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## Complementary/Alternative Treatments for Cancer Patients with Depression and Anxiety: Critical Analysis

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RUNNING HEAD: COMPLEMENTARY/ALTERNATIVE TREATMENTS FOR  
CANCER PATIENTS WITH DEPRESSION AND ANXIETY: CRITICAL  
ANALYSIS

Complementary/Alternative Treatments for Cancer Patients with  
Depression and Anxiety: Critical Analysis

by

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MSW Clinical Research Paper

Presented to the Faculty of the  
School of Social Work  
St. Catherine University and the University of St. Thomas  
St. Paul, Minnesota  
In Partial fulfillment of the Requirements for the Degree of

Master of Social Work

Committee Members

Dr. Michael Chovanec, Ph.D., (Chair)  
Kate Pederson, MSW, LICSW  
Patrick Clark, MSW, LICSW

The Clinical Research Project is a graduation requirement for MSW students at St. Catherine University/University of St. Thomas School of Social Work in St. Paul, Minnesota and is conducted within a nine-month time frame to demonstrate facility with basic social research methods. Students must independently conceptualize a research problem, formulate a research design that is approved by a research committee and the university Institutional Review Board, implement the project, and publicly present the findings of the study. This project is neither a Master's thesis nor a dissertation.

# COMPLEMENTARY/ALTERNATIVE TREATMENTS FOR CANCER PATIENTS WITH DEPRESSION AND ANXIETY: CRITICAL ANALYSIS

## **Abstract**

Cancer is a life threatening disease that has many psychological and physical effects on the patient population. Fifty-five percent of cancer patients reported at least mild levels of depression and sixty-four percent reported at least mild levels of anxiety (Salvo et al., 2012). A review of the literature suggested that complementary and alternative therapies have positive effects on relieving depression and anxiety in cancer patients. This research is looking to address the importance of complementary and alternative therapy use with cancer patients. Qualitative interviews were conducted with seven oncology social workers. The research used an inductive grounded theory method. The transcripts were analyzed and coded for themes. There were similarities and differences between the research findings and the literature review. Similarities that were found were participant's sense of control as a positive outcome and mental health relief for patients. Differences that were found were distraction as a positive outcome, stigma and preconceived notions and time limitations and interruptions affect practice. Further research is needed to address the differences between the findings and the literature review and to further explore time and stigma limitations complementary and alternative therapies face.

# COMPLEMENTARY/ALTERNATIVE TREATMENTS FOR CANCER PATIENTS WITH DEPRESSION AND ANXIETY: CRITICAL ANALYSIS

## **Acknowledgments**

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COMPLEMENTARY/ALTERNATIVE TREATMENTS FOR CANCER  
PATIENTS WITH DEPRESSION AND ANXIETY: CRITICAL ANALYSIS

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Cancer is a life-threatening disease that has affected many individuals and families. As of January 2009, there were over 12 million Americans living with cancer (National Cancer Institute, 2012). It is estimated that approximately 40% of Americans will be diagnosed with cancer at some point in their lives (Institute of Medicine, 2008).

Cancer has many psychological and physical effects on the patient population (Salvo, Zeng, Zhang, Leung, Khan, Presutti, Nguyen, Holden, Culleton & Chow, 2012). Anxiety and depression are the most common mental health disorders observed in patients with cancer. Unfortunately, both disorders are often under diagnosed and left untreated. These disorders can cause significant distress for the patient and their family members.

In a longitudinal study, fifty-five percent of patients with cancer reported at least mild depression and sixty-four percent reported at least mild levels of anxiety (Salvo et al., 2012). Another study looked at the extent to which participants developed symptoms of depression after a new diagnosis of several illnesses- cancer, diabetes, hypertension, heart disease, arthritis, chronic lung disease, or stroke (Institute of Medicine, 2008). Researchers found that people with a diagnosis of cancer were at the highest risk of developing symptoms of depression, with more than triple the risk of all other diagnoses combined.

Depressed and anxious individuals have lower social functioning, more disability and greater overall functional impairment (Institute of Medicine, 2008). Distressed emotional states often generate additional somatic problems including: sleep difficulties, fatigue and pain. Overall, depression and anxiety are significant

barriers to patients facing serious illnesses. Depression and anxiety cause behavior changes and they can affect treatment by impairing cognition, weakening motivation, and decreasing coping abilities and quality of life.

Effective interventions are needed to improve psychosocial functioning of patients with cancer. Social workers are in a position to work with these patients because they focus on mental health needs. Often times physicians are focused on the patient's biological treatment and may not be aware of or have the skill set to work with patients' psychosocial functioning (Institute of Medicine, 2008).

The purpose of this study is to further research on whether or not complementary and alternative therapies are effective psychosocial interventions for patients with cancer. This study will seek to answer the research question: What are the strengths and limitations of complementary and alternative therapy approaches used for relieving depression and anxiety in cancer patients? A qualitative study was performed. The researcher conducted a series of interviews with oncology social work professionals and critically assessed the use of complementary and alternative therapies used for relieving depression and anxiety in cancer patients.

### **Literature Review**

This literature review will discuss the impact of cancer, what complementary and alternative therapy approaches are, the use of these therapies by cancer patients and professionals, the effects of these therapies on cancer patients, and cancer patients and professionals perceptions of complementary and alternative therapies.

#### **Impact of Cancer**

Over 12 million Americans were living with cancer in 2009 and approximately 40% of all Americans will be diagnosed with cancer at some point in their lives (National Cancer Institute, 2012; Institute of Medicine, 2008). Traditionally cancer is seen as a biological problem and treated with chemotherapy or radiation therapy by an oncologist (Institute of Medicine, 2008). However, a cancer diagnosis can be a difficult and complicated stressor for many families. Several cancer survivors and their caregivers did not feel that their psychosocial needs were met during treatment. They were not aware of available resources and they felt that their depressive and stress symptoms were not recognized or addressed (Institute of Medicine, 2008). Merckaert et al. (2005) conducted a study where they evaluated 58 physicians' abilities to detect distress in patients with cancer after the physicians' went through a communication skills training. Results showed that oncology physicians were not accurate in determining their patients' distress levels, even after training most oncology physicians still could not accurately assess their patients distress levels.

The Commission on Cancer (CoC) has mandated that by 2015 there will be an implementation of distress screening procedures for every cancer patient treated at



American College of Surgeons (ACoS) accredited facilities (Zebrack et al., 2012).

Oncology social workers will be at the forefront developing and implementing these procedures. It is estimated that 30% of cancer patients are experiencing high distress. Social workers have an opportunity to identify highly distressed patients and facilitate systems change using their skills. It is the oncology social workers role to provide psychosocial services to patients and their families. The new implementation of distress screening places oncology social workers in a leadership role where they can help provide better patient care and outcomes (Zebrack et al., 2012).

### **Complementary and Alternative Therapy Approaches**

Complementary and alternative therapy approaches (CAM) are a group of diverse approaches to health care that are not considered to be part of the mainstream medical approach. There are four domains of CAM including: mind-body medicine, biologically based practices, manipulative and body-based practices and energy medicine. Mind-body medicine is the most common CAM approach for treating mental health disorders (Landier & Tse, 2010).

The focus of this paper will be the CAM domain of Mind-Body medicine. Mind-body medicine is an intervention that focuses on the brain, mind, and body and it examines how these interactions affect our health. Mind-body medicine includes meditation, relaxation, visual imagery, yoga, and spirituality (Smith, Shelley, Dalen, Wiggins, Tooley & Bernard, 2008).

