

AMERICAN UNIVERSITY OF BEIRUT

DESIGNING AN EVIDENCE BASED ADVANCED
PRACTICE PSYCHIATRIC NURSE LED BREAST CANCER
SUPPORT GROUP

by:

DINA MOHAMMAD JUMAA MOUZAYEN

A Project

Submitted in partial fulfillment of the requirements

For the Master of Science in Nursing

To the Hariri School of Nursing

At the American University of Beirut

Beirut, Lebanon


April 2016

AMERICAN UNIVERSITY OF BEIRUT

DESIGNING AN EVIDENCE BASED ADVANCED
PRACTICE PSYCHIATRIC NURSE LED BREAST CANCER
SUPPORT GROUP

by
DINA MOHAMAD MOUZAYEN

Approved by:



Dr. Laila Farhood, Professor
Rafic Hariri School of Nursing

First Reader



Dr. Myrna Doumit, Associate Professor
Lebanese American University

Second Reader



Dr. Nuhad Dumit, Assistant Professor
Rafic Hariri School of Nursing

Third Reader

Date of project presentation: April 27, 2016

AMERICAN UNIVERSITY OF BEIRUT

THESIS, DISSERTATION, PROJECT RELEASE FORM

Student Name: _____ Mouzayen _____ Dina _____ Mohammad _____
Last First Middle

Master's Thesis Master's Project Doctoral Dissertation

I authorize the American University of Beirut to: (a) reproduce hard or electronic copies of my thesis, dissertation, or project; (b) include such copies in the archives and digital repositories of the University; and (c) make freely available such copies to third parties for research or educational purposes.

I authorize the American University of Beirut, **three years after the date of submitting my thesis, dissertation, or project**, to: (a) reproduce hard or electronic copies of it; (b) include such copies in the archives and digital repositories of the University; and (c) make freely available such copies to third parties for research or educational purposes.

Dina Mouzayen
Signature

5/5/2016
Date

ACKNOWLEDGMENTS

Special thanks and sincere appreciation is extended to Dr. Laila Farhood and Dr. Myrna Doumit for their infinite time, energy and advice into this learning endeavor. Dr. Farhood has encouraged incredible growth throughout the past three years as being my advisor and teacher at school of nursing.

Genuine gratitude is bestowed to Dr. Huda Huijer director of Hariri School of Nursing, and to all my professors in the graduate program who provided consistent support and encouragement through the process of my graduate studies. I will always be grateful.

Lastly, I would like to thank my parents, my brothers and sisters' for their continuous motivation. I am forever thankful for my dearest friends and their confidence and persistent support throughout my studies.

AN ABSTRACT OF THE PROJECT OF

Dina Mohammad Jumaa Mouzayen

for

Master of Science in Nursing

Major: Nursing Administration

Title: Designing an Evidence Based Advanced Practice Psychiatric Nurse Led Breast Cancer Support Group

Breast cancer is the most common cancer reported among females in Lebanon.

The proposed project aims to design an Evidence Based Advanced Practice Psychiatric Nurse (APPN) Led Breast Cancer Support Group to help patients express their feelings, cope effectively, and pass through the grieving process in a healthy approach. The proposed support group will be able to improve patients' communication skills, help them cope in a more functional manner, decrease their anxiety and fear through different techniques allowing them to conquer good quality of life while living with breast cancer.

The design, structure and content of the support group follow evidence based practices as indicated in the literature. The proposed breast cancer support group includes a combination of psycho-educational sessions, self-expressing discussions, and relaxation activities (Art therapy and Yoga). Compared to other support groups in Lebanon and in the region, it will be the first support group that integrates the above three types of interventions. It consists of eight sessions spread over a period of four months. The delivery of the support group could be easily generalized. Specifically, other health care institutions in Lebanon and the Arab world can adopt the proposed support group.

CONTENTS

	Page
ACKNOWLEDGEMENTS.....	v
ABSTRACT	vi
Chapter	
I. INTRODUCTION	1
II. LITERATURE REVIEW	6
A. Breast Cancer Trends	6
B. Psychosocial Effects of Treatment on Breast Cancer Patients	7
C. Significance of Support Groups on Breast Cancer Patients	10
D. Characteristics of Effective Breast Cancer Support Groups	14
E. conclusion.....	20
III. BUILDING THE BREAST CANCER SUPPORT GROUP	22
A. Design	22
B. Support Group Members	22
C. Date, Time and Location	23
D. The Proposed Program for the Support Group	24
1. Program Goals	24
2. Recruitment of Patients	24
3. Selection Criteria.....	24
4. Session Outline.....	25
IV. SUPPORT GROUP IMPLEMENTATION	26

A. Administration Approval.....	26
B. Outreach and Research Prospects.....	26
C. Budget Plan	27
D. Limitations.....	27
Appendix	
I. ATTENDANCE LIST	29
II. RECRUITMENT FORM.....	30
III. SESSION DESCRIPTION.....	31
IV. CONSENT FORM.....	46
V. EVALUATION FORM.....	47
VI. EXPENSES	48
VII. PSYCH EDUCATIONAL SESSION SAMPLE.....	49
REFERENCES.....	50

CHAPTER I

INTRODUCTION

Breast cancer is the most common cancer in women both first world and third world countries (International Agency for Research on Cancer, 2013). In its latest cancer country profiling, the World Health Organization (2014) reported that breast cancer in Lebanon has the highest rate compared to any other cancer (1,934 cases in 2014). The American Cancer Society (2016) estimates that 246,660 new cases of invasive breast cancer will be diagnosed among women in the United States in 2016 among which 40,450 women will die from it.

There are several treatments for breast cancer depending on the type and stage of the disease. Such treatments include surgical interventions, radiation therapy, chemotherapeutic and hormonal therapies (American cancer society, 2014). The mentioned cancer treatments affect the emotional health of patients causing some degree of depression, anxiety, and fear (American cancer society, 2013). Those emotional turbulences are the result of the effects of those treatments. During these treatments, patients feel they are losing control over their lives, are adjusting to the new changes within their family and work duties, and dealing with the physical changes (American cancer society, 2013). Several interventions are commonly recognized to decrease the psychological burden on women with breast cancer. one of the notable interventions is the support group, for support groups have shown significance in reducing the stress and anxiety associated with being diagnosed with a life threatening disease (Goodwin, 2005).

In the United States, support groups for cancer patients could be found in a

number of prominent hospitals and medical centers. For example, MD Anderson Cancer Center offers different types of support groups to different types of cancer patients; those support groups are held either every week, month or every other month based on the goals of the support group (MD Anderson Cancer Center, 2016). The support group for breast cancer is held every month for one hour to the outpatient breast cancer patients, survivors, families and caregivers (MD Anderson Cancer Center, 2016). The Johns Hopkins Medicine holds a breast cancer support group every month for one hour and a half for breast cancer patients only (Johns Hopkins Medicine, 2016). At the University of Maryland Medical Center, support groups are held for different types of diseases and conditions such as cancer, stroke, diabetes, amputees and HIV; however, there is no support group dedicated for breast cancer patients, but there is a support group for women diagnosed with any type cancer (University of Maryland Medical Center, 2016).

In the Middle East, the King Hussein Cancer Foundation in Jordan holds support groups for cancer patients and their families; the breast cancer support group does not have a fixed meeting schedule, but rather the meetings are scheduled on demand either daily, weekly or monthly (King Hussein Cancer Foundation, 2016). In Lebanon, there are a number of organizations that are currently offering support for breast cancer patients. One of those organizations is a non-profit humanitarian association called Fair Face. It provides educational information on cancer, wigs and mammary prosthesis, a hotline for cancer patients and their families, testimonials, and a list of activities and services that include the Group Dynamics activity (led by a psychotherapist) (Faire Face, 2011). This support group activity is held on the first Wednesday of every month for breast cancer patients, their family members, cancer survivors, and other volunteers

(Faire Face, 2011). During each session, patients are encouraged to share the problems that they are encountering, and together as a group, they try to come up with possible solutions to these problems (Faire Face, 2011). The aim of the association is to provide patients a venue to exchange experiences and discuss issues with other people who are currently in treatment phase or have passed through similar experiences before; ultimately, their goal is to help patients break their isolation in order to receive the needed moral support (Faire Face, 2011). The Lebanese Breast Cancer Foundation (LBCF), which is a non-profit foundation, provides comprehensive support for women with breast cancer at AUBMC. Its goals include financially supporting the treatment of breast cancer patients, including radiation therapy and surgery, disseminating more knowledge and awareness about breast cancer, promoting systematic and programmed early detection, and supporting breast cancer research projects and clinical trials (Lebanese Breast Cancer Foundation, 2011). Another association is the One Wig Stand, which is a non-profit organization dedicated to raising awareness about breast cancer among young women (One Wig Stand, 2010). One Wig Stand provides support to breast cancer patients in the form of art therapy, live online chat with specialists, wigs and educational resources, peer to peer support through matching patients with survivors (One Wig Stand, 2010).

