ones in an empathetic and caring manner, and simply being present are useful and highly effective methods in supporting the individual's hope (Buckley & Herth, 2004; Chi, 2007; Mok et al., 2010).

### **Evaluating the Effectiveness of Hope-Fostering Strategies**

After successfully implementing hope-fostering strategies or interventions, the nurse can utilize the HHI to determine their effectiveness (Herth, 2000). The nurse can also assess for the individual's utilization of active coping strategies and/or acceptance which are prognostic of both increased hope and QOL. Active coping strategies include actively addressing the situation and making efforts to change stressful circumstances, prioritizing coping, making efforts to find something positive about the situation, waiting until it is appropriate to act by venting or releasing emotions, and planning strategies on how to deal with the situation (van Laarhoven et al., 2011). Regardless of the results of the evaluation, healthcare providers can continue to make efforts to foster hope. Caring and compassion, two of the most effective hope-fostering strategies, are core values of the nursing profession, and as such should be performed consistently and continually. Due to the correlation between hope and QOL, hope outcomes can be analyzed by assessing and measuring individual-reported QOL and comparing findings with that of the results of the HHI or other hope measurement system. The healthcare provider can

utilize QOL measurement systems such as the Cancer Rehabilitation and Evaluation Systems, Short Form (CARES-SF) (Herth, 2000), the McGill Quality of Life (MQOL) questionnaire (Breitbart et al., 2012), and/or the European Organization for Research and Treatment of Cancer QOL Questionnaire version 2.0 (EORTC QLQ-C30v2) (van Laarhoven et al., 2011).

## **Implications for Education**

The findings of this literature review, if implemented as a component of the curriculum for students studying to become healthcare providers, will positively impact the future of care, particularly of individuals with a terminal cancer diagnosis. This may be implemented as a component of pre-existing holistic care education, as a sub-section of terminal cancer education, or both. Students may be first introduced to this subject matter prior to an acute care clinical experience, and this information may be reinforced once the students are practicing in this environment. Students may also be encouraged to conduct their own research on this subject matter, as well as to implement the guidelines for healthcare providers in their clinical practice.



## **Implications for Research**

As stated previously, only two articles included in this study actually contained an analysis of the true nature of the relationship between hope and quality of life. Authors Herth (2000) and Rustoen et al. (2010) found that the relationship between hope and QOL is that of a positively correlative one. That is, when levels of hope are measured using the HHI, these levels positively correlate with the measured levels of QOL. A third variable may be responsible for the correlative relationship between the two variables (Bewick, Cheek, & Ball, 2003). Therefore, there is a need for further research to determine the presence or absence of this potential third variable.

There is not one definition which fully encompasses hope. Dufault & Martocchio's 1985 definition of hope comes close, and is utilized by various well-tested, well-known, and widely utilized hope measurement systems such as the HHI and HHS. Further research must be conducted to construct a more precise definition of hope, and subsequently construct a hope measurement system of increased sensitivity. There is not one QOL measurement tool utilized in all of the articles which the current study's author has analyzed. Three different QOL measurement tools were utilized in three separate articles; The Cancer Rehabilitation and Evaluation Systems, Short Form (CARES- SF), the McGill Quality of Life (MQOL) questionnaire, and the European Organization for Research and Treatment of Cancer QOL Questionnaire version 2.0 (EORTC QLQ-C30v2). Future research may be conducted to analyze the exact nature between hope and QOL, and validate it as being positively correlated. The results of this future research must then be implemented in clinical practice to positively impact the hope, QOL, and overall well-being of individuals with a terminal cancer diagnosis.

## **Limitations**

There is extremely limited research focused directly on analyzing the true nature of the relationship between hope and quality of life in terminal cancer. What little research is currently out there points to a relationship that is correlative, rather than causative. This is contrary to what some authors may have assumed without analyzing, and alluded to in their studies. A majority of the pertinent research on this matter comes from articles written by Dufault and Martocchio (1985), Herth (1992, 2000), and Buckley and Herth (2004), for example. This extended gap in the literature is a limitation because research conducted now may result in information that differs substantially.

