A STUDY OF THE BENEFITS OF CANCER PATIENTS ENGAGING IN COMPLEMENTARY THERAPIES

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ABSTRACT

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The purpose of this study was to look at the benefits of cancer patients engaging in complementary therapies. Cancer affects a large number of people and their families every day. Different mortality rates and different treatment modalities exist for cancer patients based on the stage of their disease at the time of diagnosis and the kind of cancer that the patients are diagnosed with. Those patients and their families who are affected by cancer have many choices to make regarding treatment and self care.

A literature review was conducted looking at the prevalence of cancer, common medical treatments that cancer patients endure, the psychological impacts of cancer, reasons for psychosocial interventions, and complementary therapies that cancer patients engage in.

Cancer is often viewed as an acute and usually fatal disease. Cancer patients face many struggles relating to the diagnosis and treatment of their disease. Self-esteem is a major concern among cancer patients. In this study, literature and research was presented on various complementary therapies to determine the benefits that they provide for cancer patients in improving their quality of life and prolonging survival. Recommendations to various professionals in the health care field were made at the completion of the study.

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CHAPTER ONE

Introduction

Estimates indicate that about 555,500 Americans will die from cancer in 2002, corresponding to 1,500 deaths per day (Jemal, Thomas, Murray, & Thrun, 2002). In Wisconsin, the towns of Black Earth, Colby, Dickeyville, Eagle River, Elroy, Galesville, Independence, Mazomanie, Necedah, Oneida, Pepin, Redgranite, Somerset, Spring Green, Strum, Viola, and Wonewoc would be wiped out in a day if it were their citizens who died from cancer. The population of Menomonie would be gone in 9 days. La Crosse would be without citizens in 34 days where as Eau Claire would take 40 days for its citizens to die from cancer. The population of Madison would be completely wiped out in approximately 134 days. That is less than half of a year. The whole state of Wisconsin would be gone in 3,483 days or in about 9 and a half years (Rand McNally, 2000).

According to the same source, Wisconsin is estimated to have 25,300 new cancer cases in 2002, while enduring 11,000 deaths due to cancer in 2002. Cancer remains a major public health problem in the United States, with one in four deaths caused by cancer. No nationwide cancer registry exists, so precisely how many new cases of cancer are diagnosed each day in the United States is unknown.

With so many people and their families dealing with cancer, it is important that effective ways of dealing with issues related to cancer be examined. This includes psychological support, as well as medical treatment. In 1870, renowned surgeon James Paget wrote about frequent cases in which deep anxiety, deferred hope, and

disappointment were soon followed by such a growth and increase in cancer so that it would be quite realistic to say that mental depression is a weighty addition to the other influences favoring the development of cancer (Walker, Heys, & Eremin, 1999).

Research has found that psychosocial interventions not only improve the quality of life but may also prolong survival in patients with cancer. Studies show that the higher the level of mood disturbance before the first cycle of chemotherapy, the poorer the clinical and pathological response to chemotherapy (Walker, Heys, & Eremin, 1999). Psychosocial interventions may help in a number of ways such as enhancing treatment compliance, improving nutrition intake by patients, reducing high risk behaviors, altering coping strategies, improving the quality of life, providing group or other social support, and directly effecting a response to medical treatment. Psychosocial interventions have been found to alter host defenses, such as stimulating the immune system, although the mechanism of action in cancer patients is unclear.

Memorial Sloan-Kettering Cancer Center in New York has developed “The Network Project” to provide interdisciplinary education and training for professionals dealing with cancer patients. The professionals include a variety of people from health care disciplines such as oncologists, nurses, and mental health professionals. The two-week program covers cancer pain management, psychosocial oncology, and cancer rehabilitation.

Participants are asked to complete a knowledge and attitude inventory both before and after training as well as completing follow-up questionnaires one year after participation. Analysis of the first 152 participants showed that the vast majority indicated little or no knowledge in areas including the use of psychotherapies for treating

cancer patients and families (Breitbart, Rosenfeld, & Passik, 1998.) The greatest discrepancy reported by participants between their knowledge and the importance they felt should be placed on an area in their clinical practice was in psychosocial aspects. Clearly these health care professionals felt that they would be better prepared to deal with cancer patients if they had more training and access to a better mental health support system. Some of the topics the participants felt needed more emphasis included psychiatric complications of cancer pain, cognitive-behavioral interventions for cancer pain, psychotherapies for cancer patients and their families, assessing and managing delirium, and developing cancer patient education programs.

Barriers to treatment of cancer pain in patients have been identified to include a variety of educational, attitudinal, and institutional obstacles. Lack of psychological and psychiatric support services to enable a multidisciplinary approach to pain treatment has also been reported by both doctors and nurses as a barrier to adequate cancer pain management (Breitbart, Rosenfeld, & Passik, 1998.)

Somatic symptoms in cancer patients most likely have organic and physiological components. Cancer patients commonly exhibit anxiety and depressive symptoms (Chaturvedi & Maguire, 1998). The emotional changes that accompany these disorders can influence pain or somatic perception, which may result in heightened levels of pain. Higher depression scores have also been found in those patients with pain compared to those patients without pain.

In a study of patients with Hodgkin’s disease and non-Hodgkin’s lymphoma an association between somatization, depression, and cancer was found. A dual relationship was found to exist between cancer and somatic symptoms as well as between

psychological problems and somatic symptoms. The patients who were considered disease free but with residual symptoms had significantly more anxiety and depressive symptoms than the control group. Insomnia, fatigue, feelings of guilt, loss of interest, and depressed mood as well as anxious foreboding, nervous tension, motor tension, autonomic arousal, apprehension, and vigilance were reported more often by the residual symptom group compared to the control group. Patients were treated with counseling, antidepressants, or relaxation exercise training. Follow up studies were done with 32 patients. Of those, 16 reported a reduction of the severity or frequency of somatic symptoms, 16 reported reduction in psychological symptoms, and 10 reported total remission of their symptoms. A significant reduction was found overall in the anxiety and depression scores. This study confirms an association between depression and somatization in cancer patients (Chaturvedi & Maguire, 1998).

Purpose of the Study

The purpose of this study was to examine complementary therapies that adult cancer patients engage in and whether or not these therapies seem to be beneficial to the cancer patients in improving their quality of life. This will be accomplished by completing a literature review on material related to the subject of cancer patients receiving complementary therapies and an analysis and critique of the findings and recommendations to both professionals and professional persons.

Research Questions

There are several research questions that this study addressed. They were:

1. What complementary therapies do cancer patients engage in?

2. What health benefits for cancer patients have been measured in regards to these complementary therapies?

3. Are there any differences in health benefits according to the method of complementary therapy that the patients utilized?

Definition of Terms

For clarity and understanding of this study, several terms need to be defined. They are defined by the National Cancer Institute (n.d.) on their website as follows:

Cancer – "A term for diseases in which abnormal cells divide without control. Cancer cells can invade nearby tissues and can spread throughout the bloodstream and lymphatic system to other parts of the body" (n.p.).