On the level of AUBMC, and in collaboration with LBCF, a breast cancer support group for patients was previously conducted. This support group included 10 patients who used to meet once every 3 weeks with a mental health professional and cancer survivors. The group was maintained for almost 8 sessions, covering patients' fears, concerns, strengths, weaknesses and their perception of being diagnosed with breast cancer. During the sessions, patients were encouraged to talk about their personal

experiences with cancer and their families' concerns, usually in the form of group discussions. Unfortunately, this support group is no longer being held for unidentified reasons.

In an unpublished MSN project conducted by Richa (2010) regarding the attitudes of doctors and nurses towards the psychological assessment for cancer patients, the results revealed the importance of psychological assessment and support for cancer patients and recommended designing an intervention to improve patients' psychological status. Richa (2010) observed that many cancer patients who are psychologically distressed do not require medications, but instead would benefit from psychosocial interventions.

Throughout my 5 years of experience as an adult oncology nurse, I have encountered many breast cancer patients facing difficulties in coping with and continuing their daily life activities. One of the questions asked regularly by cancer patients is whether other patients are experiencing the same feelings and side effects and whether it is possible to survive and lead a healthy life once the treatment is completed. I have noticed that reassuring patients verbally by a health professional (oncology nurse, oncology attending, clinical nurse specialist) is not always enough. As an oncology health professional, I tend to tell my patients that they are not the only ones fighting cancer, and that there are many survivors out there who are leading normal and healthy lives. However, such a reply might seem ineffective and restrictive because patients would psychologically benefit more from people passing through the same experience.

This project aims to create the first structured and continuous breast cancer support group at AUBMC to be led by an Advanced Practice Psychiatric Nurse. This initiative will be created based on the guidelines set by Hermann & colon (2005) in the

book of Cancer Support Group a Guide for Facilitators and the Cancer Council Australia (2005) in creating a cancer support group. The goal is to provide a venue for breast cancer patients to express themselves, identify with other patients, face their fears, remain motivated, receive psych-education about different topics related to fighting cancer, release their anxiety, alleviate their psychological disturbances and improve their coping skills.

CHAPTER II

LITERATURE REVIEW

A. Breast Cancer Trends

Breast cancer is the second most common cancer among American women, after skin cancer. About 1 in 8 (12%) women in the US will develop invasive breast cancer during their life time (American cancer society, 2016). Breast cancer is also the second leading cause of cancer death around the world, for around 6.6% of young women below the age of 40 are diagnosed with breast cancer (Assi et al., 2013). It is also the most prevalent type of cancer among Lebanese women (Doumit et al., 2010).

According to Shamseddine et al. (2014), cancer trends in Lebanon, and projections to 2020 data showed that cancer incident rates in 1998 have increased by third since Abu Daoud (1966) conducted the study. This study recorded 145.2 and 143.8 incidence rates for males and females per 100,000 respectively. The trend pattern of the actual period, which was described to be the best fitting logarithmic model, was used to predict site specific cancer incidence rates till the year 2020. The annual percentage change was calculated to estimate the change in incident rates and their significance over the projected time; there was an expected increase for males and females. It was noted that there was an increase in breast cancer incidence in Lebanon since 1998 with 46.7 per 100,000 accounting for 33.4% of all female cancer cases; this level increase in the year 2008 to 95.7 per 100,000 accounts for 43.2% of all female cancer cases. Regarding the projections for 2020, it was calculated to be 146.1 per 100,000 accounting for 40.4% of all female cancers cases. This observed increase exceeds all rates shown in the neighboring Arab countries, and the mean age of diagnosis was

stated to be 50 years compared to industrialized countries, which is 63 years.

The United Nations estimated that the average life expectancy in Lebanon will rise from 71 to 78.7 years between 2009 and 2050. This will lead to an increase in the median population age from 28.8 to 41.7 years as well the percentage of older population aged 60 years and above from 10.3% to 25.8%. With an aging population, it is expected that the cancer burden will also increase (Shamseddine et al., 2014).

According to Assi et al. (2013) and Shamseddine et al. (2014), the factors that increase the likelihood of breast cancer in Lebanon in the near future are the significant changes in marriage and fertility trends such as the increase in marriage age, the decrease in fertility rates, the changes of dietary habits (the transition from traditional Mediterranean diet to more westernized diet), the increasing rates of obesity and overweightness, and the increase of screening campaigns.

B. Psychosocial Effects of Treatment on Breast Cancer Patients

In order to create a culturally fit support group, a qualitative study done by Huijer et al. (2009) on Lebanese women suffering from breast cancer showed that there are five main themes emerging on the psychological effects of treatments on their wellbeing. The five themes are living with losses (hair loss, loss of body part, loss of a normal life), living with a guilt feeling and stigma (fear of genetic predisposition), living with fear and uncertainty (fear of recurrence, uncertainty of emotions, fearing pity, living with the need to know more and to share knowledge and fighting non-stop with cancer. Based on this study, another qualitative study done by Doumit et al. (2010) explored the coping skills that Lebanese Breast Cancer Patients use to deal with their illness. Results showed that coping skills included sharing about their experience with

other people, receiving support from husband, colleagues and family, trusting that cancer is sent from God and comparing it to any other disease. However, non coping skills also emerged, such as fear of reoccurrence and fear of disrupted body image.

Being diagnosed with breast cancer is not a simple condition, and it is considered to be extremely stressful (Li et al., 2015). It is a traumatic life-changing event to the patients and their families. When diagnosed with breast cancer, patients immediately think about death, and they become more concerned about life plans that include family, education, work and social activities (American Cancer Society, 2016). After the diagnosis phase, patients will develop certain ideas that will impact their lives like: the fear of recurrence or spread of the disease to other sites, apprehension towards physical symptoms like fatigue, sleep difficulties, pain, body image disruption, and sexual dysfunctions, treatment related anxieties, intrusive thoughts about illness and persistent anxiety, marital/partner miscommunication issues, feelings of vulnerability and concerns about mortality (Holland et al., 2004). In addition to battling cancer as a disease, patients must deal with these types of fears and concerns. Each patient ends up creating a different personalized coping mechanism (Holland et al., 2004). Burgess et al. (2005) states that breast cancer affects the patients' mental adjustment, and notes that the prevalence of depression and anxiety in the year after diagnosis is around twice than that of general population. Tehrani et al. (2011) states that almost one third of patients with cancer suffer from a known psychological problem that requires proper intervention as well as socio-emotional support in each stage of the disease. For instance, surgical intervention might lead to the loss of both of the breasts or one of them, which will cause patients to feel undermined. Patients would have lost an important part of their bodies, a loss that would lead to psychological effects such as

low self-confidence, loss of feminine attraction, and thus causing anxiety and depression (Tehrani et al., 2011). Furthermore, chemotherapy agents and radiation therapy, when given to patients, cause many side effects such as nausea, vomiting, pain alopecia, change in skin color, decreased appetite, and skin dryness. As a result of these changes, patients often feel scared, worried, anxious and depressed. In addition, the physiological effects of certain chemotherapy agents on the central nervous system may directly produce anxiety and depression (Jacobsen & Jim, 2008).

Women who are fighting breast cancer often feel that their world has changed, is falling apart, and this often makes them feel helpless. This misconception will hinder them from their daily life activities, social interactions, and will push them to distant themselves from what used to interest them (Doumit et al., 2010). Psychological distress rates have been reported to be between 25% to 40% in breast cancer patients (Meraner et al., 2009), and patients who were passively accepting their disease and resigning were at significant risk for poor long-term psychological adjustment (Hack & Degner, 2004). Butow et al. (2000) added that patients who minimized these effects of cancer treatment survived longer and healthier. In a review done by Richa (2010), it was found that depression and anxiety were the most frequent disorders associated with breast cancer. In fact, 13% to 50% of patients were diagnosed with depression and 13% to 25% were diagnosed with anxiety disorders (Hopko, Bell, Armento, Robertson, Mullane, Wolf, et al., 2008; Frick, Tyroller, & Panzer, 2007; Reuter et al., 2007). In a study done by Li et al. (2015) aimed to investigate the incidence of depressive symptoms in women newly diagnosed with early breast cancer and aimed at examining relationships between emotional suppression and depressive symptoms in Mainland China, the Center of Epidemiological Studies Depression Scale (CES-D), the Beck Anxiety Inventory (BAI)

and the Chinese version of the Courtauld Emotional Control Scale (CECS) were used to assess the level of depressive symptoms, anxiety symptoms and emotional suppression respectively in 247 women with early breast cancer and 362 healthy women. Results showed that the incidence rates of clinical depressive symptoms and severe depressive symptoms in women newly diagnosed with breast cancer were 36.4 % and 36.0 % respectively. Those findings show a higher percentage than previous studies using the same instrument for assessing depressive symptoms. In addition, they suggest that patients who are newly diagnosed with breast cancer are at higher risk of developing depressive symptoms. It was also noted that emotional suppression was associated with the level of depressive symptoms in women newly diagnosed with breast cancer. Furthermore, anger suppression plays a role in initiating depressive symptoms among those patients. As a result, psychosocial intervention in breast cancer patients may be effective to target anger expression and alleviate symptoms of depression (Li et al., 2015). In addition, Doumit et al. (2010) reports that as the survival rates of breast cancer increases, the number of women living with long term consequences of breast cancer treatment will increase as well. For that reason, patients' responses and coping mechanisms with the diagnosis of the disease are becoming a focus area to many researchers. With the stress and anxiety that the diagnosis and treatment of breast cancer brings to the surface, there is a need for mental health interventions to be done for the patients in order for them to deal with their illness in a healthy approach (Richa, 2010).