### **Bias Against Complementary and Alternative Therapies**

The *2010 Complementary and Alternative Medicine Survey of Hospitals* results showed that although complementary and alternative therapy approaches are

becoming more available throughout hospitals, there is still a lack of availability (Ananth, 2011). Out of the 714 hospitals that responded, 42% offer one or more CAM therapies. The results of the survey showed that the main reasons hospitals did not offer CAM was due to budgetary constraints. Other reasons for not offering CAM programs included: lack of evidence-based studies, lack of internal expertise, disapproval from hospital senior managers, difficulty identifying qualified practitioners, and difficulty credentialing providers (Ananth, 2011).

### **CAM Use by Cancer Patients and Professionals**

Studies have indicated that complementary and alternative therapies have been growing in popularity, especially among patients with cancer. Approximately 34% of cancer patients worldwide use complementary and alternative medicine approaches (Wheat & Currie, 2007).

Shaharudin, Sulaiman, Emran, Shahril and Hussain (2011) did a cross-sectional study to see what the prevalence of CAM use was by Malay breast cancer survivors. They surveyed 116 breast cancer survivors who were two years post diagnosis, and found that 64% of the participants were CAM users.

Correa-Velez, Clavarino, Barnett and Eastwood (2003) conducted a study with 111 patients who had advanced cancer and found that 32% of participants had used at least one type of CAM in the previous week, and 48% had used CAM therapies at least once over the study period. Similarly, Ben-Arye et al. (2011) found that 49% of respondents, who were either undergoing active oncology treatment or doing follow-up surveillance, used CAM in the previous year.

Another study looked at how many radiation therapy centers in Australia adopted CAM practices. Eighteen of the forty-five radiation therapy centers returned the questionnaires. Of those eighteen, 27.7% employed staff with training in CAM. CAM was recommended or endorsed by 66.7% of the centers, and 37.5% actually account for CAM use in therapy planning. Their main reasons for using CAM in radiation therapy were to help patients cope with the emotional aspects of radiation therapy and to improve their quality of life (Wheat & Currie, 2007).

### **Effects of CAM on Cancer Patients**

Several studies have indicated that complementary and alternative therapies have positive effects on patients struggling with cancer including: pain relief, psychosocial and emotional relief, and improvements in quality of life (Kwekkeboom et al., 2008; Linde & Stuart, 2002; Uitterhoeve et al., 2004; King, 2010; Kliger et al., 2011; Roffe et al., 2005; Snow et al., 2012; Loizzo et al., 2010). King (2010) performed an evaluation and summary of studies to see if guided imagery helped relieve cancer pain. The results indicated three out of the five studies showed a decrease in pain in the guided imagery intervention vs. a control group. Average pain intensity scores and body discomfort both decreased (King, 2010).

Studies have looked at how CAM affected cancer patient's emotional and psychosocial functioning (Linde & Stuart, 2002; Uitterhoeve et al., 2004; Kliger et al., 2011; Roffe et al., 2005; Snow et al., 2012; Loizzo et al., 2010). Linde & Stuart (2002) created a study that examined how cognitive-relaxation-visualization affected anxiety in women with breast cancer. They looked at two different groups: women who were pre-diagnosis with breast lumps and were undergoing mammograms, and

women who were post-diagnosis who had surgery and were about to undergo radiation therapy. Results showed that the intervention reduced anxiety in both pre and post-diagnosis breast cancer patients. Patient's felt that the intervention provided a distraction from their current situation and helped relieve anxiety (Linde & Stuart, 2002).

Another study that examined women with breast cancer suggested that a meditation-focused intervention may be an effective intervention in reducing distress and disability in breast and gynecologic cancer patients (Loizzo et al., 2010). Forty-six women who had breast or gynecologic cancer and had completed chemotherapy participated in a study that used a meditation based health education and self-healing program to reduce stress-related symptoms associated with cancer. The intervention focused on stress reduction by using mindfulness, visualization, affirmations, and yogic breathing. The program was 20 weeks long. Social support, anxiety, depression, adjustment to cancer and quality of life were all examined pre and post-test. Biological measures including: cortisol levels, resting heart rate, natural killer cell and interleukin-6 levels were also examined pre and post-test. Results demonstrated improvement in anxiety, depression, and quality of life scores. Biological measures that were studied improved as well, indicating an increase in cortisol levels and a significant reduction in resting heart rate.

Kliger et al. (2011) looked at whether the "Urban Zen Initiative: an optimal healing environment" had an impact on patient experience in inpatient oncology care (p. 729). A total of 163 patients participated in the study, they were split into two groups: Pre UZ Phase and Post UZ. The Pre UZ Phase was the baseline sample and

did not experience the Urban Zen environment. The Post UZ was the intervention group that experienced the Urban Zen environment. They found that patients in the intervention group experienced less emotional distress, greater improvements in pain and discomfort, lower levels of tension, depression and fatigue when compared to patients in the baseline group.

Another study looked at the effects of hypnosis versus standard procedure for adult cancer patients undergoing bone marrow procedures (Snow et al., 2012). Eighty cancer patients were randomly assigned to either the hypnosis group or the standard procedure group. Results indicated that the hypnosis group had a greater reduction in anxiety when compared to the standard procedure group.

In Roffe et al's (2005) review of the literature, they aimed to find out whether guided imagery was an effective adjuvant in cancer therapy. In three of the four studies they fully analyzed, guided imagery improved measures of anxiety, comfort, depression, and quality of life over the control group.

In Uitterhoeve et al.'s (2004) review of the literature, they were searching to find out the effectiveness of psychosocial interventions in patients with cancer. In twelve of the thirteen trials complementary and alternative therapies were used as the interventions including: relaxation exercises, guided imagery, and visualization. All of the trials, except one, used questionnaires as their measurement instruments. The Profile of Mood States (POMS) and the Hospital Anxiety and Depression Scale (HADS) were the most frequently used instruments. The results indicated that all twelve trials showed positive effects on one or more indicators of quality of life including: anxiety, depression, self-esteem, and coping abilities. They identified

small, moderate and large statistically significant changes in measurement tools. One trial showed a statistically significant treatment effect for anxiety, six trials showed a statistically significant treatment effect for depression, and five trials showed a statistically significant treatment effect for coping abilities. The main benefit was an improvement of depression or a decrease in feelings of sadness (Uitterhoeve et al. 2004).

### **Cancer Patients and Professionals Perceptions of CAM**

Studies have also looked at how patients and professionals perceive complementary and alternative therapies and their effectiveness (Kwekkeboom et al., 2008; Wheat & Currie, 2007; Schernhammer et al., 2009). Kwekkeboom et al. (2008) did a secondary analysis of data collected during a trial of relaxation and imagery interventions for pain in 40 hospitalized patients with cancer. Their sample included 26 participants who complete a post-study interview. They were looking to see if patients' perceptions of the effectiveness of guided imagery and progressive muscle relaxation interventions were congruent with the observed changes in their pain scores. Results showed that half of the subjects experienced a clinically significant change in their pain score, and nearly the same number perceived that the interventions were effective. Sixty-two percent perceived that guided imagery was effective, and eighty-one percent perceived that progressive muscle relaxation was effective for their pain. A larger number of people actually perceived the interventions as more effective than the change in their pain scores showed. Five persons reported that guided imagery worked for their pain, when the change in their pain score was not clinically significant, and eleven persons reported that progressive

muscle relaxation worked for their pain when they did not have a clinically significant change in their pain score. The majority of participants reported that they enjoyed the interventions. Participants felt that progressive muscle relaxation interventions gave them an awareness of their personal control over their pain, while guided imagery provided a source of distraction from pain (Kwekkeboom et al., 2008).