## **Conclusions**

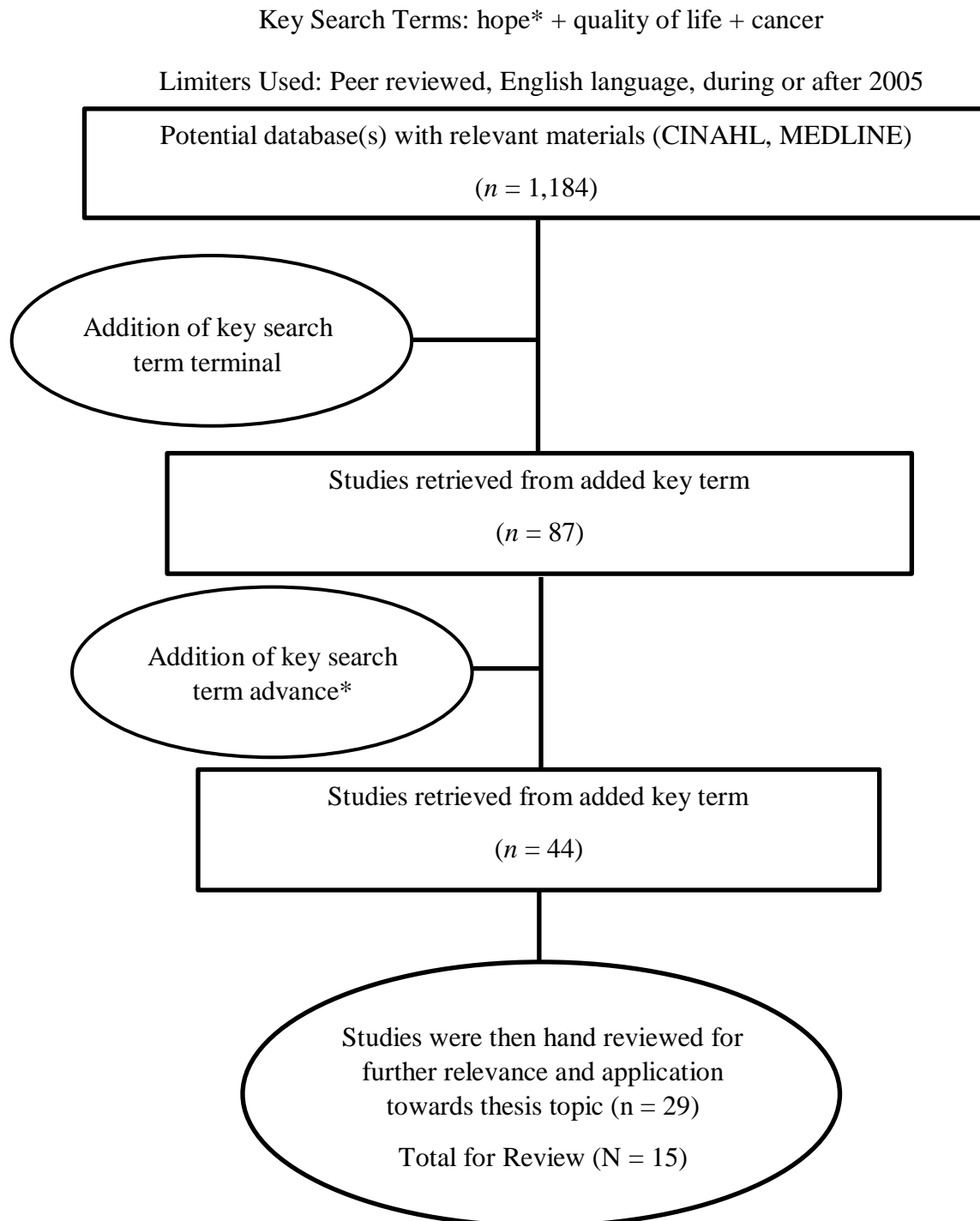
Hope and quality of life are recognized across innumerable studies as two factors of critical importance to the overall well-being of the individual with a terminal cancer diagnosis. These two concepts, while highly studied, are defined in a myriad of different ways. No one definition has been appointed as all-encompassing for either of these two factors. Certain strategies were identified in this study as beneficial in promoting hope. These strategies include placing high importance on care that is compassionate and empathic practiced by all healthcare providers, interaction with friends and family that is loving in nature, promoting spirituality, humor, self-esteem, and a positive attitude, amongst other things. Hope is highly subjective and hope fostering strategies are specific to the individual. A correlative relationship has been identified between hope and QOL in a select few studies. This relationship must be further studied to determine its exact nature. A correlative relationship between these two variables also indicates the possibility of a third, currently undiscovered variable that can positively impact both hope and QOL. Once completely understood, the correlative relationship between hope and QOL can be promoted in the individual with a terminal cancer diagnosis to promote ultimate well-being, and psychological health and wellness.