C. Significance of Support Groups on Breast Cancer Patients

Sadness and grief are normal reactions to a cancer diagnosis as discussed by Richa (2010) and may extend from several days to weeks. Throughout this period,

patients will pass through the following grief stages: shock, denial, anger, bargaining, and finally acceptance. There is a need for interventions to help patients cope with the disease in order to decrease the effect of the diagnosis on their psychological well-being. Support groups for cancer patients were studied and showed significant results in successful adaptation and coping mechanisms (American Cancer Society, 2016).

The Cancer Council Australia (2005), in a report on building effective cancer support groups, reported evidence to support that counseling, relaxation therapy, education programs and cognitive behavioral interventions have a positive impact in improving emotional adjustment and reducing distress in patients with cancer. This positive outlook towards cancer support groups is based on the premise that patients with cancer benefit from contact with other cancer patients through mutual social support (Samarel et al., 1998). Spiegel et al. (1989) studied 86 women with metastatic breast cancer, of which 50 participated in weekly supportive-expressive group therapy sessions. The results showed reduction in mood disturbance ($p < 0.01$), reduction in maladaptive coping ($p < 0.01$) and reduction in phobias ($p < 0.05$). While Edelman et al. (1999) studied 124 women who underwent cognitive behavioral group therapy (8 weekly sessions, 3 monthly sessions) versus the control group (those who didn't undergo cognitive behavioral group therapy) showed reduced depression ($p = 0.008$), reduced mood disturbance ($p = 0.04$), and enhanced self-esteem ($p = 0.05$). In addition, a supportive-expressive group therapy (long term) versus control group was performed by Goodwin et al. (2001) and Classen et al. (2001) showed reduced mood disturbance ($p < 0.01$), reduced experience of pain ($p = 0.04$), and reduced stress response syndrome ($p = 0.03$) with reduced mood disturbance ($p = 0.02$) respectively.

Tehrani et al. (2011) studied the effects of belonging to peer support groups on the quality of life and adherence rate in breast cancer patients by creating two groups of patients. The first group was an experimental group who underwent 6 sessions that covered coping with stress and worries, gaining self-awareness and mindfulness. The second was a control group who participated in 6 breast cancer educational sessions that covered its treatment and complications, appropriate nutrition and similar subjects. The findings of the study revealed that social support from other patients as well as educational programs could be effective in increasing life quality of patients with breast cancer. Moreover, the experimental group showed significant improvement regarding vitality, mental health, social functioning, and role limitation due to emotional problems (Tehrani et al., 2011). This study could also be suggestive of the important use of this method in improving mental health in breast cancer patients. Tehrani et al. (2011) also reviewed several studies that were conducted on peer group impact on life quality of breast cancer patients in Iran. This review supported the study findings she conducted, that supporting breast cancer patients by forming peer groups or by means of educational sessions focusing on coping with stress, worries, gaining self-awareness and mindfulness, were more beneficial than just presenting educational sessions about the disease, its treatments, complications, and appropriate nutrition. On the other hand, she stated in her review that patients, who have undergone surgery and were enrolled in a one to one peer support program with similar patients, showed improvement on their mental and social aspects, yet it was of no benefit in physical and spiritual aspects. Yavuzsen et al. (2012), when studying the effects of group therapy on the psychological symptoms and the quality of life in Turkish patients with breast cancer, found that there were significant differences between the start and the end of the group therapy

programs. The study was performed on 16 breast cancer patients who completed their treatments and the total group therapy program, that included weekly sessions over 16 weeks. Pre and post assessments were held, and the results revealed that anxiety, depression and distress showed significant improvement while hopelessness was detected to be on the borders of improvement. This pilot study demonstrated that brief, predominantly group therapy is feasible for patients with breast cancer, and it may be helpful to cope with emotional and physical distress. In a randomized controlled support group intervention, Björneklett et al. (2012) assessed the anxiety and depression in 382 women, who were divided evenly between an intervention group and a control group. His study showed that support group intervention, that included educating the patients about the disease and performing psychological inducements mixed with art, dance therapy and relaxation, had positive influence on anxiety levels among patients over time.

In addition, in a meta-analysis of 116 intervention studies, Devine and Westlake (1995) found that patients with cancer receiving psychoeducational or psychosocial interventions showed much lower rates of anxiety, depression, mood disorders, nausea, vomiting and pain, and significantly greater knowledge about disease and treatment than the control group. Furthermore, there is evidence that various psychosocial interventions benefit people affected by cancer through increasing wellbeing, improving adjustment and coping, and reducing distress (Carlson & Bultz, 2003; Meyer & Mark, 1995; Rehse & Pukrop, 2003). One study showed that social and psychological interventions could possibly lead to higher survival rates on the premise that reducing stress could limit the disease's progression. In a randomized Clinical Trial conducted by Anderson et al. (2008), This study had involved 227 cancer patients and a median follow up of 11 years.

It was reported that the survival rate was higher for patients who received the Psychological intervention (Intervention and assessment (n = 114). The intervention was weekly and spread over 4 months, followed up by an 8-month maintenance phase. The intervention focused on reducing distress, improving quality of life and improving health behaviors through activities such as muscle relaxation, problem solving, communication and exercise. These findings contradict other studies that have shown that social support and group therapy do not prolong survival (Kissane et al., 2007). Anderson et al. (2008) argues that the determining factor for increasing survival among breast cancer patients is the ability of the intervention to reduce stress since stress hormones could lead to immune dysregulation.

D. Characteristics of Effective Breast Cancer Support Groups

In their book *Cancer Support Group as a Guide for Facilitators*, Hermann & Colón (2005) state that medical treatment is not enough if the quality of the patients' lives is reduced. Support-group services are one source of help for people dealing with emotional and family problems that can result from chronic illness (Hermann & Colón, 2005). Support groups vary in size and structure, and is usually defined by the needs of the potential participants (Hermann & Colón, 2005). Cancer support groups have evolved in variety of forms, mainly characterized by a small number of participants, regular meetings, emphasis on personal participation, voluntary attendance and provision of emotional support (The cancer council Australia, 2005). There is no single model of a support group that will work for all breast cancer patients, but certain characteristics of a support group should be identified to be educational and therapeutic in order to serve the purpose that it was developed. Both the Cancer Council Australia

(2005) and Hermann & Colón (2005) reported that for the support group to be effective, it should provide:

- A caring and safe atmosphere for the open discussion of feelings
- A non-judgmental acceptance
- Educational and informational sessions
- Emotional support and socialization opportunities
- Skills in leadership and/or facilitation
- A level of humor and a personality to the group
- An adequate number of members and recruiting new ones
- Involvement of a health professional
- A well organized and structured outline

On the other hand, it is established that the primary factors that discriminate between active and disbanded support groups are the length of intervention, number of newly recruited patients who join a meeting, leadership skills, and the continuity of financial support from either national and/or local organizations (Wituk et al., 2002).

Hermann & Colón (2005) state that support groups need to be structured in order for participants to have a sense of belonging and to know what to expect from the group. Hermann & Colón (2005) highlight the following characteristics for an effective cancer support group:

- It is important to determine whether the group will be open-ended or time-limited
- The best size for a support group is between 5-12 participants
- Meetings should be held twice a month since this will help the group stay on track allowing for a smooth integration
- The cycle for time limited groups is 6-12 weeks

- The duration of each meeting should not exceed ninety minutes. This amount of time permits people to settle in and exchange ideas, feelings, and thoughts with each other
- The meeting room should be easy to find, and it must be large enough to accommodate the group but small enough to create a feeling of comfort
- Rest rooms should be easily accessible to everyone including those who are elderly or disabled.

When it comes to the selection of the breast cancer patients, the Cancer Council Australia reports that there is well-established evidence that different types of psychosocial interventions are effective for patients at different points of their cancer journey. For example, short term interventions maybe sufficient for people with good prognosis or in early stages of the disease, but long term group support seems best for advanced stages. Fawzy et al. (1995) elaborates on this categorization by classifying structure and content by defining three levels of interventions that are based on the prognosis of the disease:

- Type 1 (Diagnosis, initial treatment): Groups for patients who have just been diagnosed and have good prognosis. This intervention should be short termed, structured, and psycho-educational and usually last 6 to 10 weeks and are institution based.
- Type 2 (Recurrence/retreatment): Groups of patients with recurring cancer and ongoing disease but longer-term prognosis. The intervention should be less structured, ongoing, supportive in nature, and driven by patient issues/needs and to be held monthly rather than weekly.
- Type 3 (Terminal/palliative): Groups of patients who are at the terminal/palliative

stage that have short prognosis. The intervention should be long-term, structured and goal oriented and supportive. Usually this type of group is to be held weekly or more often, and they are institutional based.