Majumdar et al.'s (2002) exploratory study on mindfulness meditation's contributions to health found that participants reported positive changes in their physical and emotional well-being. This study used both qualitative and quantitative measures to examine the effects of an 8-week meditation based program in mindfulness with 21 participants, who all had chronic illnesses. The study was a pre-test and post-test design that included a 3-month follow-up. Subjects were measured on emotional and physical well-being, sense of coherence, overall psychological distress, and overall satisfaction with life. The results showed the interventions were beneficial and effectively improved psychological distress, well-being, and quality of life. Participants suggested that mindfulness contributed to improved coping of symptoms, and improved their daily lives, awareness, calmness, and sense of self. One participant stated, "It gives me a tool for coping and enables me not merely to endure but to find new niches and paths" (Majumdar et al., 2002, p. 726).

Schernhammer and colleagues (2009) looked at what determined peoples attitudes toward complementary and alternative medicine in cancer treatment. They found that women and people with more formal education had more positive attitudes towards CAM. Additionally, Vernhoef et al. (2005) found in their review of the

literature that women and younger individuals were more likely to use CAM. Higher income and more education were also attributed to CAM use. They also found that a therapeutic response, wanting control, a strong belief in CAM and finding hope were the most common reasons cancer patients used CAM.

Another study looked at CAM use among radiation therapy departments in Australia. They also looked at why these professionals used CAM. The results showed that, among these professionals CAM therapies helped patients cope with emotional aspects of radiation therapy and it helped improve their quality of life (Wheat & Currie, 2007).

### **Summary**

In summary, the literature has revealed that cancer is a life-threatening illness that affects many people worldwide (Institute of Medicine, 2008). Many cancer patients' psychosocial needs are not being met and effective interventions are needed. Complementary and alternative therapies have become more popular and their usage among cancer patients is increasing (Wheat and Currie, 2007). The literature has suggested that complementary and alternative therapies are effective psychosocial treatments for patients with cancer (Kwekkeboom et al., 2008; Linde & Stuart, 2002; Uitterhoeve et al., 2004; King, 2010; Klinger et al., 2011; Roffe et al., 2005; Snow et al., 2012; Loizzo et al., 2010). Studies have shown that complementary and alternative therapies can cause reductions in anxiety and depression, and they can help to improve self-esteem, quality of life and coping abilities. Although many studies support the effectiveness of complementary and alternative therapies there is a gap in the literature. Few studies focus on hospital social workers using



complementary and alternative therapies. Most of the studies are conducted and performed by medical doctors, nurses, and psychologists.

### **Research Question**

Although research has shown that complementary and alternative therapies have positive effects on cancer patients, studies still demonstrate a wide variety in these effects (Kwekkeboom, 2008). Some patients achieve significant improvement in pain reduction or emotional and psychosocial relief, while others experience little or no improvement. Further research needs to be done on what professionals, specifically social workers that use these interventions see as the benefits and drawbacks. What are the strengths and limitations of complementary and alternative therapy approaches used for relieving depression and anxiety in cancer patients?

### **Conceptual Framework**

For this study the researcher will be using the ecological perspective for their conceptual framework. The ecological perspective examines both the individual and their environment (Forte, 2007). The individual and the environment are viewed as inseparable. The ecological perspective also looks at a person's life situations and stressors and the impact these may be having on a person.

The ecological perspective relates to this study because it looks at both the individual and their environment. It also looks at a person's life situations and the impact these may be causing (Forte, 2007). A cancer diagnosis is a scary and traumatic change in a person's life that can cause many psychosocial changes in a person (Institute of Medicine, 2008). Anxiety and depression in cancer patients often stems from changes in their environment: treatment, financial strains, and social relationships/activities. This study is looking at how complementary and alternative therapies can be used as effective interventions to relieve the anxious and depressive symptoms caused by the individual's environment.

The following ecological perspective concepts will be applied to this study: *micro-system*, *meso-system*, and *macro-system* (Forte, 2007). The *micro-system* is the immediate setting of the individual. Complementary and alternative therapies can impact an individual's micro-system by providing relief from anxiety and depression or providing coping mechanisms to deal with anxiety and depression caused by an individual's environment (Smith et al., 2008).

The *meso-system* is a system that connects two or more settings of the individual (Forte, 2007). Cancer affects the family system as well as the individual,

and a cancer diagnosis can be a trying and difficult time for families (Institute of Medicine, 2008). Complementary and alternative therapies can impact a person's meso-system by providing them with tools to help families affected by cancer cope with the interactions and demands their new lifestyle may bring. This can include interactions between the hospital and family life, the hospital and work or school, and the family and neighbors, etc.

The *macro-system* is a system that refers to the broad social context including the culture, values and customs of a society (Forte, 2007). Complementary and alternative therapies can impact a person's macro-system by creating new values, customs or beliefs (Smith et al., 2008). Complementary and alternative therapies are often different than the mainstream therapies that tend to be customary to a culture. Some cultures are more prone to use complementary and alternative therapies because they are seen as customary therapies in that culture. A person may choose to use complementary and alternative therapies based on their macro-system. A person may also choose to change their values and belief system and use complementary and alternative therapies if they are not seen as mainstream in that culture.

For the purposes of this study the researcher will use this conceptual framework to develop their research questions.

## **Methods**

### **Research Design**

The research design that was used in this study was qualitative and exploratory. The researcher chose qualitative because the information needed for this study was best answered by qualitative interviews. It allowed the researcher to gather more information and therefore more meaning. Berg (2009), states that some things “cannot be meaningfully expressed by numbers” (p. 3). For the purpose of this study the researcher conducted a series of interviews, transcribed the interviews and searched for themes.

### **Sample**

The sampling procedure used in this study was a snowball sample. The researcher contacted oncology social workers whom they have previously worked with as possible candidates and then also received references to other oncology social workers. The researcher also asked their committee members for a list of possible candidates. Subjects were licensed social work professionals. They were either currently working in the field of oncology or had previously worked in this field. The social workers had a minimum of six months experience working in the oncology field.

### **Protection of Human Subjects**

All subject’s participation was completely voluntary and confidential. Before the interview the subject was given a consent form that was approved by the St. Catherine’s University Institutional Review Board (IRB). The consent form addressed issues of confidentiality and discussed the research further (Appendix A).

The questions for the interviews were approved by the St. Catherine's University IRB before the researcher conducted interviews and were seen as non-threatening questions. The respondents could choose not to answer any of the questions. The interviews took place at convenient locations for subjects, no identifying information was used in this study, and the data was destroyed after the research was completed.

### **Instrument**

The instrument used for this study was an interview. The questions were formulated by the researcher and their committee members, using their conceptual framework. The interview consisted of demographic variables and open-ended questions. The demographic variables included gender, level of licensure, place of employment and length of experience in the oncology field. The open-ended questions focused on the subjects training and experience with complementary and alternative therapies and also included their beliefs about strengths and limitations of complementary and alternative therapies (Appendix B). The interview questions were reviewed by the committee to increase validity and reduce researcher bias. It was a semi-structured interview.

### **Data Collection**

The data was collected using the following steps:

1. Each committee member and the researcher identified 2-3 potential participants to contact.
2. Researcher contacted each potential participant, informed them how researcher obtained their name and introduced the study using a protocol.

3. Researcher distributed questions and consent form in advance to allow potential participants to make a decision about participating in this research study.
4. If interested potential participants set up an interview with the researcher.
5. If potential participants did not call within one week, the researcher made one follow-up contact to see if they were interested in participating.
6. The interviews lasted 20-40 minutes and were conducted at the participant's worksite or an alternative site agreed on by researcher and participant, i.e. coffee shop.
7. The interview was audio-taped and transcribed.
8. The data collection process was repeated until the researcher had 6-8 scheduled interviews.