Complementary medicine –"Practices not generally recognized by the medical community as standard or conventional medical approaches and used to enhance or complement the standard treatments. Complementary medicine includes the taking of dietary supplements, megadose vitamins, and herbal preparations; the drinking of special teas; and practices such as massage therapy, magnet therapy, spiritual healing, and meditation" (n.p.). Also referred to as complementary therapies and psychosocial interventions.

Oncology – "The study of cancer" (n.p.).

Assumptions

It is assumed that literature will be available on the subject of cancer treatment and complementary therapies. Another assumption of the research is that studies have been conducted on the health benefits of cancer patients engaging in complementary therapies.

Limitations

A limitation of the research may be that not enough literature does exist on the subject of cancer and complementary therapies. Another limitation may be that some cancer patients do not complete the studies in the literature due to mortality or other reasons. Also, a limitation may be that studies have been done on the effects of complementary therapies and cancer, but the results may not have been recorded.

CHAPTER TWO

Literature Review

Introduction

This chapter discusses the prevalence of cancer in the United States, the common medical treatments that cancer patients endure, psychological impacts of cancer, reasons for psychosocial interventions, and the complementary therapies that cancer patients use to supplement their medical care. In addition, the complementary therapies are delineated and beneficial patient outcomes are discussed. The chapter will conclude with a look at those complementary therapies that are available to patients with cancer.

Prevalence

It is estimated that 1,284,900 new cases of cancer will be diagnosed in the United States alone in the year 2002 (Jemal, Thomas, Murray, & Thrun, 2002). These estimates do not include carcinoma or basal and squamous cell cancers of the skin.

In 2002, 637,500 new cases of cancer are expected among males as compared with 647,400 new cases of cancer among females. Among men, the most common cancers expected to occur include cancers of the prostate, lung and bronchus, and colon and rectum. These cancers are expected to comprise 55% of all new male cancer cases. Among females, the most common cancers expected to occur include cancers of the breast, lung and bronchus, as well as cancers of the colon and rectum. These cancers are expected to comprise 55% of all new female cancer cases.

The lifetime probability of developing cancer is higher for men at 43.39% than for women at 38.25%. However, due to breast cancer, women have a slightly higher probability of developing cancer before the age of 60.

In 1999, cancer was second only to heart disease in leading causes of death in the United States comprising 549,838 of the 2,391,399 deaths that year. Cancer was the leading cause of death in women ages 40 to 79 and men ages 60 to 79 in 1999.

In the United States, 55,500 people are expected to die from cancer in 2002 (Jemal, Thomas, Murray, & Thrun, 2002). In the state of Wisconsin alone, 11,000 deaths are expected in 2002. Overall, 288,200 deaths from cancer are expected among males as compared to 267,300 female deaths from cancer. From 1992 to 1998, cancer death rates declined in both males and females while cancer incidence rates decreased among males and increased slightly among females.

In the same period of time, 1992 to 1998, African-American men showed the largest decline for incidence and mortality. However, African Americans still experience later-stage cancer diagnosis and poorer survival when compared with whites. Other than female breast cancer incidence rates and lung cancer death rates which are higher in white females, incidence and death rates for the most common cancer sites are higher for African Americans than for any other racial and ethnic group. In the United States, American Indian/Alaskan Natives have the lowest average incidence and mortality rate with Hispanic being the next lowest followed by Asian/Pacific Islander, Whites, and African Americans respectively (Jemal, Thomas, Murray, & Thrun, 2002).

Common Medical Treatments

In the human body, normal cells grow, divide, and die in a controlled manner. As people grow-up, normal cells divide rapidly until adulthood. After that, normal cells of most tissues divide only to replace dying cells or to repair injuries. Cancer cells continue to grow and divide in an uncontrolled manner and can spread to other parts of the body.

Cancer cells can accumulate to form tumors that may compress, invade, and destroy normal tissue. If cells break away from a tumor and get into the bloodstream or lymph system, they can be deposited in other areas of the body and form new tumors. The spread of a tumor to a new site is called metastasis. When the cancer spreads, it is still named after the part of the body where it started. Different cancer types vary in their rate of growth, pattern of spreading through the body, and response to different treatments (21st Century Oncology, 2001).

Surgery and radiation therapy are very effective at controlling cancers that have not spread beyond their site of origin. Radiation therapy is "the treatment of cancer and other diseases with ionizing radiation" (National Cancer Institute, 1992, n.p.). The target tissue receives deposits of energy that injure or destroy cells by damaging their genetic material. Both cancer cells and normal cells are destroyed. The normal cells are able to repair themselves and function properly again, while the ionizing radiation makes it impossible for the cancer cells to continue to grow. Radiation therapy is often used to treat solid localized tumors and cancers of the blood-forming cells and lymphatic system.

Systemic therapy, which travels throughout the body via the bloodstream, is used to treat cancer that has spread to other parts of the body. There are two main kinds of systemic therapy: chemotherapy and hormone therapy. Chemotherapy involves the use of toxic drugs to kill cancer cells. These drugs are designed to kill or disable rapidly dividing cells. Hormone therapy, however, is used to block hormones that increase the replication of certain cancer cells (National Foundation for Cancer Research, n.d.).

Cancer may develop when the immune system is not functioning properly or at all. Immunotherapy uses the immune system to help lessen the side effects of some cancer treatments. Immunotherapy also uses the immune system to fight cancer either directly or indirectly by repairing, stimulating, or enhancing the immune system response (National Cancer Institute, 2001).

According to the National Foundation for Cancer Research (2001), the following treatment options for select cancers are among the choices that many cancer patients will need to face. They are:

Prostate cancer - surgery, radiation therapy, hormone therapy, cryosurgery, immunotherapy, chemotherapy (for metastatic disease), and clinical trials.

Breast cancer – surgery, radiation therapy, chemotherapy, hormone therapy, breast reconstruction, bone marrow transplant or stem cell rescue, and clinical trials.

Lung cancer – surgery, radiation therapy, chemotherapy, and clinical trials.

Colo-rectal cancer – surgery, radiation therapy, chemotherapy, and clinical trials.

Non-Hodgkin's Lymphoma – radiation therapy, chemotherapy, bone marrow transplantation, and clinical trials.

Bladder – surgery, radiation therapy, chemotherapy, immunotherapy, and clinical trials.

Melanoma – surgery, chemotherapy, radiation therapy, immunotherapy, and clinical trials.

Leukemias – chemotherapy, blood transfusions, bone marrow transplantation, and clinical trials.

Psychological Impacts of Cancer

Cancer has historically been viewed as an acute and usually fatal disease. As of 1998, it was estimated that approximately half of all newly diagnosed cancer patients would live for five years or longer. Mullan (as cited in Marcus et al., 1998) used the term 'seasons of survival' to describe a three stage progression of events which can be related to cancer. 'Acute survival' begins at diagnosis and is dominated by the medical treatment process. 'Extended survival' refers to the transitional stage during which cancer patients reengage into everyday lives. 'Permanent survival' is considered to be disease free.