Regarding the content of the support group intervention, the Cancer Council Australia suggested that educational programs are more effective in improving the quality of life in adult cancer patients than social support, coping skills training or psychotherapy (Rehse & Pukrop, 2003; Fawzy et al., 1995; Helgeson et al., 1999). However, interventions that enhance self-regulation and increase self-efficacy with regard to cancer-related issues has large effect sizes on patients' coping and dealing with negative expectations (Graves, 2003). Furthermore, it was concluded that structured group interventions led to positive changes (Edelman, Bell & Kidman, 1999; Helgeson et al., 1999) while less structured groups did not (Helgeson et al., 1999; Spiegel et al., 1981). Structured coping skills training, that includes instruction in relaxation and stress management, assertive communication, cognitive restructuring, problem solving, feelings management, and pleasant activity planning are more beneficial than support groups and control groups (Telch & Telch, 1986; Cunningham & Tocco, 1989). Both structured problem-focused interventions such as problem solving, education and behavioral methods, and supportive therapy have benefits over no treatment.

Other than the psycho-educational and self-expressive interventions, physical activity provides a number of psychological benefits to cancer patients. These benefits include lessening the impact of symptoms and the treatment of side effects such as fatigue and nausea, and improving general well-being and quality of life (Culos-Reed et al., 2005). When considering a specific type of physical activity, many researchers have

considered yoga since its practice has a positive psychological impact on individuals (Culos-Reed et al., 2005) and it's one of the most widely used complementary and alternative medicine therapies to manage illness (Lin et al., 2011). In a pilot study aimed to examine the physical and psychological benefits of yoga on breast cancer patients, Culos-Reed et al., (2005) designed a 7-week yoga program and divided patients between an intervention group that went through yoga program and a control group that didn't have yoga in their support group. Both groups had to do pre and post assessment. The assessment required patients to complete psychological questionnaires that included demographics, profile of mood status, symptoms of stress, physical activity, physiological and fitness indices. The findings of this study state that there were significant differences between the intervention and the control group at post-intervention. The intervention group reported improved results when it came to mood disturbances, tension, depression, confusion, emotional irritability and gastrointestinal symptoms.

In a meta-analysis done on the effects of yoga on psychological health, quality of life and physical health of patients with cancer, Lin et al. (2011) states that in addition to the potential benefits on the psychological health of patients, yoga should be considered as a possible adjunctive therapy for cancer patients to reduce their psychological distress and improve quality of life. His findings further support the conclusion that Vadiraja et al. (2009) reached through their randomized controlled trial that studied the effects of yoga on symptom management in breast cancer patients, suggesting that yoga interventions are beneficial for managing cancer-related symptoms in early breast cancer patients taking recourse to adjuvant radiotherapy.

Geue et al. (2010) reveals that art therapy in the form of painting, drawing,

music and poetry is also being considered as a complementary therapy that enhances coping of patients with cancer and its symptoms. Geue et al. (2010) reports that many oncology units are already implementing art therapy to support cancer patients. Wood, Molassiotis and Payne (2009) justify this tendency by describing how art therapy provides a space for patients to communicate and express themselves. They added that being a form of psychotherapy, art therapy induces personal change by increasing the well-being and improving the psychological state of the patients. Many researchers have reported results that show promising effects of drawing and music on cancer patients. In a study conducted by Öster et al. (2006) that included 41 women (study group $n = 20$), the results have shown an increase in the coping ability, body imaging and social skills among the study group compared to the control group. Öster et al. (2006) followed an art therapy procedure defined by Betensky (1995, p. 14–23). Patients in the study group participated in 5 individual art sessions and were given sheets of paper, different coloring tools, paintbrushes and scissors. In each session, they were asked to draw something different, starting with drawing an image to reflect a feeling during session one. Then they move to drawing an outline of their bodies and thus express their body image during sessions two. During session three and four, patients had the option to draw whatever they want. Finally, in the fifth session, patients displayed their drawings for everyone in the group to see. This art therapy procedure was repeated by Svensk et al. (2009), but their assessment focused on the quality of life of the patients. They used the WHOQOL-BREF (World Health Organization Quality of Life BREF) and the EORTC Quality of Life Questionnaire-BR23 (European Organization for Research and Treatment of Cancer), in which the assessment results showed an improved quality of life for patients in the intervention group.

When considering art therapy that is based on music, Bulfone et al. (2009) differentiate between active music therapy where patients play a role in conducting or producing music, and passive music therapy, either in a group or individually where patients listen to music. Bulfone et al. (2009) states that music is a personal preference, but in order to increase its therapeutic effectiveness, patients should choose music that is relaxing and soothing. As a general rule, music with 60 to 80 beats per min is recommended, for it prompts relaxation. To investigate the impact of music on cancer patients, Bulfone et al. (2009) conducted a clinical experiment that involved 60 breast cancer patients divided between an intervention group and a control group. The anxiety levels were assessed pre and post intervention using the Spielberg State-Trait Anxiety Inventory (STAI). The intervention included asking the patients in the intervention group to individually listen to music for 15 minutes using earphones as they wait for the chemotherapy call. The results have shown positive effects in anxiety reduction for patients in the intervention group.

E. Conclusion

As discussed above, psychosocial care is recognized as having an important role in minimizing cancer's physical and psychological burden on breast cancer patients. For this project, psychological care will be provided to the breast cancer patients at AUBMC in the form of a breast cancer support group, for it is increasingly recognized as an effective means of meeting the needs of breast cancer patients for educational, emotional and practical support. This project will design an APPN Led Breast Cancer Support Group that abides by the nine characteristics of success as provided by the Cancer Council Australia (2005) and Hermann & Colón (2005). The proposed support

group will include psycho-education, interpersonal psychotherapy, and meditational relaxing activities like yoga and art therapy.

The targeted group of patients will be the Level 1 group (Diagnosis and initial treatment) as classified by Fawzy et al. (1995). In other words, this support group will be open to a limited number of patients who have just been diagnosed with breast cancer undergoing chemotherapy or have just finished the treatment. As for the family members for patients diagnosed to with breast cancer, they won't be included in this type of support group, but family members and caregivers can be referred to special services by the mental health professional.

CHAPTER III

BUILDING THE BREAST CANCER SUPPORT GROUP

This chapter describes the design of the support group as recommended by the literature review. It will cover its design and implementation; it will also list the objectives and learning outcomes of each session.

A. Design

The breast cancer support group will be a formal, professionally led therapeutic and structured psychiatric educational group, which will focus on cognitive-behavioral and supportive-expressive techniques and coping skills. It will include 8 sessions extending over a period of 4 months, with a 1.5 hours' session to be held every other week. The Support Group will engage the group members in activities such as informational sessions, discussions, self-expressing activities, and meditation. All of these activities are proven to reduce stress and anxiety according to the literature review done. The recruitment process will be continuous, and a new group might be formed if the number of patients increases. Therefore, there could be more than one support group running independently during the same period.

B. Support Group Members

In order for the support group to run smoothly, the support group should include the following roles.

- **Group Leader:** The Advanced Practice Psychiatric Nurse (APPN) who will be leading the support group, initiating the topics, facilitating the discussion between

participants, and providing educational information about mental health and psychological disorders related disease.

- Group Co-Leader: The Oncology Advanced Practice Nurse who will be co-leading the APPN the group activities, delivering educational and informational sessions on breast cancer, its treatment side effects, and giving medical advices when needed.
- Guest speakers: Breast cancer survivor affiliated with the Lebanese Breast Cancer Foundation who will share their experience with breast cancer.
- Breast Cancer patients: A group of 8-10 female patients (see **Selection Criteria**).

C. Date, Time, and Location

The date and time of the sessions will depend on the availability of the patients. Hence, it might vary from one iteration to the other depending on the cohort. Nevertheless, as a general rule, sessions will be held once every other week; preferably the first and third Friday of each month. Therefore, in total, eight sessions will be conducted over a period of four months. The duration of each session will be 90 minutes. This will be a closed group, meaning no new members could join after the first meeting.

The meetings will be held in a setting near the hospital. The location will be accessible, comfortable and free from stress or anxiety. The room should be big enough to host the 12 participants; comfortable chairs must be available. The yoga activity will be conducted in a more spacious room, probably at the Charles Hostler Center at AUB.

D. The Proposed Program for the Support Group

1. Program Goals

- To create a structured and sustainable breast cancer support group at AUBMC to be led by an Advanced Practice Psychiatric Nurse.
- To provide a venue for breast cancer patients to express their feelings.
- To identify with other patients passing through same experience.
- To decrease patients' anxiety level through delivering psych-education about different topics of concern for breast cancer patients.
- To alleviate patient's psychological problems.
- To improve patients' coping skills.