### **Data Analysis**

The data analysis technique chosen for this research project was content analysis. Content analysis is a detailed examination and interpretation of material in order to find repeating patterns and themes (Berg, 2009). The transcriptions of the interviews were examined to identify codes and themes. A code is a category that has been found in the data. A theme is three or more codes. Open coding was used to identify codes and themes in the data. Open coding is using an open-ended approach and having no pre-existing concepts that could obscure the data (Padgett, 1998). The researcher also used a grounded theory approach to look at the data. It started as inductive, where the researcher looked for initial codes and themes. Then it went to the deductive phase where the researcher looked over the data to make sure it was

coded consistently with the themes. Lastly the researcher went over the data again to find any new emerging themes, another inductive phase (Padget, 1998). Once the codes were identified, any code that emerged three or more times was established as a theme. Each theme is supported with at least one quote from the respondents.

## **Findings**

### **Sample**

The sample for this study consisted of seven oncology social workers. The researcher contacted thirteen potential participants and received a response rate of seven. Interviews were conducted over a series of four weeks. All seven of the participants were female. Six of the participants were Licensed Independent Clinical Social Workers (LICSW), one was a Licensed Social Worker (LSW). In addition, one of the six LICSW's was also a Licensed Psychologist. The length of time the participants had worked in oncology ranged from 2.5 years to 22 years, see figure 1. Four of the participants were currently working in oncology and three were not. Five of the participants worked in a hospital setting, one worked in private practice and one worked in a hospital mental health clinic. All of the seven participants had some sort of training or education in complementary and alternative therapies; five out of the seven participants were trained in clinical hypnosis. The most commonly used complementary and alternative therapies by participants were hypnosis and guided imagery, see figure 2.



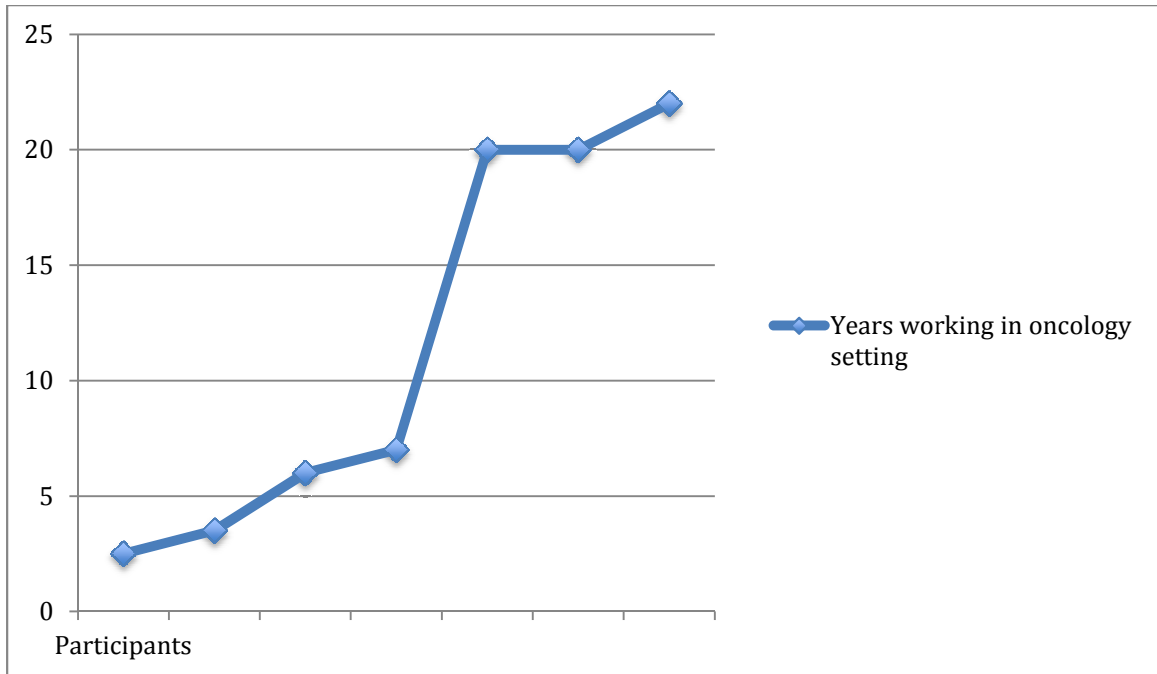


Figure 1

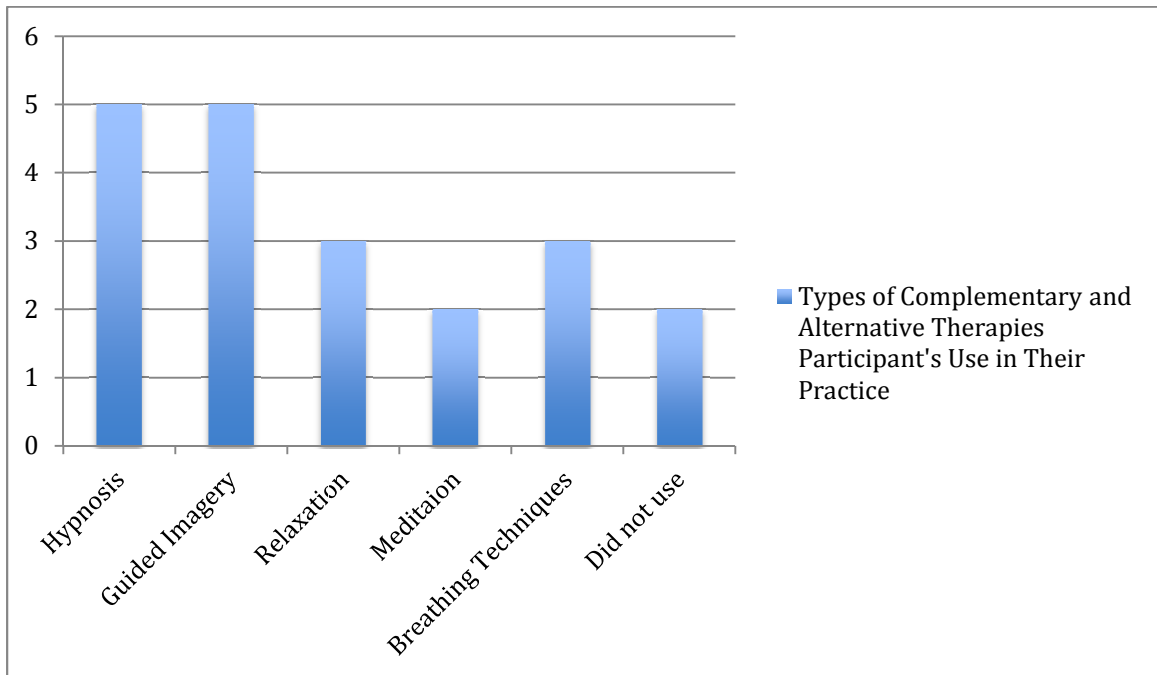


Figure 2

## Themes

For this study a theme was defined as an idea that was recurrently discussed by at least two of the participants. Several quotes will be presented throughout the findings to provide examples of each theme. Quotes are italicized.