A rationale for expecting psychological effects after cancer treatment has been based on the vulnerability of the cancer patient to three types of stressors (as cited in Marcus et al., 1998). Anticipatory stress is defined as the "anticipated threat of death arising from personal confrontation with mortality". This includes anxiety, depression, damaged body image, and fears of recurrence of cancer. Residual stress has been considered as a form of stress syndrome, a grief reaction, or a traumatic disorder. Current stress is conceptualized as the stress cancer patients confront when reengaging in their premorbid lifestyle. These stresses together interact to create chronic vulnerability.

Behavioral research and practice are becoming a necessary part of the treatment and care of patients with cancer. Cancer patients struggle with quality of life issues. Behavioral involvement has become more common to help cancer patients to deal with their well-being, their mental health, and other psychosocial factors that affect the disease course as well as the response of the patient to medical treatment and their overall survival (Baum, Thompson, Stollings, Garofalo, & Redinbaugh, 2001).

Many sources of psychological stress and strain are related to the diagnosis of cancer, the treatment of cancer, and the survival of cancer. Distress in patients begins with the discovery and diagnosis of cancer and continues throughout treatment and post-treatment transitions. Psychological complications that are not detected, treated, or prevented can cause complications as well as compromised treatment outcomes. This may result in higher medical costs as well as worse patient outcomes.

The treatment of psychological issues in cancer patients is complex. Treatment varies according to stage of illness, patient characteristics, and the phase of discovery or treatment of cancer. Psychosocial interventions have become involved in all aspects of cancer care including prevention, early detection, treatment, and other care related areas. The behavior that people engage in is centrally involved in their risk for developing cancer. Some examples include tobacco use, sun exposure, diet, exercise, and drug and alcohol use.

Prevention programs are tailored towards risk factors for cancer. Smoking cessation programs are an example of a preventive program to reduce the risk of disease onset as well as reduce the risk of recurrence among disease-free cancer patients. Addressing maladaptive health behaviors may reduce cancer morbidity especially in

people with a inheritable family risk. Identification of people at risk may lead to and encourage healthier lifestyle behaviors that may reduce the likelihood of cancer onset or provide better vigilance and earlier detection among people at risk.

Early interventions seek to prevent major psychological distress when cancer is discovered and diagnosed. The diagnosis of cancer presents the patient with demands that exceed ordinary daily activities of living. Patients may experience feelings of fear, stress, and uncertainty due to the severe life threat associated with the diagnosis of cancer.

Many patients report adjustment problems as well as feelings of depression, anxiety, and isolation. Feelings of guilt may be present if a patient feels that a past behavior has lead to the current diagnosis of cancer. Adjustment problems may be present for years and may develop into debilitating psychological disorders. Patients may become overly preoccupied with their health and may spend more time focusing on the despair in their future rather than on their present situation (Baum et al., 2001).

Psychosocial interventions are designed to assist patients in coping more effectively with the onset of the psychosocial distress symptoms related to the diagnosis of cancer. Also, interventions are designed to reduce some of the detrimental effects that stress may have on health behaviors as well and future mood disturbances and other psychological symptoms. Some examples include: sexual dysfunction, unemployment, job discrimination, gender identity, and changes in body image.

Not all psychosocial interventions are the same. Different cancer diagnosis sites have different mortality rates as well as different treatment regimes. Treatment options have different durations and different side effects. Differing severity or disease

progression leads to different worry and coping responses among patients. Some cancer patients are forced to deal with disfiguring effects of surgery such as breast cancer patients having a mastectomy.

Many patients also have to make the decision of which treatment they feel is right for them. Weighing the pros and cons of cancer treatment can cause major distress for cancer patients. Distress may hamper judgment and interfere with coping and problem solving skills.

Early detection and treatment is generally the best indicator of cancer survival. The needs of cancer patients change throughout the cancer experience. Emotional support, psychoeducational material, coping strategies, and relaxation training appear to be valuable throughout the entire disease process.

Interventions with early stage cancer patients tend to emphasize preparation for and prevention of distress related to the experience of life with cancer. Cancer patients with advanced disease report more issues with depression and anxiety and the need to work through existential issues. Cancer patients with later stages of disease report more issues with death and dying (Baum et al., 2001). Advanced stage cancer patients also experience more side effects such as fatigue, sleep disturbance, as well as neuropathic pain.

Many cancers are characterized with concerns about post-treatment sexuality. Self-esteem and body image are a major concern for women diagnosed with breast cancer. Some cancer treatments may induce premature menopause which eliminates reproductive options and creates new problems for patients and their families.

Poor adjustment to cancer can lead to depressed mood and feelings of hopelessness about self and future. A past psychiatric history increases the likelihood of a maladaptive adjustment to the diagnosis of cancer. Mental health interventions can be extremely helpful in situations where the cancer patient has a psychopathological disease or maladaptive personality traits.

Cancer patients may use denial in three different ways. These include: using complete denial, using denial of the implications of the cancer diagnosis, and using denial of affect (Baum et al., 2001). Mental health interventions can be helpful when patients use denial as a coping strategy to the point of endangering their physical health.

Psychological and social morbidity among cancer patients is high. Anxiety, demoralization, suffering, isolation, anger, and depression are especially common in patients with advanced stages of cancer. Pharmacological treatment of symptoms is associated with adverse side effects including constipation, nausea, delirium, or sedation (Liossi & White, 2001). A significant number of cancer patients experience difficulties in coping with and adjusting to their illness as well as the insecurity of the future. The incidence of depression in cancer patients increases with higher levels of disability, advanced illness, and increased levels of pain.

Pain is a common symptom of advanced cancer. The experience of pain has a negative impact on quality of life for the cancer patient. Pain can impair psychological well being and interfere with social activities. Anxiety and depression can be induced by excessive pain.

Palliative Care

Palliative care typically involves patients with advanced care that no longer respond to curative treatments. The goal of palliative care is medical care that has patient comfort and quality of life as the primary goal. Palliative care may last for many months or for many years. Palliative care differs from hospice in that hospice usually is used only during the last six months of life and hospice usually does not include palliative radiation or chemotherapy treatments which are aimed at simply reducing the pain for the cancer patient (Baum et al., 2001)

Palliative care teams typically consist of personnel in the fields of medicine, psychology, psychiatry, social work, nursing, pastoral care, and pharmacology either in a hospital or in a home care setting. The palliative care team is an interdisciplinary model with all disciplines enjoying equal status and working together with a primary goal of optimizing patient comfort. Palliative care services are designed to train patients and their families in quality of life issues. Symptom management and psychological interventions are some areas that the palliative care team can facilitate to help increase patient comfort. The palliative care team seeks to minimize patient pain while helping to optimize patient mental status and patient alertness.