## **Appendix A: Figures**

## Appendix A: Figures

**Figure 1.1**

Example of Flow Diagram Design towards Study Selection Process



## **Appendix B: Table of Evidence**

## Appendix B: Table of Evidence<sup>1</sup>

Article & Year	Method	Sample Size & Study Design	Objective	H H	Q O L	H C P R	R	C S	Measurement Tools Utilized	Key Findings
Exploring the therapeutic value of hope in palliative nursing.  Alidina & Tettero, 2010	Review of the literature	17 Articles	To explore and analyze the therapeutic value of hope	X	x	X	X	X		Terminally ill individuals require hope to maintain their dignity, to cope with stressors, and to enhance their QOL. There is a need to conduct further research. There is a need to incorporate the concept of “hope” in nursing practice.
Pilot randomized controlled trial of individual meaning-centered psychotherapy for individuals with advanced cancer.  Breitbart, Poppito, Rosenfeld, Vickers, Li, Abbey, . . . & Cassileth, 2012	Randomized controlled trial: pre-intervention, post intervention, and follow-up assessment through use of self-report questionnaires	120 Participants  Quantitative	To establish the efficacy of Individual Meaning-Centered Psychotherapy to meet the need for interventions that target the spiritual well-being of individuals with advanced cancer.	x	X				Functional Assessment of Chronic Illness Therapy (FACIT); Spiritual Well-Being Scale (SWB); McGill Quality of Life Questionnaire (MQOL); Hospital Anxiety and Depression Scale (HADS);	The results provide evidence that IMCP is effective in improving spiritual well-being, a sense of meaning, overall quality of life, and physical symptom distress in individuals with advanced cancer.

<sup>1</sup> **Key Abbreviations:** H – Hope; QOL – Quality of Life; HCPR – Healthcare Provider’s Role; R – Relationship Between Hope and Quality of Life; CS – Clinical Scenario; X – Major Theme; x – Minor Theme

									Beck Hopelessness Scale (BHS); Memorial Symptom Assessment Scale (MSAS); Clinical Status Assessment	
Fostering hope in terminally ill patients.  Buckley & Herth, 2004	Self-report questionnaires and 1 Semi- Structured Interview	16 Participants  Qualitative	To investigate the meaning of hope, identify strategies that individuals with a terminal diagnosis use in maintaining and fostering hope during the final stage of life, explore changes in hope during the dying trajectory.	<b>X</b>		<b>X</b>	<b>x</b>		Herth Hope Index (HHI)	The meaning of hope in these participants was equated with the love they felt for family and friends, their own inner resources and spirituality. Central also to hope was being goal-focused and maintaining independence. As disease progresses, so goals are ‘scaled down’...Being courteous, friendly, able to laugh with individuals and maintaining good levels of ‘basic’ care are paramount to the ability of individuals to maintain a feeling of hopefulness. For many, the hope becomes a ‘mature’ hope, that is, hope for others in their family rather than personal hope. Hope for a cure seems to be inexhaustible in terminal illness.
The role of hope in patients with cancer. Chi, 2007	Review of the Literature	26 Articles	To synthesize the literature, develop generalizations, and identify issues that should be evaluated in the future in regard to hope	<b>X</b>	<b>x</b>	<b>X</b>	<b>X</b>			The concept of hope should be developed systematically to extend knowledge and build a logical program of research based on previous studies. Nurses need to develop new interventions to foster individuals’ hopes and new instruments that can be used to measure outcomes.



