Relaxation Intervention And Counselling Models In Controlling Stress In Cancer Patients

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Abstract

Cancer causes virus infections such as Hepatitis B/hepatitis C and human pappiloma virus which has contributed 20% of cancer mortalities in the low-middle income countries. More than 60% of new cases and around 70% of cancer deaths in the world occur annually in Africa, Asia and Central and South America. It is estimated that annual cancer cases will increase from 14 million in 2012 to 22 million in the next two decades. The intervention program against cancer risk factors not only aims to reduce new cases of cancer, but also reduce the possibility of other diseases caused by risk factors. Almost all studies found that psychosocial interventions had a significant effect on the recovery of cancer patients. Psychological interventions accompanied by motivation for healing provide suggestions to cancer patients to have more spirits of life. Hence, various studies made recommendations for handling cancer by involving psychological interventions, giving motivation, and spiritual support to cancer patients. This study allowed researchers to combine the two methods to see the effectiveness or influence in reducing and controlling stress in cancer patients through counseling and deep breathing relaxation. This study aimed to identify models of counseling interventions and relaxation to control stress in cancer patients. In this study, it is concluded that most of the concepts and results of previous studies recommend an intervention model in the form of counseling and relaxation to control stress in cancer patients.

***Key Words**: relaxation and counselling, stress control, cancer*

Introduction

Cancer is one of the leading causes of death in the world. Approximately 8.2 million deaths are caused by cancer. Lung, liver, stomach, colorectal and breast cancers are also the biggest causes of cancer mortalities every year. More than 30% of cancer deaths are caused by five behavioral and dietary risk factors, those are: high body mass index, low consumption of fruit and vegetable, lack of physical activity, cigarette smoking, and excessive alcohol consumption. Smoking is one of the main risk factors for cancer which causes more than 20% of cancer deaths in the world and around 70% of deaths from lung cancer worldwide(1)

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Cancer that causes infections of viruses such as hepatitis B / hepatitis C virus and human papilloma virus contributes to 20% of cancer deaths in the low-middle income countries. More than 60% of new cases and around 70% of cancer deaths in the world occur annually in Africa, Asia and Central and South America. It is estimated that annual cancer cases will increase from 14 million in 2012 to 22 million in the next two decades.(2)

In the United States and several other developed countries, cancer is now responsible for around 25% of all deaths. Within a year, about 0.5% of the population is diagnosed with cancer. In adult men in the United States, the most common cancers are prostate cancer (33% of all cancer cases), lung cancer (13%), colon and rectal cancer (10%), bladder cancer (7%), and cutaneous melanoma (5%). The most common cause of death is lung cancer (31%), followed by prostate cancer (10%), colon and rectal cancer (10%), pancreatic cancer (5%)

and leukemia (4%). Meanwhile, for adult women in the United States, breast cancer is the most common cancer (32% of all cancer cases), followed by lung cancer (12%), colon and rectal cancer (11%), endometrial cancer (6%, uterus) and non-Hodgkin's lymphoma (4%) Based on cases of death, lung cancer is most common (27% of cancer deaths), followed by breast cancer (15%), colon and rectal cancer (10%), ovarian cancer (6%), and pancreatic cancer (6%). Statistics can vary greatly in other countries.[3]

A diagnosis of cancer can cause feelings of fear, anxiety, depression, despair, and doubts in carrying out future plans. Cancer can significantly increase a patient's spiritual needs. Because of self-esteem and spiritual beliefs are threatened and personal relationships are disrupted due to lack of self-confidence, previously adaptive mechanisms become insufficient. Meanwhile, hospital care can trigger feelings of loneliness and eventually, a spiritual crisis arises in them. This crisis can cause imbalances in the mind, body, and soul. In dealing with critical illness, such as cancer, patients bring out special needs, the most important of which is spiritual needs. These patients depend on spiritual aspects, and spiritual adjustment is the strongest method they use to deal with the disease.[4]

Most studies found that psychosocial interventions had a significant effect on the recovery of cancer patients. Psychological interventions accompanied by motivation for healing provide suggestions to cancer patients to have more spirits of life. Therefore, various studies made recommendations for handling cancer by involving psychological interventions, giving motivation, and spiritual support to cancer patients.[5]

Research on the implications of mental health in bladder cancer patients included 11 prospective studies and 8 retrospective studies. This study reviewed mental health problems, such as depression and anxiety, which often accompanied the diagnosis of bladder cancer with a worse prognosis associated with a greater psychological burden.[6] Bladder cancer patients also have an increased suicide risk especially in older male patients who are not married with advanced disease status. Poor mental health can affect treatment outcomes such as postoperative complications and survival-related outcomes similar to physical health. While awareness of the importance of mental health in bladder cancer patients is growing, further studies are needed to assess the role of interventions such as cognitive behavior therapy or pharmacotherapy to optimize treatment.