Palliative care is broadly focused in that the caregivers and family are treated in addition to the patient. The psychological distress of spouses tends to mirror that of the patients themselves (Baum et al, 2001). The grieving process in family affected by cancer begins with the acceptance of a poor prognosis. Families often times try to deny

the lethality of cancer. The palliative care team assists patients and families by helping them to maintain a positive day by day quality of life for the cancer patient as well as a sense of continuity during the end of life process.

Complementary Therapies

Complementary therapies are therapies that are used in conjunction with medical treatment to improve the quality of life of those suffering from cancer. Some complementary therapies include counseling, stress management techniques, aromatherapy, biofeedback, hypnotherapy, imagery, massage, meditation, and the arts in therapy such as music, dance, and literature.

Counseling

For the purposes of this study counseling will be defined as interactions between a therapist and a client. Counseling will include individual therapy, family therapy, group therapy, and telephone counseling as well as psychoeducational programs.

Counseling can also be referred to as psychotherapy. Psychotherapy incorporates a wide range of approaches to help people change the ways that they think, feel, or behave. Psychotherapy has not been proven to increase survival in patients with cancer; however, psychotherapy can help cancer patients to improve their quality of life.

Psychotherapy can be useful to cancer patients by helping them to increase their coping skills. People use psychotherapy to help them deal with the diagnosis and treatment of cancer. Psychotherapy can be useful in helping cancer patients to overcome depression and anxiety and to find inner strength (American Cancer Society, 2000).

Many different forms of psychotherapy exist. A few will be briefly described here that may be considered beneficial for cancer patients. Behavioral therapy focuses on

dealing with problematic behaviors and replacing them with more healthy behaviors without the need for insight. Client-centered therapy focuses on the therapist providing empathy and support for the feelings and experiences of the patient. Body-oriented therapy is based upon the idea of helping patients to release emotions that have been built up in the body. Cognitive therapy helps patients to reframe harmful negative thoughts and create positive self-talk. Family therapy focuses on relationship problems and increasing appropriate communication among family members. Group therapy varies in size and format but includes people with similar problems, such as a group of all breast cancer patients, meeting together to share information, learn coping skills, reduce anxiety, share concerns, and receive emotional support.

Psychotherapy has been found to help patients to learn to communicate better with their doctors and to be more compliant with medical treatment because they feel that their needs are being met. Cancer patients also receive benefits of reduced anxiety and depression, making better use of their time, and being able to return to work sooner when they have received psychotherapy as a complementary treatment to cancer (American Cancer Society, 2000).

Fawzey and colleagues carried out a between 5 and 6 year follow up study on disease recurrence and survival in 68 patients with malignant melanoma who participated in a brief group psychoeducational intervention. At the time of follow up, 10 of the 34 control patients had died as compared with only 3 of the 34 patients who had received the intervention (as cited in Walker, Heys, & Eremin, 1999).

In a landmark study, Spiegel and colleagues carried out a ten-year follow up study of 86 women with metastatic breast cancer who had received a variety of interventions. These interventions included peer group support, emotional expression, relaxation training, and autohypnosis. The mean survival time of the patients receiving group therapy was 36.6 months as compared with 18.9 months in the control group (as cited in Walker, Heys, & Eremin, 1999). The time from first metastasis to death was also increased in the patients who had received group therapy. The analysis that followed demonstrated that the results were not due to between group differences such as disease stage or the amount of previous or subsequent medical treatment. However, the reason for enhanced survival is unknown. The investigators suggest that the intervention may have enhanced compliance with medical treatment, improved nutritional intake, and enabled patients to maintain a therapeutic level of physical activity.

Telephone Counseling

Another mode of counseling can be done via the telephone. The Cancer Information and Counseling Line of the AMC Cancer Research Center conducted a randomized, controlled telephone counseling trial for breast cancer survivors to determine the impact of the intervention on quality of life of early-stage breast cancer patients who have completed adjuvant therapy. Participants were survivors with a good prognosis who had completed medical treatment.

Over a 12-month period, 16 calls were placed. The patients receiving the intervention also received a wellness kit in the mail consisting of six educational modules as well as a resource directory. Those patients receiving the intervention were also encouraged to create their own personal expression of their experience with breast cancer

and to share that with the telephone counselor at the end of the sessions. The patients not receiving the intervention received standard medical care and a directory on resources for breast cancer in their area.

The telephone counseling intervention was a psychoeducational therapy utilized to promote adaptive coping of life stressors for cancer patients. Individualized concerns were addressed through the use of the supplemental modules and tailoring of themes and coping strategies to the individual cancer patients. Problem-focused, emotion-focused, and cognitive-focused strategies were applied. Patients were also trained in the use of basic active and passive relaxation techniques with the use of audiotapes. Primary outcome measures were quality of life, mood, social support, self-efficacy, and sexual functioning. Assessment took place with a baseline measure and then follow-ups at 3, 6, 12, and 18 months (Marcus et al., 1998). The group receiving the intervention reported higher quality of life scores than did those cancer patients in the group not receiving the intervention. The telephone counseling was found to be easier to reach patients who are traditionally underserved due to the fact that an additional trip to the hospital is not necessary. Some of these underserved patients include the elderly, the homebound, late-stage cancer patients, and cancer patients who reside in rural areas.

Adjuvant Psychological Therapy

Greer and Moorey have done work on Adjuvant psychological therapy (APT) (as cited in Baum et al., 2001) which represents one of the most commonly used treatment protocols for psychological disorders related to cancer. APT has been described as a brief, problem-focused, cognitive-behavioral form of therapy. The therapy is approximately six sessions long and is directed towards current problems. APT tries to

involve the spouse or partner with a goal of helping the patient to focus on the meaning of the disease and the coping attitudes that the patient has. Clinical trials have found APT to be particularly effective in reducing psychological distress for the patient. In one trial, cancer patients receiving APT had significantly higher scores on fighting spirit and lower scores measuring helplessness and anxiety than did control subjects who did not receive therapy.

Gestalt Therapy

Gestalt therapy focuses on here and now concepts. This can be extraordinarily useful in moving cancer patients away from predicting the future and blaming the past. Instead, cancer patients are encouraged to focus on what happens here and now in an immediate time frame. The focus is on problem solving in the present rather than on catastrophic expectations for the future (Hardy, 1999).

Volunteer Support System

Hope and Cope, an oncology volunteer support program offers a wide range of services for cancer patients and their families. The program is based on a model of peer support and consists of over 120 volunteers whom are either cancer survivors themselves or have a family member or friend who was diagnosed with cancer (Edgar, Remmer, Rosberger, & Rapkin, 1996).

A survey was handed out over a six week period to patients and family members who utilized Hope and Cope and those who did not. Significantly more women than men utilized Hope and Cope. Predominately these women were under the age of 70 with fewer patients that were newly diagnosed and more patients who were in the follow up stage with their cancer. Patients who used Hope and Cope reported a greater need for

emotional support than did non-users. Hope and Cope users also reported feeling the need for more information regarding cancer as well as a need for help with activities of daily living and assistance with transportation and financial concerns.