2. Recruitment of Patients

The Oncology Advanced Practice Nurse will be the primary person to recruit patients to participate in the support group based on the criteria mentioned below (see **Appendix B**), during the visit to the Adult Oncology Outpatient unit based on the assessment needs. Furthermore, the oncologists and oncology registered nurses will be informed about the support group for referral purposes. The APPN in her recruitment process will share with the patients the purpose of the Support Group, what to expect and the timeline/outline of the sessions.

The Oncology APN will focus the assessment on the following:

3. Selection Criteria

- The patient can be at any age.
- The patient is newly diagnosed with breast cancer, undergoing treatment or finished.
- The patient can be at any stage in the treatment plan.
- The patient feels comfortable to give and receive support.

- The patient is willing to join the support group.

Check **Appendix B** for the recruitment/registration form.

4. Session Outline

Check **Appendix C** for a detailed description of each session.

- Session 1: Introduction to Mental Health Wellbeing
- Session 2: Grief Process and Hopefulness
- Session 3: Positive Coping Techniques and skills
- Session 4: Understanding depression and anxiety
- Session 5: Self Expression
- Session 6: Adapting to Change
- Session 7: Art therapy and Yoga
- Session 8: Evaluation and Termination

CHAPTER IV

SUPPORT GROUP IMPLEMENTATION

This chapter describes the needed approval process to launch this project in addition to its budget plan, limitations, outreach and research prospects.

A. Administration Approval

In order to initiate this project, the APPN will file a proposal to be submitted to the Nursing Department and to the Oncology Department at AUBMC. The proposal will include the significance and main components of this support group in addition to the stated evidence for the effectiveness of this approach with breast cancer patients. The proposal will also include the facilities, materials and budget plan needed to implement the project. For funding purposes, this proposal will also be submitted to the Lebanese Breast Cancer Foundation since it works in affiliation with the Adult Oncology Department at AUBMC. The first iteration of this project will be a pilot test and based on the feedback gathered during and at the end of this pilot test, further improvement will be done to the project.

Please check the Budget Section for information about funding.

B. Outreach and Research Prospects

Given the need and shortage of breast cancer support groups in Lebanon and in the region, the project will provide interested Oncology Departments with the needed information to set up their own support groups. As a start, they will receive a guiding booklet that includes the steps to initiate this project at their institution.

The proposed mental health intervention for oncology patients will allow future research to take place to study the effect of support group on psychological and mental health of cancer patients at the Lebanese and the Arab world level. Research can be done in the form of pre and post testing.

C. Budget Plan

The expected running expenses should be covered by the Nursing Department at AUBMC and the Lebanese Breast Cancer Foundation. Please check **Appendix F** for a detailed list of expenses. After the first iteration, the total expenses will be reduced to 650 \$ since the yoga mats will be reused.

D. Limitations

- Given the length of this intervention and the spread of the sessions over several months, some patients might end up withdrawing in the middle of the intervention.
- Some of the proposed activities of the intervention require some funding to acquire tools and services. Therefore, any lack of funding might result in altering the delivery plan.
- Unexpected medical emergencies might hinder the participant's attendance. This might also have an impact on other group members.
- The designed yoga session requires minimal physical effort, but nonetheless, some breast cancer patients might not be able to perform them because of age, surgical interventions, fatigue...etc.

APPENDICES

APPENDIX I

ATTENDANCE LIST

The following form will be used to track the attendance of the participants over the period of the intervention. It will be filled out by the Oncology APN at the beginning of each session. Although this will be a printed out sheet, this information will be confidential and copied to an excel sheet for future reference.

Participant Name	Session 1 Date: dd/mm/yy	Session 2 Date: dd/mm/yy	Session 3 Date: dd/mm/yy	Session 4 Date: dd/mm/yy	Session 5 Date: dd/mm/yy	Session 6 Date: dd/mm/yy	Session 7 Date: dd/mm/yy	Session 8 Date: dd/mm/yy
Participant 1								
Participant 2								
Participant 3								
Participant 4								
Participant 5								
Participant 6								
Participant 7								
Participant 8								

APPENDIX II

RECRUITMENT FORM

The following form is the recruitment form that will be filled out by the participants before joining the support group. This form will be filled with the help of the Oncology APN during the recruitment phase.

Breast Cancer Support Group Registration Form <i>Information provided in this form are confidential and will not be disclosed to any third party without prior consent of participants.</i>	
Demographics	
<i>Full name:</i> _____	<i>Age:</i> _____
<i>Date of Birth:</i> _____	<i>Nationality:</i> _____
<i>Address:</i> _____	<i>City of residence:</i> _____
<i>Educational level:</i> _____	
<i>Marital Status:</i> _____	<i>Number of children:</i> _____
<i>Are you currently employed? If yes, where?</i> _____	
Contact Information	
<i>Telephone number:</i> _____	<i>Email:</i> _____
Emergency Contact Information	
<i>Emergency contact number:</i> _____	<i>Contact Name:</i> _____
<i>Relationship:</i> _____	
Medical Information	
<i>Date of Diagnosis:</i> _____	<i>Stage of the Disease:</i> _____
<i>Other Medical Issues:</i> _____	<i>Treatment Phase:</i> _____
	<i>Medications:</i> _____
	<i>Willingness to join group :</i> _____
<i>Do you have any special dietary or physical needs?</i> _____	
<i>Have you been involved in a support group previously?</i> _____	

APPENDIX III

SESSION DESCRIPTION

Session 1: Introduction to Mental Health Wellbeing

Outline	<ul style="list-style-type: none"> - Welcoming the participants and the guest speaker. - APPN introducing herself, her credentials and role in the support group. - APPN introducing the Oncology APN and the group leaders (breast cancer survivors). - Reviewing the goals of the support group. - Discussing confidentiality. - Icebreaker activity: support group members introducing themselves to the group. - Tea and juice break. - Disseminating the rules and schedule of the support group. - Closing Activity: as a take home activity, participants are asked to list the source(s) of their strength in life.
Duration	1.5 hours
Who will lead this session	Advanced Practice Psychiatric Nurse Oncology Practice Psychiatric Nurse
Learning Outcomes	<p>By the end of this session, participants should be able to:</p> <ul style="list-style-type: none"> - Define the role of each support group member. - Identify the support group goals, rules and schedule. - Communicate personal experience with breast cancer. - Initiate informal discussions with others. - Reflect on the sources of strength in personal life.
Teaching methods	Discussions, Self-reflection
Measure of success	Level of engagement of participants in the group discussions.

Session Description:

This is an introductory session for the participants and the group leaders. The APPN will start by welcoming the participants and the guest speaker from the Lebanese Breast Cancer Foundation (LBCF). The APPN will cover the confidentiality terms, stressing that everything discussed in the group is confidential, and individual identifying information will not be shared outside the group. A copy of the Confidentiality Agreement will be distributed and signed by each participant.

After this introduction, participants will be asked to introduce themselves through an icebreaker activity. Participants will be encouraged to talk about their cancer journey, why they chose to join this group and what are their expectations. The APPN will then talk about the support group goals, why and how it was formed, and what are its desired outcomes. A ten minutes' break is then taken, thus allowing patients to socialize informally with each other. After the break, the APPN will review the support group rules stating that the participants are encouraged to share their personal experiences, listen to others, provide information to one another, provide sympathetic understanding, be respectful to each other's feelings, views, concerns and should be courteous to each other all the times. Interruptions or talking while someone else is talking is not allowed, and listening carefully to each other is a must. Then, the APPN will discuss the Group Arrangement, content and schedule (Date and time).

Towards the end of the session, the APPN will give homework to participants to reflect on the sources of strengths in their lives in order to share it during the next session. At the end of the session, the APPN and the Oncology APN will debrief what was covered.

Session 2: Grief Process and Hopefulness

Outline	<ul style="list-style-type: none"> - Welcoming the participants and checking on each other - APPN going over what was covered during the first session - Participants reporting on their strengths in dealing with the diagnosis. - APPN giving a psycho-educational session on the stages of the grieving process and emotional impact of the disease. - Guest speaker talking about her journey through breast cancer treatment and her grieving process. - Tea and juice break. - Discussions among participants about how each one has passed through this grieving process and identify which stage they are in. - Closing Activity: as a take home activity, participants are asked to identify their coping techniques that helped them distress (for example physical activity, social interaction, social isolation...etc).
Duration	1.5 hour
Who will lead this session	Advanced Practice Psychiatric Nurse Oncology Practice Psychiatric Nurse Guest speaker
Learning Outcomes	By the end of this session, participants should be able to: <ul style="list-style-type: none"> - Describe the five stages of the grieving process. - Identify the stage they are at in the grieving process. - Show continual desire to endure a healthy grieving process. - Express feelings and concerns towards other participants who are at an earlier stage in the grieving process. - Initiate informal discussions with others.
Teaching methods	Presentation; Discussions
Measure of success	Level of engagement of participants in the group discussions. Ability of the participants to identify which grieving stage they are currently passing through.
Session content	Stages of Loss and Grief

Session Description:

The APPN will go over what has been covered during the first session.