**Stigma and Preconceived Notions.** In response to the question, What do you perceive as the biggest challenge of using complementary and alternative therapy with patients with cancer on an individual level/family or staff level/community level, the theme of stigma and preconceived notions was generated. This theme was discussed by four out of the seven participants. This theme addresses the idea that patient's may have preconceived notions or feel it is socially unacceptable to use complementary and alternative therapies. The thought that these therapies are weird or unusual may be keeping people from using them. The following quotes from the respondents are examples of this theme:

*I think one of the challenges as I referenced before is patient's or individual's perceptions of these kind of interventions. Sometimes people think it's 'weird' or it's 'out there' or it's 'not their thing' and so I think that can definitely be a challenge for individuals. (Transcript 4, Line 43-46)*

*I think the 'buy in'. People worry that you are trying to do this instead of traditional medicine and we really try to talk about how this is complementary and we still believe in the use of traditional medicine. And just that whole*

*'buy in' and preconceived notions about is this some 'new aged thing' is what we hear a lot. (Transcript 2, Line 89-92)*

*Some people are very clear that they're not into that weird stuff, and they'll just sometimes need education about what other things are, they'll just assume depending on their backgrounds some people who are more religious feel like doing things like relaxation or guided imagery is like um.. I don't want to say sinful cause that's extreme, but they'll feel like that's against their religious beliefs and I feel like that's more a lack of understanding of what it actually is. (Transcript 1, line 38-44)*

*I think particularly about clinical hypnosis there's a lot of misunderstandings as to what that is, and a lot of people have only one experience with hypnosis and it's the entertainment variety. You know having gone to their high school graduation party and seen someone do crazy things when they're hypnotized. (Transcript 4, line 110-113)*

**Participants' Sense of Control and Empowerment.** In response to the question, what do you perceive as the greatest benefit of using complementary and alternative therapy with patients with cancer on an individual level, the theme of participants' sense of control and empowerment emerged. This theme was represented by four of the seven participants. This theme addresses the importance of control. People who use complementary and alternative therapies feel a sense of control over their situation and are able to be an active participant in their therapy,

which is a great benefit of these approaches. The following quotes from the respondents are examples of this theme:

*I think on an individual level its something the patient can do. I think so much with cancer patients that so much is being done to them. For a breast cancer patient for example, they might be having surgery, they're being given chemotherapy, they get radiation and they are a passive participant in their program. But for the complementary medicine things, it is something that they are actively pursuing and doing. (Transcript 2, line 99-104)*

*When they ask the question what if my cancer comes back, which every cancer patient asks, pretty much all the time that they can answer themselves and say this is what I'm doing. I'm doing yoga, I'm juicing, I'm meditating, and these are the things I'm doing to keep myself cancer free. So that when they get rediagnosed, should they get rediagnosed, they can say I've done everything I can. So that they're not falling, so they can stay present. So the same thing with people who are in ongoing treatment, that they're an active participant in maintaining their healing state. (Transcript 6, line 187-194)*

*So I think that's really empowering, especially for people, cancer patients, who are subject to the health care system, very little is in their control, the doctors are telling them what they need to take, most patients don't have any idea how the medications work or what would be helpful, so to give them*

*something that they can hang onto and can be theirs and they can own and do on their own, I think is a huge benefit for patients. (Transcript 4, line 138-143)*

**Time Limitations and Interruptions Affect Practice.** In response to the question, what do you perceive as the biggest challenge of using complementary and alternative therapy with patients with cancer on an individual level/family or staff level, the theme of time limitations and interruptions affect practice was generated. This theme was discussed by five of the seven participants. This theme addresses the time limitation and interruptions professionals face. The professionals often did not have enough time to use complementary and alternative therapies with patients and they faced interruptions from various medical staff. The following quotes from the respondents are examples of this theme:

*I think if social workers had more time and especially if you're in a hospital setting it gets just so busy, and with everything you're expected to do. I would love to spend more time just doing these interventions with patients because I think there is so much benefit and really teaching people how to do it instead of just fully relying on here's a CD or a handout that really walks you through it. So I think across the board in clinical hospital settings that's one thing that's lacking is the time social workers have to give to that. (Transcript 1, line 234-240)*

*I actually in my work I feel like I have not had much of an opportunity to use any of them because when I was an oncology social worker I felt like I was spending so much time on discharge planning. (Transcript 5, line 21-23)*

*Time. I mean just from what I was in, we didn't have time to dig into that, which I wish we did cause I think it's great. (Transcript 7, line 82-83)*

*Because we were in a medical setting, not in a therapy, counseling setting, we would have constant interruptions, and these patients had very complex medical situations being in bone marrow transplant. So there were lots of times when you can't avoid that there are gonna be interruptions. (Transcript 3, line 29-32)*

*Fitting it in in terms of time with all the chemotherapy and transplant and all of the things they're going through and all of the other medical interventions and all of the other professionals that need to be involved I think that can make it hard for individuals to actually successfully participate. (Transcript 4, line 50-53)*

**Relief for Family.** In response to the question, what do you perceive as the greatest benefit of using complementary and alternative therapy with patients with cancer on a family or staff level, the theme of relief for family emerged. This theme was represented by four of the seven participants. This theme addresses family relief. Family members often worry about the patient and these therapies help provide relief

for family members. These therapies can provide families with a sense of hope and ways to help the patient. The following quotes from the respondents are examples of this theme:

*Leading into the family I think if the loved one is more calm and at peace and maybe less pain, obviously the family is going to feel that effect too. Maybe not be as worried about the person, maybe don't feel like they have to check in on them as much or can just call and their anxiety goes down, that caregiver burnout and all that stuff. (Transcript 7, line 105-110)*

*I think there's hope. I think cancer is a teaching experience for everybody involved. Nobody ever wants it to be that, but it is. Cancer's random. We just don't know enough about why people do or don't get it, and so whoever has it, everybody's surprised, including themselves..... And so everybody is surprised and it's a wonderful way to start doing educational information, and I've watched families get better, I've watched one woman I worked with, I watched three generations heal. (Transcript 6, 275-278, 285-287)*

*I think one of them is that it gives both family members and staff members another way to help the patient. Both for family members who are there watching the person suffer and deal with the effects of treatment and the effects of their disease and for the staff members who watch the same, I think there can be a real sense of helplessness. (Transcript 4, line 170-174)*

*You feel so helpless and you want to help them and you just sit there and watch and you see that oh they're doing better, they've had their relief, then it gets transferred to the loved ones and caregivers to recognize, okay they have relief, they're doing better. A lot of people say you know if they're happy, I'm happy, if they're suffering, I'm suffering. You know their mood just follows exactly how the patient is doing. (Transcript 1, line 181-186)*

**Physical Limitations.** In response to the question, what do you perceive as the biggest challenge of using complementary and alternative therapy with patients with cancer on an individual level, the theme physical limitations emerged. This theme was discussed by two of the seven participants. This theme addresses the physical limitations that cancer patients face that make it difficult for them to be able to engage in complementary and alternative therapies. The following quotes from the respondents are examples of this theme:

*Medications too, they are on so many medications and many of them have sedative type effects and so they may not really be able to focus or even be able to stay awake. (Transcript 3, line 43-45)*

*I think for cancer patients sometimes it's how they're feeling physically and whether they're up for this kind of thing throughout the course of treatment. (Transcript 4, line 47-48)*



**Medical Model Limitations.** In response to the question, what do you perceive as the greatest benefit of complementary and alternative therapy with patients with cancer on an individual level, the theme medical model limitations emerged. This theme was discussed by two of the seven participants. This theme addresses the limitations of western medicine. Complementary and alternative therapies can provide another outlet for cancer patients where the medical model falls short. The following quotes from the respondents are examples of this theme:

*And that's huge because we fall short, the medical world falls short in making it comfortable for patients...So the patients who've been able to do this and find ways to get them through the procedure have a huge benefit. (Transcript 4, line 159-163)*

*I think the medical model is crazy making like going from one appointment to the next, not getting answers, being referred to someone else, and then not knowing if you're gonna get better or not, just the built in anxiety around all that. (Transcript 5, line 161-163)*

*I think when you're in a place of such a bad place you, I just think the more alternative medicine that you can use the better, cause it's very different than our western medicine. (Transcript 5, line 234-236)*

**Community Healing.** In response to the question, what do you perceive as the greatest benefit of complementary and alternative therapy with patients with

cancer on a community level, the theme community healing emerged. This theme was represented by three of the seven participants. This theme addresses the community benefit of complementary and alternative therapy. The following quotes from the respondents are examples of this theme:

*And that's about growing the light. And the more of us that are working with the light, the better it is. It's like Wellstone's saying, "We all do better, when we all do better". (Transcript 6, line 327-329)*