Hope and Cope offered eighteen possible resources to cancer patients and their families. The most frequently used resources included the volunteers in the oncology and radiotherapy clinics, followed by the library, office volunteers, and Hope and Cope staff. The role of the volunteers was perceived by those completing the survey as offering hope, encouragement, understanding, and reassurance as well as providing information. Overall, 86% of patients rated their contact with the Hope and Cope program either as excellent or as very good.

Patients reported benefits of receiving hope and encouragement, understanding and reassurance, as well as learning coping skills and helpful information. Patients reported feeling better equipped to deal with the medical system by knowing what to ask their doctors, why to stay in treatment, and being able to better manage side effects to treatment. Other reported benefits included patients feeling that they were able to meet the demands of the present while preparing for what was ahead in their future.

Some suggestions were given to improve and expand services. Approximately 20% of respondents wished that they had been connected to the resources available sooner. Therefore, suggestions were made for Hope and Cope to visit hospitalized patients as soon after diagnosis as possible, to help patients to learn about resources earlier, and to reach out to patients directly (Edgar, Remmer, Rosberger, & Rapkin, 1996).

On-line Support Groups

The American Cancer Society and cancer survivors have created the Cancer Survivors Network that is the first telephone and web-based support service. Anyone dealing with cancer in their life or in the lives of a loved one can use the services. Pre-recorded discussions and stories help the clients to find others with similar situations. Since it is so new and open to everyone, no research was available on the benefits that it is providing to users at this time (American Cancer Society, 2001).

Stress Management

For the purposes of this study, stress management techniques are considered as interventions that individuals may learn and engage in by themselves. Some of these stress management techniques include relaxation skills such as deep breathing exercises, guided imagery, yoga, tai chi, and exercise.

A randomized, controlled trial of relaxation training and guided imagery in 80 women with large or advanced breast cancer was carried out to determine the effects of the intervention on host defenses in the patients. The intervention was shown to improve the quality of life, increase the number of cells that fight cancer, and lower the level of cell cytotoxicity (Walker, Heys, & Eremin, 1999).

Acupuncture

Acupuncture is a technique in which very thin needles of varying length are inserted through the skin. No scientific evidence exists that acupuncture is effective for treating cancer, however, evidence does exist that acupuncture may help to ease nausea related to chemotherapy (American Cancer Society, 2000).

Traditional teachings of Chinese medicine explain that acupoints lie along invisible meridians in the body which are channels for the flow of vital energy or life force called qi. The 12 major body meridians are also said to connect specific organs or networks of organs. The National Institutes of Health recognize acupuncture as an effective treatment for nausea caused by chemotherapy when performed by a trained professional.

Aromatherapy

Aromatherapy is defined by the American Cancer Society (2000) as "the use of fragrant substances distilled from plants, called essential oils, to alter mood or improve health" (p. 52). The aromatic substances can be either self administered through inhalation or can be administered as oils by either an individual or a practitioner through the skin such as in the case of massage.

Aromatherapy has not been found to be effective in treating or preventing cancer, however, use of the approximately 40 essential oils can be used to enhance quality of life among cancer patients. Early clinical trials suggest that cancer patients may benefit from aromatherapy as a treatment to reduce stress, pain, tension, anxiety, and depression and promote a feeling of well-being.

Different oils are promoted to have different health effects. Some of the most commonly used oils include: lavender, rosemary, eucalyptus, chamomile, marjoram, jasmine, peppermint, and geranium. Unscientifically proven reports also suggest that inhalation of peppermint, ginger, and cardamom oil seem to relieve nausea related to chemotherapy and radiation treatments.

Biofeedback

Biofeedback is a treatment process that helps patients by using monitoring devices to teach them how to consciously control and regulate physiological processes that are usually controlled automatically. These physiological processes include heart rate, breathing, blood pressure, temperature, perspiration, and muscle tension (American Cancer Society, 2000).

An independent panel of the National Institutes of Health has approved biofeedback as a useful complementary therapy for treating chronic pain and insomnia. Biofeedback has not been proven to influence the development or treatment of cancer, but can be considered useful to help improve the quality of life among cancer patients by helping to reduce stress and muscle tension. The effects do vary greatly from person to person however and a certified professional to control monitoring equipment and interpret change is required.

Hypnotherapy

Hypnotherapy can be defined as “the treatment of disease by hypnotism”. Hypnotherapy is a form of “psychotherapy that facilitates suggestion, reeducation, or analysis by hypnosis” (Merriam Webster Collegiate Dictionary, n.d., n.p.).

Hypnosis is considered by the American Cancer Society (2000) to be “a state of restful alertness during which a person can be relatively unaware of, but not completely blind to, their surroundings” (p. 74). Hypnosis is one of the few relaxation methods that has been approved by an independent panel of the National Institutes of Health as a

useful complementary therapy for treating pain. No scientific evidence exists that hypnosis can influence the progression or development of cancer, but hypnosis can be considered to help improve the quality of life among some cancer patients.

Hypnosis is said to quiet the conscious mind and leave the unconscious mind open to suggestions such as those to improve health and lifestyle. Hypnosis creates a state of deep relaxation and is commonly used to reduce blood pressure and feelings of stress, fear, and anxiety as well as to promote a sense of well being. Some people believe that hypnosis can also enhance the immune system. Some research has also demonstrated that hypnosis can be used to help control nausea and vomiting associated with chemotherapy.

Ratcliffe and colleagues conducted a study to determine the effects of relaxation training and hypnotherapy in 63 patients with Hodgkin's or non-Hodgkin's lymphoma. Five years after the initial diagnosis, analysis revealed that survival rate was related to age, stage of disease at diagnosis, and performance status. Two psychosocial factors also showed statistical significance in the increase of survival rates among cancer patients. The study found that early stage of disease at diagnosis, low depression scores, and having a psychological intervention were independent factors for survival (as cited in Walker, Heys, & Eremin, 1999).

In an individual case study, Hardy (1999) describes the use of hypnotherapy with a female cancer patient in her mid-thirties who had been experiencing chemotherapy for the third time and had also been through radiation therapy and had become very ill and in danger of losing her job if her symptoms did not improve. Hardy taught the patient a self-hypnosis strategy. The therapist and the patient worked together to develop several

suggestions regarding self-regard, self-care, stress management, and pain management. Antinausea suggestions were also developed as well as approaches to viewing the medical staff and the medical equipment as allies in a fight against cancer. The patient was encouraged to view herself as being in charge of leading her allies in the battle with her cancer.

The patient was also provided with other resources such as the teaching of progressive relaxation, the employment of a dream suggestion, and the development of her own anticancer imagery. Dissociation was used as an approach to pain management. After six months of therapy, the female patient began to embrace and enjoy life to a significant degree and learned to be more responsible for providing herself with basic care and nurturance.