The high incidence of cancer cases and around 40% of cancer deaths are likely related to risk factors of cancer that should be prevented. The risk factors of cancers are among behavior and eating patterns, including high body mass index; Less consumption of fruits and vegetables; Lack of physical activity; Cigarette smoking; Excessive alcohol consumption; other cancer risk factors, are due to exposure: physical carcinogens, such as ultraviolet (UV) and radiation; Chemical carcinogens, such as benzo (a) pyrene, formalin and aflatoxin (food contaminants), and fibers, for example asbestos; Biological carcinogens, such as virus, bacterial and parasitic infections.[7]

The intervention program against cancer risk factors not only aims to reduce new cases of cancer, but also reduce the possibility of other diseases caused by these risk factors. Smoking, one of which, causes around 1.5 million deaths from cancer each year (60% of deaths occur in low-middle income countries). Overweight, obesity and lack of physical activity cause 274,000 cancer deaths every year; Excessive alcohol consumption causes around 351,000 cancer deaths each year; Sexual transmission of human papilloma virus (HPV) causes around 235,000 cancer deaths each year; Air pollution (outside and indoors) causes around 71,000 cancer deaths every year; Carcinogens in the work environment cause at least 152,000 cancer deaths each year.[8]

Previous research examined the effect of training in relaxation techniques to reduce anxiety in primary caregiver breast cancer patients at home. The results of quantitative analysis using Wilcoxon nonparametric statistics and visual inspection graphs showed a significant difference score between before and during training with $Z = -2{,}023$ and $p = 0{,}0215$ ($p < 0{,}05$).[9]

Regarding to the learning model by Bandura (social cognitive theory), previously there was a model of this research that was counseling on the efficacy of adopting a behavioristic bandura learning model as conducted by researchers (Lev & Owen, 2000) with the research title Counseling women with breast cancer using principles developed by Albert Bandura. This study found that counseling interventions to promote self-efficacy can improve quality of life and reduce pressure for women diagnosed with breast cancer.

In this study design the researcher combined the two methods to examine the effectiveness or influence in reducing and controlling stress in cancer patients through counseling and deep breathing relaxation.

Based on the given facts, this study aimed to examine intervention counselling and relaxation models to control stress in cancer patients.

Research Methodology

This paper used a two-stage methodology for the formation of the initial model and conceptualization. This study collected several concepts, theories and some research results that were relevant to counseling and relaxation of stress control in cancer patients.

Results & Discussion

The results of this study found that cancer is caused by hormonal irregularities resulting in the growth of neoplasms in normal body tissues or often known as malignant tumors. In addition these symptoms are also known as malignant neoplasms and are often characterized by typical cell cycle abnormalities that allow cells to: grow uncontrollably (cell division exceeds normal limits), attack nearby biological tissues, and migrate to other body tissues through blood circulation or lymphatic system, called metastasis.[10]

This disease is often known by the public as a tumor, but not all of them are cancer. Tumors are all abnormal lumps, and are divided into 2 groups, namely benign tumors and malignant tumors. Cancer is a general term for all types of malignant tumors. This disease can affect everyone, in every part of the body, and in all age group, but more often affects people who are 40 years old.[11]

Cancer causes many different symptoms, depending on the location and character of the malignancy, and the presence or absence of metastasis. Diagnosis usually requires microscopic examination of tissue obtained by biopsy. After being diagnosed, cancer is usually treated with surgery, chemotherapy, or radiation. Most cancers cause death.[12]

Commonly, cancer is referred to based on the type of organ or cell where it occurs. For example, a cancer that begins in the large intestine is referred to as colon cancer, whereas cancer that occurs in basal cells of the skin is referred to as basal cell carcinoma. Cancer classification is then carried out in more general categories.[12]

Most cancers are recognized through visible signs or symptoms or through screening. Both of these methods do not lead to a clear diagnosis, which usually requires a biopsy.[13] Some cancers are discovered accidentally during medical evaluation of unrelated problems. Because cancer can also be caused by methylation of certain gene promoters, early detection can be done by testing genes that become biomarkers for cancer. Some types of cancer have known the status of the biomarker methylation. For example for breast cancer BRCA biomarkers can be used, whereas for colorectal cancer can use Sox17 biomarkers.[14]

Individual counseling is a counseling service organized by a counselor to clients in solving problems experienced by cancer patients.[15] A counselling can be made through communication or face-to-face discussion between counsellor and client to discuss about past and present problems as well as unsolved problem in cancer patients.[16] Discussion of problems in counseling is comprehensive and in-depth and touches on important things about the client (very likely to touch the client's personal secrets). But it is also specific in the direction of problem solving. [11]

Relaxation techniques are independent nursing interventions to reduce pain intensity, improve pulmonary ventilation and improve blood oxygenation. Skeletal muscle relaxation is believed to reduce pain by relaxing the muscle tension that supports pain, plenty of evidences show that relaxation is effective in relieving pain. The purpose of respiratory relaxation is to improve ventilation of the alveoli, maintain gas exchange, prevent lung attenuation, relax muscle tension, increase cough efficiency, reduce stress both physical and emotional stress which is to reduce pain intensity (control or reduce pain) and reduce anxiety.[5]

Patients who carry out relaxation techniques achieve a greater focus of attention using Jacobson techniques and increased emotional control using visualization of surveillance and lifestyle are associated with stronger intentions, higher perceived needs, and lower concerns than kemoprevensi. Strong predictors of intention are women's beliefs about risk reduction methods, especially for lifestyle and chemoprevention.

Cancer deaths are highly related to cancer risk factors that should be prevented. Cancer risk factors that consist of risk factors for behavior and eating patterns,

including high body mass index; Less consumption of fruits and vegetables; Lack of physical activity; Cigarettes smoking; Excessive alcohol consumption; other cancer risk factors. [17]

Conclusions

This study concluded that most of the previous concepts and studies recommend intervention model in a form of counselling and relaxation to control stress in cancer patients.

Ethical Clearance: Our study was not directly applied on human, hence ethical clearance was not required.

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