Participants will be asked to present what they have listed as strengths that helped them get through. The APPN will then give a brief summary of the session being held and the topics that are going to be discussed. The APPN will then go over and explain the 5 stages of the grieving process. A guest speaker from the LBCF will talk about her experience with breast cancer and how she passed through the grieving process and what helped her go through. The participants then will be asked to talk about their own personal experience from diagnosis to the treatment phase and where they think they are in the grieving process. Towards the end of the session, the APPN will reiterate what has been discussed during this session and will ask participants to list down their coping techniques when stressed as a take home assignment

Session 3: Positive Coping Techniques and Skill

Outline	<ul style="list-style-type: none"> - Welcoming the participants and checking on each other - APPN going over what was covered during the previous session - APPN giving a psycho-educational session on the healthy coping techniques vs. harmful coping techniques. - Guest speaker talking about her experience with breast cancer and how she coped with the disease. - Participants reporting on their coping techniques in dealing with stress in life and especially with the breast cancer diagnosis. - Tea and juice break. - APPN highlighting to the participants what is helping and what is hindering their coping. - APPN giving a psycho-educational session on communication styles where participants will be asked to share their input. - APPN giving a psycho-educational session on art therapy. - Closing Activity: as a take home activity, participants will be asked to color sketches of drawings at home in their free time while listening to music.
Duration	1.5 hour
Who will lead this session	Advanced Practice Psychiatric Nurse Oncology Practice Psychiatric Nurse Guest speaker
Learning Outcomes	<p>By the end of this session, participants should be able to:</p> <ul style="list-style-type: none"> - Differentiate between healthy and non-healthy coping techniques. - Show continual desire to attain a healthy coping mechanism. - Influence each other to adopt healthy coping mechanisms. - Be aware of their coping techniques and skills. - Initiate informal discussions with others.
Teaching methods	Presentation; Discussions; Drawing
Measure of success	<p>Level of engagement of participants in the group discussions.</p> <p>Ability of the participants to identify which harmful coping techniques they are using.</p>
Session content	<p>Healthy coping techniques vs. harmful coping techniques</p> <p>Communication Styles</p> <p>Art Therapy</p> <p>Relaxing and soothing music CD</p>

Session Description:

The APPN will cover the topic of healthy coping techniques versus harmful coping techniques. A guest speaker from the LBCF will be invited to share her experience with breast cancer and how she coped with the disease and its side effects. The participants will then be invited to share their coping techniques in dealing with stress in life and especially with the breast cancer diagnosis. The APPN will explore the participants' coping skills and will highlight to them what is helping and what is hindering their coping. The APPN will then cover the best communication styles to be used by breast cancer patients; what words to avoid and what words to use more in order to have a positive impact on one's psychological health.

The last 15 minutes will be dedicated to introducing the concept of art therapy and its benefits and how it is done. The APPN will distribute sketches of drawings and will ask the participants to color them when they are at home in their free time as a take home activity. The APPN will also distribute a music CD containing relaxing and soothing music for the participants to listen to while coloring. Then, debriefing of the session will take place by the APPN or the participants.

Session 4: Understanding Depression and Anxiety

Outline	<ul style="list-style-type: none"> - Welcoming the participants and checking on each other - APPN going over what was covered during the previous session - APPN giving a psycho-educational session on depressive and anxiety disorders. - Participants discussing their experience with depression and anxiety. - Tea and juice break. - Guest speaker talking about her experience during the depression phase and how she dealt with it. - Participants reflecting on the coloring and listening experience and whether it helped them. - One of the participants doing the sessions debriefing.
Duration	1.5 hour
Who will lead this session	Advanced Practice Psychiatric Nurse Oncology Practice Psychiatric Nurse Guest speaker
Learning Outcomes	<p>By the end of this session, participants should be able to:</p> <ul style="list-style-type: none"> - Identify depressive and anxiety disorders. - Influence each other to overcome depression and anxiety. - Show continual desire to deal with depression and anxiety in a healthy manner. - Reflect on the benefits of art therapy. - Initiate informal discussions with others.
Teaching methods	Presentation; Discussions;
Measure of success	Level of engagement of participants in the group discussions. Participants' positive reaction towards art therapy.
Session content	Depressive and anxiety disorders(appendix G)

Refer to Appendix G: psycho-educational presentation content

Session Description:

The APPN will introduce topics of this sessions which include depressive and anxiety disorders, how and why they develop with breast cancer patients and what the signs and symptoms are and when patients should talk to their doctors. The APPN will give a psycho-educational session covering depressive and anxiety disorders; the presentation will also cover information about antidepressants and anxiolytic medications and the importance of individual psychotherapy when needed. Then the APPN will open the discussion for each participant. Then the guest speaker (breast cancer survivor) will share her experience.

Towards the end of the session, participants will be asked about the coloring activity they did at home, and they will reflect on whether it helped them. At the end of the session, the APPN will ask one of the participants to do the debriefing.

Session 5: Adapting to Change

Outline	<ul style="list-style-type: none"> - Welcoming the participants and checking on each other. - APPN going over what was covered during the previous session. - APPN introducing the side effects of the treatment that leads to body image changes. - Participants listing the changes they noticed and how this affected their relationships and family difficulties. - APPN discussing with the participants the impact of the diagnosis on their sexual life and their kids. - Tea and juice break. - APPN introducing the benefits of physical exercise as a therapeutic technique to reduce stress and anxiety. - APPN introducing next session plans and asking participants to come prepared for the yoga session.
Duration	1.5 hour
Who will lead this session	Advanced Practice Psychiatric Nurse Oncology Practice Psychiatric Nurse
Learning Outcomes	<p>By the end of this session, participants should be able to:</p> <ul style="list-style-type: none"> - Identify the body changes caused by breast cancer treatments. - Express their feelings towards body image changes. - Acknowledge how body image changes have affected their relationships. - Identify unhealthy reactions from their kids towards their diagnosis. - Initiate informal discussions with others.
Teaching methods	Discussions;
Measure of success	<p>Level of engagement of participants in the group discussions. Participants' openness to discuss the impact on their sexual life and on their kids.</p>

Session Description:

The APPN will start by introducing the session topics that will be covered which include the side effects of the treatment that leads to body image changes and the possible effects of those body image changes on their well being. The participants will be asked to list the major changes that they noticed and how this made them feel and its impact on their relationships with others (family, spouse, and kids). The APPN will explore with the participants the effects of the diagnosis on their kids, and how they dealt with it and if their kids are facing any difficulties (problems at school, lower grades and altered performance). The discussion will continue to cover intimacy, sexual life and body changes. Participants will be asked to share their experience and concerns about these topics and if they have any question to ask the oncology APN as well. The APPN will then introduce the benefits of physical exercise, and specifically yoga as a therapeutic technique to reduce stress and anxiety.

For the next session, participants will be asked to come wearing comfortable sport cloth in order to participate in a yoga session given by a certified yoga instructor.

Session 6: Art Therapy and Yoga

Outline	<ul style="list-style-type: none"> - Welcoming the participants and checking on each other. - APPN going over what was covered during the previous session. - APPN giving a psycho-educational session about psychosomatic pains associated with breast cancer treatment. - APPN going over the importance and benefits of relaxation techniques and meditational activities. - APPN introducing the certified yoga instructor. - Participants participating in the yoga session. - Participants reflecting on their yoga session experience. - Closing Activity: there will be no take homework. However, participants will be encouraged to continue drawing and listening to music.
Duration	1.5 hour
Who will lead this session	Advanced Practice Psychiatric Nurse Oncology Practice Psychiatric Nurse Certified Yoga Instructor.
Learning Outcomes	<p>By the end of this session, participants should be able to:</p> <ul style="list-style-type: none"> - Differentiate between pain related disease and psychosomatic pain - Seek relaxation techniques and meditational activities. - Reflect on the benefits of yoga.
Teaching methods	Presentation; Discussions; Physical Exercise
Measure of success	<p>Level of engagement of participants in the group discussions.</p> <p>The participants enjoying the yoga session.</p>
Session content	<p>Depressive and anxiety disorders</p> <p>Psychosomatic pains associated with breast cancer treatment</p> <p>Relaxation techniques and meditational activities</p>

Session Description:

The APPN will discuss the pains associated with breast cancer treatment, how they affect the psychological health of the individual, and how some pains are psychosomatic. The APPN will present to participants the importance and benefits of relaxation techniques and meditational activities. The APPN will then introduce the certified yoga instructor. The yoga instructor will then talk about yoga as an activity and its benefits. Then participants will then be engaged in the yoga session. At the end of the session, participants will reflect on their experience and will be asked if they would want to pursue yoga classes. Participants who are interested will be referred to professional centers.

The group then is dismissed without a take home assignment, but they will be encouraged to continue coloring with music, and they will be presenting their drawings during the last session. During the debriefing, the APPN will discuss that the support group is entering the termination phase.