Liossi and White (2001) conducted research in order to evaluate the efficacy of clinical hypnosis in enhancing the quality of life among advanced stage cancer patients. Terminally ill cancer patients were divided into two groups: those receiving standard care and those receiving hypnosis. Psychological support consisting of cognitive-existential therapy in a supportive counseling setting was provided to all participants. This model integrates existential and cognitive-behavioral psychotherapy by promoting compliance with medical regimens, correcting distorted cognitive perceptions, facilitating grief work, enhancing problem solving as well as coping skills to manage discomfort from physical symptoms, and fostering a sense of mastery and a sense of self worth.

In addition, patients in the hypnosis group received weekly sessions of hypnosis with a therapist for four weeks. The hypnosis intervention consisted of induction, suggestions for symptom management and ego-strengthening, as well as post-hypnotic

suggestions for comfort and maintenance of the therapeutic benefits throughout the upcoming week. Suggestions were individualized according to the predominant symptom of the patient. At the end of treatment, patients in the hypnosis group reported significantly better overall quality of life scores as well as significantly decreased anxiety scores and significantly decreased depression scores when compared with the standard care group (Liossi & White, 2001). Participants with the highest initial levels of psychological distress showed the greatest level of improvement with this effect being greater in the hypnosis group than in the standard care group.

In conducting semi-structured interviews with the hypnosis patients, Liossi and White found that patients reported using hypnosis primarily for physical and psychological symptom control. They reported hypnosis helping them with improving their self-esteem and coping with the stress of cancer in their lives.

Imagery

Imagery involves "mental exercises designed to enable the mind to influence the health and well being of the body" (American Cancer Society, 2000, p. 76). Imagery involves visualization techniques to help reduce stress, anxiety, and depression. Imagery is also useful in helping cancer patients to manage pain, ease fears, lower blood pressure, ease some of the side effects of chemotherapy, alter brain waves, increase motivation, promote relaxation, improve communication, enhance the immune system, and to help the cancer patients to feel as if they have some control. Imagery is believed to help relieve physical and emotional pain as well as help to improve the effectiveness of drug therapies and provide emotional insights to the cancer patient.

Many different imagery techniques exist. One such technique is called palming and consists of patients placing their palms over their eyes and visualizing alternate colors that they associate with stress and relaxation. Visualizing a calming color is believed to promote feelings of relaxation and improve the sense of well-being and health of cancer patients.

Another technique is known as guided imagery. This technique involves visualizing a goal to be achieved and then imagining achieving that goal. One version of guided imagery is known as the Simonton method. The Simonton method encourages patients with cancer to imagine their bodies fighting cancer cells and winning. Another method encourages cancer patients to imagine the arcade game Pac Man eating and destroying their tumor cells.

Massage Therapy

Massage therapy is “the manipulation of the soft tissues of the body for the purpose of normalizing those tissues” (Greene, 2001). Massage consists of manual techniques that include applying pressure, holding, and/or causing movement to the body. Touch is the fundamental medium of massage therapy. References to the use of massage can be found as far back as Chinese medical texts that are more than 4,000 years old. Massage has been used as a tool for relaxation, communication, and alternative healing.

Massage is known to increase blood circulation, reduce muscle tension, stimulate or sedate the nervous system, and enhance tissue healing. All of these are important in patients with cancer. Some other benefits of massage useful to cancer patients include: relief of muscle spasms, greater flexibility, relief of stress, an aid in relaxation, promotion of deeper and easier breathing, relief of tension related conditions, promotion of faster

healing of soft tissue, reduction in pain and swelling in soft tissue injuries, enhancement of health, increased nourishment of the skin, creation of a feeling of well-being, reduction in anxiety or depression level, increased awareness of mind and body connections, and promotion of a relaxed state of mental awareness. Massage can also reduce psychoemotional distress and may enhance immune system functioning. Massage therapy can be helpful with chronic and temporary pain as well as with nausea and with psychological side effects that many cancer patients experience.

Swedish massage is the most commonly used form of massage. Long gliding strokes, kneading, and friction techniques are the main techniques of Swedish massage. The uses include promotion of relaxation, improved circulation, and relief from muscle tension. Neuromuscular massage, on the other hand, is a form of deep massage that is applied to individual muscles. The common use of neuromuscular massage is reduction of pain. A word of caution is warranted for the use of massage therapy in cancer patients. Massage should not be used if it has the possibility of accelerating the metastasis or spread of the tumor or in cases where damage could occur to fragile tissue caused by chemotherapy or other treatment (Greene, 2001).

Meditation

Meditation is a “mind-body process that uses concentration or reflection to relax the body and calm the mind in order to create a sense of well being” (American Cancer Society, 2000, p. 80). Meditation has been approved by an independent panel of the National Institutes of Health as a useful complementary therapy for treating chronic pain and insomnia. Meditation has not been scientifically proven to be effective in treating cancer, but it can be used to help cancer patients to improve their quality of life.

The National Cancer Center for Complementary and Alternative Medicine reports that regular meditation can increase longevity and quality of life as well as reduce chronic pain, anxiety, high blood pressure, high cholesterol, improve health care use, and decrease blood cortisol levels initially brought on by stress (as cited in American Cancer Society, 2000). Meditation is also believed to improve moods, improve immune functioning, and enhance fertility. Mental efficiency and alertness are believed to be increased as well as improved self-awareness which contributes to relaxation,

Different forms of meditation exist. Meditation is usually done while sitting, however, moving forms of meditation also exist. Self-directed meditation involves finding a quiet place free from distractions in which patients sit quietly with their eyes closed and attempt to achieve a feeling of peace. Patients concentrate on chanting a phrase or focusing on their breathing. The patients experience a relaxed, yet alert state with the ultimate goal to separate themselves from the outside world for 15 to 20 minutes twice a day.

Reflexology

Reflexology is "a treatment that applies hand pressure to specific areas of the feet to heal a variety of problems and balance the flow of vital energy or life force called qi throughout the body" (American Cancer Society, 2000, p. 153). Reflexology is considered useful in reducing some types of pain and for relaxation.

Practitioners of reflexology claim that reflex points on the feet are directly linked to various organs in the body when manipulated. Reflexology is believed to be helpful with respiratory infections, headaches, back pain, and problems with the skin and

gastrointestinal tract. Reflexology is also believed to be useful to stimulate internal organs, boost circulation, and restore bodily functions to normal.

Reiki

Reiki is “a form of hands-on treatment used to manipulate energy fields within and around the body (believed to influence a person’s physical and spiritual health) in order to liberate the body’s natural healing powers” (American Cancer Society, 2000, p. 155). Reiki is used with cancer patients to help reduce stress and improve quality of life.