*I think the more centered we can get, the better we are in working with one another. (Transcript 3, line 199)*

**Access to Services.** In response to the question, what do you perceive as the most difficult challenge of using these therapies on a community level, the theme access to services emerged. This theme was discussed by three of the seven participants. This theme addresses the challenge of accessing services and learning about availability of professionals who provide complementary and alternative therapies. The following quotes from the respondents are examples of this theme:

*I get people if somebody lets people know about me, but you know if they don't, the doctor does think [it's needed]. It's part of how a person is referred on to get any of the services..... But if I don't know about them, I can't help them and there's many that fall through the cracks. So that's another access problem. (Transcript 2, line 205-207, 217-218)*

*I think the availability of these therapies to people is somewhat limited. Some therapists use it in private practice that type of thing. But for the use with medical type issues, they're gonna need to be where someone can provide it usually. (Transcript 3, line 74-77)*

*I think it's knowing about them and knowing how they can help and feeling that direct benefit from the therapy. So it's education, and if you're not in the right channels to get the education, you're not gonna know about it. (Transcript 5, line 117-119)*

**Mental Health Relief.** In response to the question, what do you perceive as the greatest benefit of using complementary and alternative therapy on an individual level/family or staff level/community level, the theme mental health relief emerged. This theme was represented by all seven of the seven participants. This theme addresses the mental health relief that complementary and alternative therapies provide patients. One of the benefits of complementary and alternative therapies is the mental health relief it provides for patients. These therapies can decrease anxiety and depression. The following quotes from the respondents are examples of this theme:

*I think the mental health relief it brings patients. I think providing relief, a decrease in their anxiety, a decrease in their pain. (Transcript 1, line 126-127)*

*I'd say like sense of peace about self, pain management, lower anxiety for sure on the individual, and it just seemed more calm, like calmness.*

(Transcript 7, line 104-105).

*Well for individual it was a reduction of anxiety and depression. Those were the biggest ones. Anxiety is just ramped in any medical situation and particularly in [Bone Marrow Transplant].* (Transcript 3, line 120-122)

*I think that complementary and alternative therapies can be very effective for relieving depression and anxiety. I think that patients who struggle with depression and anxiety often appreciate having something other than the standard medication therapy or even psychotherapy or counseling to deal with depression and anxiety, particularly anxiety. I've certainly seen in my practice that people benefit from those modalities.* (Transcript 4, line 5-10)

## **Discussion**

### **Sample**

The sample of participants was a major strength of this study. All seven of the participants had training in complementary and alternative therapy. Training in complementary and alternative therapy is not a core part of social work practice. All of these participants have gone above and beyond and sought out training. Also they were all seasoned professionals. Three of the seven professionals have worked for 20+ years in oncology.

The sample of participants in this research study consisted of five hospital social workers and two social workers who worked in private practice or therapy settings. This statistic may have influenced some of their responses based on their setting. If this study had an even number of private practice versus hospital social workers, the results may have been different. Also all of the seven participants were female social workers. Social work tends to be a female dominated field, but having male social work participants may also have generated different results. Lastly, all seven of the participants had had some sort of training or education in complementary and alternative therapies and believed that these therapies were valuable and beneficial. The participants' training and beliefs about these therapies may have influenced their responses. If some of the participants' had not received any training or did not feel complementary and alternative therapies were beneficial the results may have been different.

### **Themes**

The purpose of this research was to determine the strengths and limitations of complementary and alternative therapy approaches used for relieving depression and anxiety in cancer patients. After analyzing the themes, some key findings were apparent about how the themes related to the research question. Nine major themes emerged in the findings of this research and after interpretation four of these themes were seen as limitations of complementary and alternative therapy approaches and five were seen as strengths of these approaches. The following themes were interpreted as strengths: Participants' Sense of Control and Empowerment, Relief for Family, Medical Model Limitations, Community Healing, and Mental Health Relief, see figure 3. The following themes were interpreted as limitations: Stigma and Preconceived Notions, Time Limitations and Interruptions Affect Practice, Physical Limitations, and Access to Services, see figure 4.

Strengths of Complementary and Alternative Therapy Themes:

Theme	Question	Strength
Mental Health Relief	What do you perceive as the greatest benefit of using complementary and alternative therapy with patients with cancer on an individual level/family or staff level/community level?	7/7 participants
Participants' Sense of Control and Empowerment	What do you perceive as the greatest benefit of using complementary and alternative therapy with patients with cancer on an individual level?	4/7 participants
Relief for Family	What do you perceive as the greatest benefit of using complementary and alternative therapy with patients with cancer on a family or staff level?	4/7 participants
Community Healing	What do you perceive as the greatest benefit of using complementary and alternative therapy with patients with cancer on a community level?	3/7 participants
Medical Model Limitations	What do you perceive as the greatest benefit of using complementary and alternative therapy with patients with cancer on an individual level?	2/7 participants

Figure 3

Limitations of Complementary and Alternative Therapy Themes:

<b>Theme</b>	<b>Question</b>	<b>Strength</b>
Time Limitations and Interruptions Affect Practice	What do you perceive as the biggest challenge of using complementary and alternative therapy with patients with cancer on an individual level/family or staff level/community level?	5/7 participants
Stigma and Preconceived Notions	What do you perceive as the biggest challenge of using complementary and alternative therapy with patients with cancer on an individual level/family or staff level/community level?	4/7 participants
Access to Services	What do you perceive as the biggest challenge of using complementary and alternative therapy with patients with cancer on an community level?	3/7 participants
Physical Limitations	What do you perceive as the biggest challenge of using complementary and alternative therapy with patients with cancer on an individual level?	2/7 participants

Figure 4



**Stigma and Preconceived Notions.** This theme addresses the idea that patients may have preconceived notions or feel it is socially unacceptable to use complementary and alternative therapies. The thought that these therapies are weird or unusual may be keeping people from using them. This theme was represented by four of the seven participants. In comparison with the literature, stigma and preconceived notions was not discussed in the literature. This may be because people who were being studied in the literature were already open to using complementary and alternative therapies, and stigma and preconceived notions addresses reasons why people are not open to using these therapies. For example Loizzo et al. (2010) recruited participants to join a 20-week-long meditation based health education and self-healing program. Participant's were aware of the program ahead of time and most likely joined the sample based on their openness to try complementary and alternative therapy. Likewise, Majumdar et al. (2002) recruited participants to join an eight-week-long meditation based program in mindfulness and therefore their sample was most likely already open to complementary and alternative therapies.

**Time Limitations and Interruptions Affect Practice.** This theme addresses the time limitation and interruptions professionals face. The professionals often did not have enough time to use complementary and alternative therapies with patients and they faced interruptions from various medical staff. This theme was represented by five of the seven participants. In comparison with the literature, how time limitations and interruptions affect practice was not discussed in the literature. This may be because the studies focused on the effects of complementary and alternative therapies on patients and the results they received. Also the studies may not have

experienced the time limitations that the participants' in this study faced. This may also be a reflection of the hospital setting, since a majority of the participants worked in a hospital setting and time limitation is a constant challenge hospital's personnel, staff, workers and professionals face every day.

**Physical Limitations.** This theme addresses the physical limitations that cancer patients face that make it difficult for them to be able to engage in complementary and alternative therapies. This theme was represented by two of the seven participants. In comparison with the literature, physical limitations were not discussed in the literature. This may be because the studies only included participants who were feeling physically well and physically able to participate in complementary and alternative therapies. For example some of the studies interviewed patients that were completed with treatments (surgery, chemotherapy, etc.) and were feeling better physically (Loizzo et al., 2010; Linde & Stuart, 2002; Shaharudin et al., 2011). Additionally some of the studies had participants drop out due to various reasons, some being not feeling well physically and therefore their results were not used (Loizzo et al., 2010; Kliger et al., 2011).