Session 7: Self Expression

Outline	<ul style="list-style-type: none"> - Welcoming the participants and checking on each other. - APPN going over what was covered during the previous session. - APPN starting the termination phase. - Participants discussing the need for further support group sessions. - Participants discussing possible anticipated fears and how they can overcome them. - Tea and juice break. - Participants engaging in a self-expression activity towards cancer presented to them as a mannequin. - Closing Activity: there will be two take home work. Participants will be asked to finish their drawing. Participants will also be asked to prepare a reflection to share with the whole group.
Duration	1.5 hour
Who will lead this session	Advanced Practice Psychiatric Nurse Oncology Practice Psychiatric Nurse
Learning Outcomes	<p>By the end of this session, participants should be able to:</p> <ul style="list-style-type: none"> - Show continual desire to overcome fears related to disease. - Express feelings towards cancer. - Altering the stigma of cancer.
Teaching methods	Discussions; Reflection; Self-expression;
Measure of success	<p>Level of engagement of participants in the group discussions.</p> <p>Participants expressing motivation and determination to overcome this disease.</p>

Session Description:

In this session, participants will start preparing for the termination phase. The APPN will assess whether the participants prefer to have a maintenance session every month in order to have a venue to express their feelings and talk about what they are passing through. Participants will be asked in this session to talk about their fears and

how they can overcome them on their own (fear of reoccurrence, fear of depression...etc.). The participants will then be engaged in an activity where a mannequin is brought in, and they have to consider this mannequin as cancer itself. Participants are asked to face it and express their feelings towards it, talk to it and describe how they are feeling towards it now. Pink boxing gloves will be available too. By the end of the activity, the APPN will ask participants about how they felt during the activity. At the end of the session, the APPN will discuss the plans of the 8th and last session.

Participants will be asked to finish their coloring work in order to present them during the last session and to prepare a final reflection to share with the group. They should reflect on how they were at the beginning of the support group and how they changed after the sessions. They are encouraged to emphasize on changes to their mood, functionality, relationships, anxiety levels, productivity and future vision.

Session 8: Termination and Evaluation

Outline	<ul style="list-style-type: none">- Welcoming the participants and checking on each other.- APPN going over what was covered during the previous session.- Participants sharing their reflection with the group.- Participants presenting their coloring work to the group.- APPN providing her final remark.- Participants filling the final evaluation form.- Final celebration.
Duration	1.5 hour
Who will lead this session	Advanced Practice Psychiatric Nurse Oncology Practice Psychiatric Nurse
Learning Outcomes	No specific learning outcomes.
Teaching methods	Reflection;
Measure of success	Participants reflecting positively on their experience during the support group.

Session Description:

In this session, each participant will read out her reflection and describing how this support group has affected her. Participants will then show their coloring work, and they will be encouraged to exchange them. As a closing remark, the APPN will give the group her final feedback about the sessions, recommendations about where to go from here, and recapping what participants have learned. Participants will then be asked to fill the final evaluation form and will receive the support group booklet. As a celebration, a cake and juice will be presented at the end of the session.

APPENDIX IV

CONSENT FORM

The following is the consent form that will be read and signed during the first session. This form includes the confidentiality agreement in addition to the group agreement. The form clauses, are based on the sample group agreement as provided by the Cancer Council Australia (2013).

Confidentiality and Group Agreement

- This is a closed group focusing on welcoming and supporting breast cancer patients. The goals of the group are to support, educate and empower the patients during their diagnosis and treatment phase.
- Everything discussed during the group sessions is confidential. Individual identifying information will not be shared outside the group. Names and information provided during the group sessions are not to be repeated to anyone outside the group.
- Group members are encouraged to share their skills, insights, strengths and hopes.
- Group members are respectful of each others' feelings, views and concerns at all times.
- Group members are respectful of everyone's right to participate equally in the discussion or not to participate, if that is their wish.
- Group members are courteous to each other at all times. This includes not interrupting or talking while someone else is talking and listening attentively when another person is speaking.
- Group members take responsibility for the success of this support group by maintaining their focus on the issues and coping strategies specific to the group and the topic being discussed.
- Group members are responsible for their own wellbeing and are encouraged to seek support from the APPN or Oncology APN if they are upset before, during or after group.

I hereby confirm that I have read and understood the above group agreement mentioned above:

Name: _____

Signature: _____

Date: _____

Cancer Council Australia (2013)

APPENDIX V

EVALUATION FORM

The following is the breast cancer support group evaluation form to be filled anonymously by the participants during the last session. This form is adopted from the sample evaluation form as provided by the Cancer Council Australia (2013).

1. At what time during your diagnosis or treatment did you join the support group:
 when I was recently diagnosed (within 6 months)
 during my treatment
 shortly after I finished treatment (within a year)
 a year or more after I finished treatment
 other: _____
2. Age: _____
3. Which of these factors determine whether or not you come to a session?
 topic my health other: _____
4. How would you rate the length of the meetings?
 just right too short too long
5. What would you change in the support group if given the chance?

6. How well do you feel the support group is meeting your needs?
 quite well not well enough well enough not at all
7. Tell us how the group could better meet your needs. Please be as specific as possible.

8. How would you rate the breakdown of time spent with speakers and time spent in general sharing?
 just right more time with speaker more time in discussion
9. What topics would you like us to include in the future?
 medical issues
 services/resources
 treatments and side effects
 complementary therapies
 media reports about new discoveries
 diet/nutrition
 other: _____
10. How satisfied have you been with the group members/activities?
APPN:
 extremely satisfied satisfied dissatisfied
Oncology APN:
 extremely satisfied satisfied dissatisfied
Discussions:
 extremely satisfied satisfied dissatisfied
Yoga session:
 extremely satisfied satisfied dissatisfied
Coloring component:
 extremely satisfied satisfied dissatisfied
Guest Speakers:
 extremely satisfied satisfied dissatisfied
11. Please can you describe how attending the support group has helped you?

12. Any final comments or suggestions on how to improve the support group?

Thank you for taking the time to fill this evaluation!

Cancer Council Australia (2013)

APPENDIX VI

EXPENSES

Following are the expected expenses to run support group during its first iteration.

<i>Items</i>	<i>Description</i>	<i>Price</i>
<i>Musical CD</i>	8 to 10 CDs to be copied	15 \$
<i>Yoga Mats</i>	10 to 12 Yoga Mats	220 \$
<i>Yoga Instructor Fees</i>	Conducting one session	150 \$
<i>Food and drinks</i>	Tea, Juice, Cake and Cookies	200 \$
<i>Name Badges</i>	10 to 12 Name Badges	15 \$
<i>Coloring material</i>	Coloring tools and a Mandala	120 \$
<i>Booklets</i>	Printing and design of the support group booklet	150\$
<i>Total</i>		870 \$

APPENDIX VII

PSYCH EDUCATIONAL SESSION SAMPLE

I-Depressive Disorders:

- A. Breast Cancer statistics
- B. Definition of Breast cancer
- C. Treatment options of breast cancer
- D. Side effects of Treatments
- E. Depression definition
- F. biological basis and environmental basis (The bio psychosocial model)
- G. Symptoms of depression
- H. Treatment of Depression
 - Individual/ Group Psychotherapy
 - Medication therapy
 - Alternative treatments (Exercise, Yoga, Meditation...etc)

II- Anxiety Disorder:

- A. Anxiety Definition
- B. Anxiety Prevalence in Cancer patients
- C. Symptoms of Anxiety
- D. Treatment of Anxiety
 - Medications
 - Individual psychotherapy/group therapy
 - Alternative treatments

REFERENCES

- About us. (2011). Retrieved from <http://www.fairefacecancer.org.lb/en/about-us.php>
- American Group Psychotherapy Association. (2007). Practice guidelines for group psychotherapy. *New York: American Group Psychotherapy Association.*
- Andersen, B. L., Farrar, W. B., Golden-Kreutz, D., Emery, C. F., Glaser, R., Crespin, T., & Carson, W. E. (2007). Distress reduction from a psychological intervention contributes to improved health for cancer patients. *Brain, behavior, and immunity, 21(7)*, 953-961.
- Andersen, B. L., Shelby, R. A., & Golden-Kreutz, D. M. (2007). RCT of a psychological intervention for patients with cancer: I. Mechanisms of change. *Journal of Consulting and Clinical Psychology, 75(6)*, 927.
- Andersen, B. L., Yang, H. C., Farrar, W. B., Golden-Kreutz, D. M., Emery, C. F., Thornton, L. M., ... & Carson, W. E. (2008). Psychologic intervention improves survival for breast cancer patients. *Cancer, 113(12)*, 3450-3458.
- Antoni, M. H., Lehman, J. M., Kilbourn, K. M., Boyers, A. E., Culver, J. L., Alferi, S. M., ... & Price, A. A. (2001). Cognitive-behavioral stress management intervention decreases the prevalence of depression and enhances benefit finding among women under treatment for early-stage breast cancer. *Health Psychology, 20(1)*, 20.
- Antoni, M. H., Wimberly, S. R., Lechner, S. C., Kazi, A., Sifre, T., Urcuyo, K. R., ... & Wells, K. A. (2006). Reduction of cancer-specific thought intrusions and anxiety symptoms with a stress management intervention among women undergoing treatment for breast cancer. *American Journal of Psychiatry, 163(10)*, 1653-1660.
- Assi, H. A., Khoury, K. E., Dbouk, H., Khalil, L. E., Mouhieddine, T. H., & El Saghir, N. S. (2013). Epidemiology and prognosis of breast cancer in young women. *Journal of thoracic disease, 5(1)*, S2-S8.
- Betensky, M. G. (1995). *What Do You See?: Phenomenology of Therapeutic Art Expression.*
- Björneklett, H. G., Lindemalm, C., Rosenblad, A., Ojutkangas, M. L., Letocha, H., Strang, P., & Bergkvist, L. (2012). A randomised controlled trial of support group intervention after breast cancer treatment: results on anxiety and depression. *Acta Oncologica, 51(2)*, 198-207.
- Björneklett, H. G., Rosenblad, A., Lindemalm, C., Ojutkangas, M. L., Letocha, H., Strang, P., & Bergkvist, L. (2013). Long-term follow-up of a randomized study of support group intervention in women with primary breast cancer. *Journal of psychosomatic research, 74(4)*, 346-353.