Reiki is believed to realign and strengthen the flow of energy through the body, speed the healing of injuries, decrease pain, ease muscle tension, improve sleep, and generally enhance the ability of the body to heal itself. The promotion of relaxation, the decrease in stress and anxiety, and the increase in sense of well being are also reported by patients who utilize reiki. More clinical research is necessary on the study of reiki.

Tai Chi

Tai chi is defined by the American Cancer Society (2000) as “an ancient Chinese form of martial arts. It is a mind-body, self-healing system that uses movement, meditation, and breathing to improve health and well being” (p. 102). Research has shown tai chi to be a useful form of exercise that may help to improve posture, improve balance, improve muscle mass and muscle tone, reduce stress, increase flexibility, increase stamina, and to increase strength in older adults. Tai chi has the same health benefits as moderate exercise including lowering both heart rate and blood pressure.

Practice of the physical movements and deep breathing of tai chi helps patients to feel more relaxed, younger, more agile, and increase their circulation. Tai chi is a series

of gentle, deliberate movements called forms. Tai chi is based on the idea of balancing the vital energy or life force called the qi which serves to prevent illness, improve general health, and extend life. No scientific evidence exists that tai chi can sure cancer, but it may be useful as a complementary therapy in improving the quality of life among cancer patients.

Yoga

Yoga is "a form of nonaerobic exercise that involves a program of precise posture and breathing activities" (American Cancer Society, 2000, p. 104). The word yoga comes from ancient Sanskrit meaning "union". Yoga can be useful as a therapeutic tool to relieve some symptoms associated with chronic disease such as cancer and can lead to increased relaxation and physical fitness. Yoga has not been scientifically proven to be effective in treating cancer; however, yoga may improve the quality of life among cancer patients.

Yoga is a system of personal development that combines ethical standards, dietary guidelines, physical exercise, and meditation to create a union of mind, body, and spirit. Patients who engage in yoga report more relaxation, happiness, peace, and tranquility. Some evidence exists that yoga can lower stress and increase strength and stamina. Yoga has also been found to be useful in controlling physiological functions such as blood pressure, heart rate, respiration, metabolism, body temperature, brain waves, skin resistance, and other bodily functions.

The Arts in Therapy

Music Therapy

Music therapy is the act of producing or listening to music in order to promote healing and improve quality of life. Some evidence exists that music therapy can help to reduce pain and reduce nausea and vomiting from chemotherapy for cancer patients. Music therapy may also reduce stress, anxiety, and depression, lower heart rate, blood pressure, and breathing rate, as well as provide an overall sense of well being (American Cancer Society, 2000). Some techniques of music therapy include musical improvisation, song writing, lyric discussion, music performance, receptive music listening, imagery, and learning through music.

Research has shown that physiological changes take place in people when they hear music, look at art, or feel the rhythm of dance. Music therapy is the most established of the arts in therapy. Some of the benefits of music have been found to be: improved gait and speech, improved communication, the reduction of pain, especially in surgeries, and limited severity of headaches. The benefit most useful in the treatment of cancer patients is in the reduction of pain in surgeries (Guth, 1996). Music has also been found to have physiological side effects such as stimulating the release of endorphins, the natural painkillers of the body, activating the immune system, and increasing cardiovascular efficiency.

In Germany, a study was conducted allowing patients to choose their own music to be played before, during, and after surgery. The research found that those patients who

were allowed to choose their own music required less anesthesia and had lower levels of anxiety when compared with patients who were not allowed to choose their own music (Guth, 1996).

Dance Therapy

The American Cancer Society (2000) defines dance therapy as "the therapeutic use of movement to improve the mental and physical well being of a person" (p. 65). The connection between mind and body is thought to promote health and healing by improving self-esteem and reducing stress.

Dance therapy can be useful as a form of exercise that helps to improve mobility and muscle coordination as well as helping to reduce muscle tension. Dance therapy is believed to have emotional affects on patients such as improving self-awareness, self-confidence, and interpersonal communication as well as helping develop body image, and reducing stress, anxiety, and depression. Decreased isolation, decreased pain and muscle tension, as well as increased feelings of well being are some other suggested effects of dance therapy. Dancing is considered to be an outlet for patients to communicate their feelings. Some people even believe that dance therapy may strengthen the immune system and even help prevent disease. No scientific evidence exists to support these claims.

Art Therapy

Art therapy is based on the idea that using creative activities helps to express emotions and can be healing (American Cancer Society, 2000). Art therapy has not undergone many scientific trials to determine the benefits for cancer patients. However,

art therapy is thought to provide patients with an opportunity to come to terms with emotional conflict within themselves such as reducing levels of stress, fear, and anxiety.

Patients are allowed to increase their self-awareness and express unspoken and unconscious concerns about their illness without the difficulty of having to talk about their painful experiences. Some patients feel that they have a sense of freedom in expressing themselves through art. Art work that patients use may include paintings, drawings, sculptures, as well as any other mediums that patients may chose to use. Some patients consider art therapy to be the viewing of beautiful works of art or viewing of photographs, books, or prints. Although uncomfortable feelings may be stirred up through the use of art therapy, many believe that this can have a healing affect for the cancer patients.

Humor Therapy

Dr. Patch Adams, founder of the Gesundheit! Institute, uses humor and love as pain relievers in the treatment of his patients. Laughter has been found to increase the catecholamines and endorphins, which are natural pain relievers. Overall, patients who laugh tend to decrease their heart rate and blood pressure over time putting them in a more relaxed state to deal with such issues as the cancer that they are facing (Guth, 1996).

The American Cancer Society (2000) defines humor therapy as “the use of humor for the relief of physical and emotional difficulties” (p. 72). Humor is considered a useful complementary therapy to promote health and coping with cancer. Cancer patients generally experience improved quality of life through the use of humor therapy by

experiencing some pain relief as well as some feelings of relaxation and experiencing reduced stress.

Passive humor involves such things as the viewing of movie comedies or the reading of humorous books. Humor production involves the ability of the patient to create or find humor in stressful life events. Laughter has physical effects on the body such as increasing breathing and oxygen use, increasing heart rate, and stimulating the circulatory system. Humor is also believed to be able to increase pain tolerance which is something that cancer patients really value.

Bibliotherapy

Emerging evidence suggests that literature and poetry can be used as therapeutic tools. Considerable evidence has been reported supporting the effectiveness of bibliotherapy in helping patients to deal with behavioral and emotional problems that they are experiencing (Pardeck, 1992). Considerable evidence also suggests that psychologists, psychiatrists, counselors, and internists widely use bibliotherapy and that the trend is only continued to increase.

Positive effects of bibliotherapy have been found in helping people to change their attitudes, to enhance self-development, to reduce fear, and to increase assertiveness. Group treatment, interpersonal growth and development, improved self-esteem, and self-help treatment are other positive effects of bibliotherapy.

Bibliotherapy can be an excellent tool for helping cancer patients to understand their illness. Cancer patients also can find insight into the long term consequences of their illness and treatment by reading books on the subject matter.