			and individuals with a cancer diagnosis.						
Exploring hope and healing in patients living with advanced non-small cell lung cancer.  Eustache, Jibb, & Grossman, 2014	1 Semi-Structured Interview	12 Participants  Qualitative	To explore the experience and meaning of hope in relation to the healing process of individuals living with stage IIIb or IV non-small cell lung cancer	X		X			<b>Four major themes were identified:</b> <i>The morass of shattered hope, tentative steps toward a new hope paradigm, reframing hope within the context of a life-threatening illness, and strengthening the link between hope and wellness.</i>
Spiritual needs of cancer patients: A qualitative study.  Hatamipour, Rassouli, Yaghmaie, Zendedel, & Majd 2015	18 Semi-Structured Interviews	18 Participants  Qualitative	To explain spiritual needs of individuals with a cancer diagnosis in Iran.	x		X			<b>Four main themes and subcategories were identified:</b> <i>Connection</i> with subcategories of social support and normal behavior. <i>Seeking peace</i> with sub-categories of inner peace, forgiveness, and hope. <i>Meaning and purpose</i> with sub-categories of accepting the reality, cause of disease, reliance on self, and meaning of life. <i>Transcendence</i> with the sub-categories of strengthening spiritual belief, communication with God, and prayer.
Enhancing hope in people with a first recurrence of cancer.  Herth, 2000	Quasi-Experimental study in which participants were allocated to 3 groups – intervention, attention	115 Participants  Quantitative	To determine if a specific intervention designed to enhance hope would positively influence the level of hope and	X	X	x	X	HHI; Cancer Rehabilitation and Evaluation Systems, Short Form (CARES-SF)	Findings suggest that it is possible for nurses to increase the feeling of hope and perceived QOL in individuals with first recurrence of cancer through specifically designed hope interventions. It is also noted that hope may influence the outcome of QOL, as QOL was improved

	control, and control and completed self-report questionnaires		enhance QOL in a population of people with a first recurrence of cancer.							in those individuals receiving the hope interventions.
Reflections on hope and its implications for end-of-life care  Mattes & Sloan, 2015	Narrative / Review of the Literature	29 Articles	To explore the interplay of hope and advance care planning	X		x				The article suggests a need for excellent individualized communication in the setting of advanced cancer to improve end-of-life care.
Health-care professionals' perspective on hope in the palliative care setting.  Mok, Lau, Lam, Chan, L., Ng, & Chan, K., 2010	Five Focus Group Interviews	23 Participants  Qualitative	To explore the meaning of hope to individuals with advanced cancer from the perspective of healthcare professionals	X	x	X				<b>Four themes were identified:</b> <i>Expected hopelessness, a dynamic process of hope, hope-fostering strategies, and peace as the ultimate hope.</i>
Theories of hope: Are they relevant for palliative care nurses and their practice?  Penz, 2008	Review of the Literature	39 Articles	To introduce and critique selected theories of hope with evaluation of their relevance to palliative care nurses and to identify the conceptual gaps in knowledge that emerged through	X						<b>8 common themes within the different theories of hope were identified:</b> Common focus on <i>negative life events, coping, uncertainty</i> , as well as <i>relational dimensions of hope, cognitive dimensions of hope, temporal dimensions of hope, spiritual dimensions of hope, and affective dimensions of hope.</i>