**Access to Services.** This theme addresses the challenge of accessing services and professionals who provide complementary and alternative therapies. This theme was represented by three of the seven participants. In comparison with the literature, access to services, illustrated similarities with the literature. The Institute of Medicine (2008), suggests that many cancer patients felt they were not aware of available resources and their depressive and anxious symptoms were not addressed. Merckaert et al. (2005) proposes that oncology physicians are not accurate in

determining their patient's distress levels, and therefore these patients may not be getting referred to services like complementary and alternative therapies. Again since many of the participant's in this study worked in a hospital setting, the medical model was dominant. Therefore, many of the professionals (doctors, nurses, etc.) in that setting are not trained and do not have a background in mental health services.

Findings supported this part of the literature, participants addressed the challenge of access and that if patients are not referred to services or are not aware of them, they may not get treated.

**Participants' Sense of Control and Empowerment.** This theme addresses the importance of control. People who use complementary and alternative therapies feel a sense of control over their situation and are able to be an active participant in their therapy, which is a great benefit of these approaches. This theme was represented by four of the seven participants. When compared to the literature, participants' sense of control and empowerment, similarities were found.

Kwekkeboom et al. (2008) found that participants felt that progressive muscle relaxation interventions gave them an awareness of their personal control over their pain. Additionally, Vernhoef et al. (2005) found that one of the main reasons cancer patients' use complementary and alternative therapy is because they want a sense of control. The findings of this study supported the literature and revealed that one of the benefits of complementary and alternative therapies is the sense of control and empowerment they provide for patients.

**Relief for Family.** This theme addresses family relief. Family members often worry about the patient and these therapies help provide relief for family

members. These therapies can provide families with a sense of hope and ways to help the patient. This theme was represented by four of the seven participants. In comparison with the literature, relief for family was not discussed in the literature. This may be because the literature addressed the individual level and not a family level benefit or limitation of complementary and alternative therapies. For example Correa-Velez et al. (2003) had a sample that consisted of 111 patients who had advanced cancer and families were not included in the study. Additionally Loizzo et al. (2010) had a sample of 46 women with breast cancer, again addressing the individual level. Several other studies included only individual level participants (Snow et al., 2012; Kliger et al., 2011; Linde & Stuart, 2002; Kwekkeboom et al., 2008; Majumdar et al., 2002).

**Medical Model Limitations.** This theme addresses the limitations of western medicine. Complementary and alternative therapies can provide another outlet for cancer patients where the medical model falls short. This theme was represented by two of the seven participants. In comparison with the literature, medical model limitations have some similarities. Wheat & Currie (2007) found that among radiation therapy department's professionals felt that complementary and alternative therapies helped patients cope with emotional aspects of therapy, since the medical model is limited in its ability to help patients cope on the emotional side. Findings supported this part of the literature in that complementary and alternative therapies provide psychosocial support where the medical model falls short.

**Community Healing.** This theme addresses the community benefit of complementary and alternative therapy. This theme was represented by three of the

seven participants. In comparison with the literature, community healing was not discussed. This may be because the literature addresses complementary and alternative therapy on an individual level and not on a community level. Snow et al. (2012) focused on the individual level using a sample of eighty adult cancer patients. Additionally Majumdar et al. (2012) used a sample of 21 participants who completed an 8-week mindfulness program. Several other studies also focused only on the individual level and not the community level (Loizzo et al., 2010; Kliger et al., 2011; Linde & Stuart, 2002; Kwekkeboom et al., 2008; Correa-Velez et al., 2003).

**Mental Health Relief.** This theme addresses the mental health relief that complementary and alternative therapies provide patients. One of the benefits of complementary and alternative therapies is the mental health relief it provides for patients. These therapies can decrease anxiety and depression. This theme was represented by all seven participants. When compared to the literature, mental health relief has many similarities with the literature. Loizzo et al. (2010) results demonstrated that complementary and alternative approaches provided an improvement in anxiety, depression and quality of life scores for cancer patients. Additionally Snow et al. (2012) found that clinical hypnosis had a greater reduction in anxiety for adult cancer patients when compared to the standard procedure group. Several other studies also had results that suggested complementary and alternative therapies provide a reduction in depression and anxiety for cancer patients (Roffe et al., 2005; Uitterhoeve et al., 2004; Kliger et al., 2011; Linde & Stuart, 2002). Findings of this research study supported the literature suggesting that

complementary and alternative therapies provide mental health relief for patients with cancer, particularly in the areas of depression and anxiety.

**Not Discussed by Participants.** The literature addresses two areas that the respondents did not explicitly discuss in this study. Studies showed that complementary and alternative therapies provided a source of distraction from patient's current situations and this helped relieve their anxiety (Kwekkeboom et al., 2008; Linde & Stuart, 2002). Many of the participants used clinical hypnosis with patients, and clinical hypnosis is a form of distraction. The participants did not clearly state distraction as a benefit of complementary and alternative therapies. Findings did not fully support this part of the literature since distraction was not explicitly discussed by the participants. Several studies also discussed how complementary and alternative therapies decreased pain levels for cancer patients (King, 2010; Kliger et al., 2011; Kwekkeboom et al., 2008). Findings did not fully support this part of the literature; respondents did not generate a theme about reduction in pain levels for cancer patients. Some participants addressed pain, but it was in the context of relieving mental health and therefore did not generate its own individual theme. This may be due to the fact that this study focused on the mental health of the cancer patients, and the professionals that were interviewed were social workers whose main focus is mental health and not pain management.

One of the seven participants explicitly addressed the importance of coping mechanisms. Other participants alluded to coping mechanisms through the theme "sense of control" but did not explicitly discuss coping mechanisms. The literature suggests coping mechanisms as an important theme. Majumdar et al. (2002) found

that participants felt mindfulness interventions gave them a tool for coping and overall improved their coping skills. Likewise in Uitterhoeve et al.'s (2004) review of the literature, the results indicated that complementary and alternative therapies had positive effects on patient's coping abilities. Findings of this study minimally supported this part of the literature with only one participant discussing coping mechanisms, suggesting that complementary and alternative therapies provide and improve coping abilities for patients with cancer.

Another area that was different from the literature review was the discrepancies between limitations of complementary and alternative therapies. The research showed that reasons why hospitals did not offer these therapies were due to budgetary constraints, lack of evidence-based studies, lack of internal expertise, disapproval from hospital senior managers, difficulty identifying qualified practitioners, and difficulty credentialing providers (Ananth, 2011). In contrast, the results of this study suggest that time limitations and accesses are the biggest limitations of these therapies; particularly in hospital settings where these therapies were not always incorporated due to time limitations. Budgetary constraints were not supported by the findings of this study.

### **Researcher Reaction**

The researcher's bias that may have influenced interpretation of results in this study is that the researcher has a strong preference for complementary and alternative therapy and may be more prone to only see strengths. The researcher has knowledge of the oncology population and has worked in the oncology social work field. To

help eliminate researcher bias, the interview questions were reviewed by the researcher's committee members.

While conducting the interviews this researcher found that many of the participants had difficulty answering community level questions. The participants shared that they didn't know how to answer the community level questions or they were hard for them to think of community level answers. One participant expressed that she didn't know how to bring complementary and alternative therapies out to the community level. This may be because the individual lens dominated the work of the participants of this study.

Another observation the researcher made during interviews was that employment setting affected the participants' responses. All of the five participants who worked in a hospital expressed experiencing time limitations, whereas the two participants who worked in private practice/therapy settings did not experience time limitations, but rather experienced access to services limitations. Therefore, depending on the setting, different barriers may arise.