Bibliotherapy is suggested to be useful for assisting with prevention and therapeutic intervention. Four basic stages are introduced for practitioners using bibliotherapy with their patients. First, identification of sensitivity to the psychosocial needs of the patient is important. Second, selection of appropriate books based on the skill and insight of patients is important. Third, presentation of the written material as well as the understanding of the needs of the patients is important. Finally, follow-up on what the patients have gained from assigned reading materials is important.

Numerous reading materials exist that deal with psychological problems and with treatment of various forms of cancer. Some limitations do exist with bibliotherapy. Readers may develop unrealistic expectations of solving problems based on information from books. Also, readers may misinterpret information in books, they may not read the books, they may see themselves as experiencing worst-case scenarios presented in the books, and they may not take responsibility for the misinterpretation of information from the books. Many patients do not like to or cannot read. Therefore, bibliotherapy is only recommended for use as a complementary therapy to standard medical protocol (Pardeck, 1992).

Spirituality

Spirituality is generally defined as "an awareness of something greater than the individual self" (American Cancer Society, 2000, p. 97). Spirituality can be expressed through religion or prayer. Some cancer patients find spirituality very important to their quality of life.

Prayer has some psychological benefits such as reducing stress and anxiety, promoting a positive outlook on life, and strengthening the will of cancer patients to live. Some people believe that prayer can decrease the negative effects of cancer, speed recovery, and increase the effectiveness of medical treatments. Regular religious attendance has been associated with improvement of various health conditions, including cancer, but scientific evidence is still unclear.

Spirituality can be practiced many ways. Prayer may be silent or spoken, alone or with a group. Regular attendance at worship services may be therapeutic for some cancer patients. Some places of worship may conduct prayers for members who are experiencing illness. Some religions have standard prayers while other people simply ask a higher being for help, understanding, wisdom, or strength in dealing with their problems. Since the beginning of recorder history, all cultures throughout the world have developed systems of religion and spirituality. Relying on the treatment of spirituality alone is not recommended when dealing with such issues as cancer.

CHAPTER THREE

Summary, Critical Analysis, and Recommendations

Introduction

This chapter provides a summary of the information presented in the literature review. Also, a critical analysis is presented concerning the complementary therapies that cancer patients engage in, the benefits of the complementary therapies that cancer patients use to supplement their medical care, and any differences that may have become evident in the benefits between different kinds of complementary therapies. The chapter concludes with recommendations to various professionals and professional persons in the field including cancer patients, oncologists, nurses, hospices, medical centers, medical schools, counseling training schools, and mental health providers.

Summary

Cancer affects many people and their families every year in the United States. Different cancer diagnosis sites and stages have different mortality rates as well as different treatment regimes. Patients may go through a variety of medical treatments including surgery, radiation therapy, chemotherapy, hormone therapy, and immunotherapy depending on the type and stage of the cancer they have.

Cancer is often viewed as an acute and often fatal disease. Cancer patients face many struggles relating to the diagnosis and treatment of their disease. Self esteem is a major concern among cancer patients. Patients may experience feelings of fear, stress, uncertainty, grief, isolation, denial, guilt, anger, anxiety, and depression. Patients may

also face other problems such as sexual dysfunction, pain, unemployment, job discrimination, gender identity issues, and changes in body image.

Some patients also engage in complementary therapies such as counseling, stress management techniques, hypnotherapy, the arts in therapy, on-line support groups, and spirituality. Studies have been presented on these various complementary therapies to determine the benefits that they provide for cancer patients in improving their quality of life and prolonging survival.

Critical Analysis

There are several research questions that this study attempted to answer. A critical analysis of the original three research questions will now be conducted.

1. What complementary therapies do cancer patients engage in?

This study found that cancer patients engage in a variety of complementary therapies. The following is a list of the complementary therapies that were mentioned in this review: counseling, telephone counseling, adjuvant psychological therapy, gestalt therapy, volunteer support system, on-line support groups, stress management techniques, acupuncture, aromatherapy, biofeedback, hypnotherapy, imagery, massage therapy, meditation, reflexology, reiki, tai chi, yoga, the arts in therapy, music therapy, dance therapy, art therapy, humor therapy, bibliotherapy, and spirituality. These complementary therapies worked through psychoeducational intervention, peer group support, emotional expression, relaxation training, autohypnosis, guided imagery, and humor and love.

2. What health benefits for cancer patients have been measured in regards to these complementary therapies?

The various studies that were presented measured benefits using different methods. Several studies hypothesized that the complementary therapies enhanced treatment compliance and resulted in better nutrition of patients as well as a reduction in high risk behaviors.

Cancer patients engaging in psychotherapy were often able to return to work sooner than those cancer patients who were not engaging in such complementary therapies. It was also suggested that complementary therapies altered the coping strategies of patients, improved their quality of life, provided group or other social support, and directly affected the response to medical treatment through such mechanisms as altering host defenses. Patients also reported less nausea with chemotherapy while engaging in complementary therapies.

Complementary therapies demonstrated significant benefit in helping patients deal with their diagnosis and to find inner strength in overcoming anxiety and depression as well as to reduce stress, pain, and tension as well as to promote a sense of well-being. Cancer patients also expressed a feeling of empowerment in their battle against cancer. Finding an outlet for emotions and decreased isolation among cancer patients were also very important benefits.

Several interventions that conducted more long-term follow-ups found prolonged survival time in patients who received complementary therapies when compared to the control groups. These studies included the complementary therapies of psychoeducation,

peer group support, emotional expression, relaxation training, autohypnosis, and hypnotherapy.

3. Are there any differences in health benefits according to the method of complementary therapy that the patients utilized?

No one intervention seemed to prove superior to another in any of the studies. The findings did show that any form of complementary intervention proved better than none. The research did however indicate that those patients who engaged in complementary therapies faired better than those patients who did not.

Recommendations

As a result of the comprehensive review and critique of literature, the following recommendations are made:

1. It is recommended that all cancer patients should be encouraged to engage in complementary therapies by their health care providers.

2. It is recommended that complementary therapies should be incorporated into standard treatment protocols for cancer patients.

3. It is recommended that health care providers should become more aware of the complementary therapies that may be available to cancer patients in their area.

4. It is recommended that medical schools and counseling training schools should provide more training in regards to treatment of cancer patients and the effects of complementary therapies.

5. It is recommended that early intervention with complementary therapies should be done with patients diagnosed with cancer.

6. It is recommended that selected complementary therapy methods such as telephone based counseling could make it easier to reach clients who have traditionally been underserved including elderly, homebound, late stage cancer patients, and cancer patients who live in rural areas.

7. It is recommended that those professionals currently in the field receive training on the benefits of cancer patients engaging in complementary therapies through such methods as inservices, mandatory workshops, and bibliotherapy.

8. It is recommended that more research be conducted on the medical benefits of cancer patients engaging in complementary therapies.

9. It is recommended that more long term studies on the benefits of cancer patients engaging in complementary therapies be conducted.

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