			the critique process, and suggest future research directions for the development of hope theory in palliative nursing practice.						
Cancer patients' experiences of their personal strengths through illness and recovery.  Rotegard, Fagermoen, & Ruland, 2012	4 Focus Group Interviews	26 participants  qualitative	To explore and describe the experiences of individuals with a cancer diagnosis and their perception of their strengths, needed or used by themselves or supported by their care providers.	X		X			<b>7 main themes and subthemes were identified:</b> <i>Good Mood</i> , with the subtheme of feeling useful, valuable, and at ease with oneself. <i>Mindfulness</i> , with the subthemes of positive thinking, and self-awareness. The importance of <i>Positive Relationships</i> with the subthemes of confidence and trust in healthcare providers, feeling seen and heard by the healthcare providers, and fellowship with peers. <i>Hopes and Beliefs</i> specifically religious beliefs, fatalistic beliefs, ethical beliefs/ humanism, and health beliefs. <i>Protection</i> with the subthemes of self-protection, and protecting family and friends. <i>Willpower</i> with the subtheme of being goal directed. <i>Taking Action and Control</i> with the subthemes of being vigorous, asserting oneself, and prioritizing/ deciding.
The importance of hope as a mediator of psychological	Self-report questionnaires	194 participants  quantitative	To evaluate the relationships between demographic and	X	X	x	X	Norwegian version of the HHI;	Hope was found to mediate the relationship between psychological distress and health status, and partially mediated the association between

<p>distress and life satisfaction in a community sample of cancer patients.</p> <p>Rustoen, Cooper, &amp; Miaskowski, 2010</p>			<p>clinical characteristics, health status, hope, psychological distress, and life satisfaction and evaluate whether hope mediated the relationship between psychological distress and life satisfaction.</p>					<p>Impact of Event Scale (IES); Seven-point Likert scale to rate satisfaction with life.</p>	<p>psychological distress and life satisfaction.</p>
<p>Hope, quality of life, and benefit from treatment in women having chemotherapy for platinum-Resistant/Refractory recurrent ovarian cancer: The gynecologic cancer intergroup symptom benefit study.</p> <p>Sjoquist, Friedlander, O'Connell,</p>	<p>Self-report questionnaires</p>	<p>126 Participants</p> <p>Quantitative</p>	<p>To explore associations among hope, indices of well-being, and perceived symptom benefits of chemotherapy to determine if individuals would be more likely to become depressed if their hopes were not fulfilled.</p>	X	X	X		<p>FACT-Ovarian Symptom Index (FOSI); HHI; HADS; Five-point likert scale to rate QOL</p>	<p>A smaller disparity between expectations of benefit from chemotherapy may be associated with a lower risk for scores indicative of clinical levels of depression.</p>

Voysey, King, Stockler, . . . & Butow, 2013										
<p>Coping, quality of life, depression, and hopelessness in cancer patients in a curative and palliative, end-of-life care setting.</p> <p>van Laarhoven, Schilderman, Blejenberg, Donders, Vissers, Verhagen, &amp; Prins 2011</p>	Self-report questionnaires	<p>151 Participants (92 curative &amp; 59 palliative)</p> <p>Quantitative</p>	To assess coping strategies in curatively treated and palliative-care individuals no longer receiving anticancer treatment and to examine the relation of these coping strategies with QOL, depression, and hopelessness.	x	X	X			<p>COPE-Easy; Satisfaction with Life Scale (SWL); European Organization for Research and Treatment of Cancer QOL Questionnaire version 2.0 (EORTC QLQ-C30v2); Beck Depression Inventory for Primary Care (BDI-PC); BHS</p>	Coping strategies were significantly correlated to QOL, depression, and hopelessness.

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