### **Limitations/Recommendations for Future Research**

The limitations of this study are that due to its small sample size and qualitative nature of the study it cannot be generalized. Due to the amount of time the researcher had to conduct the study, they could not get a larger sample size. Future research should look to allow more time for interviews and gather a larger sample size. A larger sample size could be achieved by utilizing an online survey or conducting a focus group to allow for more participants.



Another limitation of this research was selection bias. The participants that were recruited were invested in this topic and had a strong preference for complementary and alternative therapies. Future research could use an anonymous survey, which may help to recruit people who are less invested in this topic. Future research could also use financial incentives to help capture those who might be critical of complementary and alternative therapies.

Another limitation of this research is it only examines social work professional's perceptions of complementary and alternative therapies and does not incorporate patient and caregiver's perceptions. Future research should explore patient and caregiver's perceptions of complementary and alternative therapies.

### **Implications for Social Work**

The findings of this research have revealed implications for social work practice, policy and research. The findings have suggested that social workers do not have enough time to effectively use complementary and alternative therapies with every patient. The findings have also suggested that patients may have limited access to complementary and alternative therapies and to social workers in general based on referrals. These are two areas that are implications for social work practice and policy. It is important that the social work field works to find a solution to the problems of time and access to services. Increased education of the benefits of these therapies to all hospital professionals may address this issue. Additionally, networking of complementary and alternative therapy professionals in the hospital setting could help address this issue. As discussed earlier in the literature review the implementation of the distress screening procedures for cancer patients treated at

American College of Surgeons (ACoS) accredited facilities may increase patient's access to services (Zebrack et al., 2012).

Another implication for social work is the lack of attention to the macro level. Many of the participants had a difficult time answering the community/macro level questions. Some of the participants felt that they didn't know how to bring their work with complementary and alternative therapies to the community level or they weren't sure or had difficulties answering the community level questions. Social work practice, policy and research should continue to work on ways to incorporate the macro/community level. This could be done by advocating to insurance companies to fund these therapies, and educating hospitals and the health care field about the benefits of these therapies and the potential reduction in health care costs that these therapies could provide.

### **Conclusion**

The purpose of this research was to determine what are the strengths and limitations of complementary and alternative therapy approaches used for relieving depression and anxiety in cancer patients. The strengths of this study include the idea that it addresses a topic that is in need of more research. Complementary and alternative therapies have been increasingly more popular and research is showing them to be effective psychosocial interventions. Another strength of this study is that its participants are social work professionals who work or have worked with the oncology population, and who have a wealth of knowledge in regards to this specific population. The sample of this study included seven seasoned professionals who have worked in the oncology field. The major findings of this study present nine

themes. After interpretation, five of these themes were seen as strengths of complementary and alternative therapy, and four of these themes were seen as limitations of these approaches. The strongest strength theme was mental health relief and the strongest limitation theme was time limitations and interruptions that affect practice. The literature review and results of this study both suggest that complementary and alternative therapies are effective interventions in addressing mental health needs of cancer patients. Many cancer patients are living in a world without control over their situation and to allow them to engage in these therapies and become active participants in their treatment is a positive feature. These therapies also improve family and community mental health as well. Continued education is needed to decrease the stigma about complementary and alternative therapies and to improve the time and access limitations. As one participant said:

*I think probably one of the greatest benefits is that [complementary and alternative therapies] empower patients because not all, but many of the alternative interventions, like guided imagery or hypnosis, basically the professional gets involved to help the patient understand how it works and teach them, but at the end of the day it's something the patient can do all on their own. Self hypnosis, guided imagery.... give[s] patients a tool that at any point in time, day or night, you know prior to an invasive procedure or just when they're struggling to fall asleep cause their mind is spinning, they've got that, they can use that. (Transcript 4, line 127-136)*

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## **Appendix A**

### **Complementary/Alternative Treatments for Cancer Patients with Depression and Anxiety: Critical Analysis**

#### **INFORMATION AND CONSENT FORM**

##### **Introduction:**

You are invited to participate in a research study investigating complementary and alternative therapy approaches used for relieving depression and anxiety in cancer patients. This study is being conducted by: Anna Murie, a graduate student at the School of Social Work, St. Catherine University/University of St. Thomas and supervised by Dr. Michael Chovanec. You were selected as a possible participant because you are a licensed social work professional who has either worked or currently works with the oncology population. Please read this form and ask any questions you may have before agreeing to be in the study.

##### **Background Information:**

The purpose of this study is: to determine what are the strengths and limitations of complementary and alternative therapy approaches used for relieving depression and anxiety in cancer patients? This study will look at what the benefits and drawbacks of these approaches are, as well as what approaches are used the most and appear the most effective.

##### **Procedures:**

If you agree to be in this study, I will ask you to do the following things: You will set up a time and place to participate in a 40-60 minute interview that will be recorded. The interview will be transcribed and coded. Results of the study will be presented at St. Thomas University in May 2013.

##### **Risks and Benefits of Being in the Study:**

The study has no known risks.

The study has no direct benefits.

##### **Confidentiality:**

Any Information obtained in connection with this research study that can be identified with you will be disclosed only with your permission; your results will be kept confidential. In any written reports or publications, no one will be identified or identifiable. Research records will be kept in a locked file cabinet in the office at my house and only me and my advisor will have access to the records while I work on this project. I will finish analyzing the data by May 2013. I will then destroy all original reports and identifying information that can be linked back to you. The audio recordings will also be destroyed by May 2013.

##### **Voluntary Nature of the Study:**

Your participation in this study is entirely voluntary. You may skip any questions you do not wish to answer and may stop the interview at any time. Your decision whether or not to participate will not affect your current or future relations with St. Catherine University, the University of St. Thomas, or the School of Social Work. If you decide to participate, you are free to withdraw at any time without penalty. Should you decide to withdraw, data collected about you will not be used.



**Contacts and Questions**

My name is Anna Murie. If you have any questions, please feel free to contact me at 218-791-6460. You may ask any questions now, or if you have any additional questions later, the faculty advisor, Dr. Michael Chovanec 651-690-8722, will be happy to answer them. If you have other questions or concerns regarding the study and would like to talk to someone other than the researcher, you may also contact Dr. John Schmitt, Chair of the St. Catherine University Institutional Review Board, at (651) 690-7739.

**You will be given a copy of this form to keep for your records.**

**Statement of Consent:**

You are making a decision whether or not to participate. Your signature indicates that you have read this information and your questions have been answered. Even after signing this form, please know that you may withdraw from the study at any time.

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I consent to participate in the study and to be audiotaped.

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**Signature of Study Participant**

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**Date**

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**Print Name of Study Participant**

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**Signature of Researcher**

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**Date**

## Appendix B

### Research Questionnaire

Please fill out the following demographic information. Review the open-ended questions and make any notes you feel will be helpful for the interview. Please bring questionnaire with to interview.

#### Demographic Section:

Gender (please check one) \_\_\_\_\_ male \_\_\_\_\_ female \_\_\_\_\_ other

Level of Licensure (please check one) \_\_\_\_\_ LICSW \_\_\_\_\_ LGSW \_\_\_\_\_ LSW

Length of time working in oncology: \_\_\_\_\_ years

Are you currently working in oncology: \_\_\_\_\_ yes \_\_\_\_\_ no

Employment Setting: \_\_\_\_\_

Have you taken any training or education courses in complementary or alternative therapy approaches: \_\_\_\_\_ yes \_\_\_\_\_ no

#### Open Ended Questions:

The focus of this research is on mind-body medicine, one of the four domains of CAM. Mind-body medicine is an intervention that focuses on the brain, mind, and body and it examines how these interactions affect our health. Some examples of mind-body medicine are: meditation, relaxation, visual imagery, yoga, and spirituality.

1. What are your personal beliefs about the effectiveness of complementary and alternative therapies used for relieving depression and anxiety?