- Bower, J. E., Garet, D., & Sternlieb, B. (2011). Yoga for persistent fatigue in breast cancer survivors: results of a pilot study. *Evidence-Based Complementary and Alternative Medicine*, 2011.
- Bower, J. E., Woolery, A., Sternlieb, B., & Garet, D. (2005). Yoga for cancer patients and survivors. *Cancer control*, 12(3), 165.
- Bulfone, T., Quattrin, R., Zanotti, R., Regattin, L., & Brusaferrro, S. (2009). Effectiveness of music therapy for anxiety reduction in women with breast cancer in chemotherapy treatment. *Holistic nursing practice*, 23(4), 238-242.
- Burgess, C., Cornelius, V., Love, S., Graham, J., Richards, M., & Ramirez, A. (2005). Depression and anxiety in women with early breast cancer: five year observational cohort study. *Bmj*, 330(7493), 702.
- Butow, P. N., Hiller, J. E., Price, M. A., Thackway, S. V., Kricker, A., & Tennant, C. C. (2000). Epidemiological evidence for a relationship between life events, coping style, and personality factors in the development of breast cancer. *Journal of psychosomatic research*, 49(3), 169-181.
- Cancer affects your emotional health?. (2013, September 20). Retrieved from <http://www.cancer.org/treatment/treatmentsandsideeffects/emotionalsideeffects/anxietyfearanddepression/anxiety-fear-and-depression-cancer-and-your-emotional-health>
- Cancer Support Groups. (2016). Retrieved from http://www.hopkinsmedicine.org/howard_county_general_hospital/services/cancer/claudia_mayer_cancer_resource_center/counseling_support_services/cancer_support_groups.html
- Carlson, L. E., & Bultz, B. D. (2003). Cancer distress screening: needs, models, and methods. *Journal of psychosomatic research*, 55(5), 403-409.
- Chandwani, K. D., Thornton, B., Perkins, G. H., Arun, B., Raghuram, N. V., Nagendra, H. R., ... & Cohen, L. (2010). Yoga improves quality of life and benefit finding in women undergoing radiotherapy for breast cancer. *Journal of the Society for Integrative Oncology*, 8(2).
- Classen, C., Butler, L. D., Koopman, C., Miller, E., DiMiceli, S., Giese-Davis, J., ... & Spiegel, D. (2001). Supportive-expressive group therapy and distress in patients with metastatic breast cancer: a randomized clinical intervention trial. *Archives of general psychiatry*, 58(5), 494-501.
- Cramer, H., Lange, S., Klohe, P., Paul, A., & Dobos, G. (2012). Yoga for breast cancer patients and survivors: a systematic review and meta-analysis. *BMC cancer*, 12(1), 1.

- Cunningham, A. J., & Tocco, E. K. (1989). A randomized trial of group psychoeducational therapy for cancer patients. *Patient Education and Counseling*, 14(2), 101-114.
- Devine, E. C., & Westlake, S. K. (1995, October). The effects of psychoeducational care provided to adults with cancer: meta-analysis of 116 studies. In *Oncology nursing forum* (Vol. 22, No. 9, pp. 1369-1381).
- Doumit, M. A. (2011). Cancer patients support: the Lebanese experience. *Psycho-Oncology*, 20(4), 443-443.
- Doumit, M. A. A., & Abu-Saad, H. H. (2008). Lebanese cancer patients: Communication and truth-telling preferences. *Contemporary nurse*, 28(1-2), 74-82.
- Doumit, M. A., Huijjer, H. A. S., Kelley, J. H., & Nassar, N. (2008). The lived experience of Lebanese family caregivers of cancer patients. *Cancer nursing*, 31(4), E36-E42.
- Doumit, M. A., Huijjer, H. A. S., Kelley, J. H., El Saghir, N., & Nassar, N. (2010). Coping with breast cancer: a phenomenological study. *Cancer nursing*, 33(2), E33-E39.
- Edelman, S., Bell, D. R., & Kidman, A. D. (1999). A group cognitive behaviour therapy programme with metastatic breast cancer patients. *Psycho-Oncology*, 8(4), 295-305.
- El Saghir, N. S., Assi, H. A., Jaber, S. M., Khoury, K. E., Nachef, Z., Mikdashi, H. F., ... & Eid, T. A. (2014). Outcome of Breast Cancer Patients Treated outside of Clinical Trials. *Journal of Cancer*, 5(6), 491.
- El Saghir, N. S., Seoud, M., Khalil, M. K., Charafeddine, M., Salem, Z. K., Geara, F. B., & Shamseddine, A. I. (2006). Effects of young age at presentation on survival in breast cancer. *BMC cancer*, 6(1), 194.
- Fawzy, F. I., Fawzy, N. W., Arndt, L. A., & Pasnau, R. O. (1995). Critical review of psychosocial interventions in cancer care. *Archives of general psychiatry*, 52(2), 100.
- Frick, E., Tyroller, M., & Panzer, M. (2007). Anxiety, depression and quality of life of cancer patients undergoing radiation therapy: a cross-sectional study in a community hospital outpatient centre. *European journal of cancer care*, 16(2), 130-136.
- Ganz, P. A., Yip, C. H., Gralow, J. R., Distelhorst, S. R., Albain, K. S., Andersen, B. L., ... & McTiernan, A. (2013). Supportive care after curative treatment for breast cancer (survivorship care): resource allocations in low-and middle-income

- countries. A Breast Health Global Initiative 2013 consensus statement. *The Breast*, 22(5), 606-615.
- Geue, K., Goetze, H., Buttstaedt, M., Kleinert, E., Richter, D., & Singer, S. (2010). An overview of art therapy interventions for cancer patients and the results of research. *Complementary therapies in medicine*, 18(3), 160-170.
- Goodwin, P. J. (2005). Support groups in advanced breast cancer. *Cancer*, 104(S11), 2596-2601.
- Goodwin, P. J., Leszcz, M., Ennis, M., Koopmans, J., Vincent, L., Guther, H., ... & Specca, M. (2001). The effect of group psychosocial support on survival in metastatic breast cancer. *New England Journal of Medicine*, 345(24), 1719-1726.
- Hack, T. F., & Degner, L. F. (2004). Coping responses following breast cancer diagnosis predict psychological adjustment three years later. *Psycho-Oncology*, 13(4), 235-247.
- Hales, R. E. (2008). *The American psychiatric publishing textbook of psychiatry*. American Psychiatric Pub.
- Helgeson, V. S., & Fritz, H. L. (1999). Unmitigated agency and unmitigated communion: Distinctions from agency and communion. *Journal of Research in Personality*, 33(2), 131-158.
- Helgeson, V. S., Cohen, S., Schulz, R., & Yasko, J. (2000). Group support interventions for women with breast cancer: who benefits from what?. *Health psychology*, 19(2), 107.
- Hermann, J. F., & Colón, Y. (2005). *Cancer Support Groups: a Guide for Facilitators*. American Cancer Society.
- Herron, L. (2005). Building effective cancer support groups. *The Cancer Council Australia. Department of Health and Ageing, Sydney*.
- Hewitt, M., Herdman, R., & Holland, J. (2004). Psychosocial Needs of Women with Breast Cancer.
- Holland, J., Herdman, R., & Hewitt, M. (Eds.). (2004). *Meeting psychosocial needs of women with breast cancer*. National Academies Press.
- Hopko, D. R., Bell, J. L., Armento, M., Robertson, S., Mullane, C., Wolf, N., et al. (2008). Cognitive-behavior therapy for depressed cancer patients in a medical care setting. *Behavior Therapy*, 39, 126-136.

- How is breast cancer treated?. (2014, September 25). Retrieved from <http://www.cancer.org/cancer/breastcancer/detailedguide/breast-cancer-treating-general-info>
- Huijer, H. A. S., Abboud, S., & Doumit, M. (2012). Symptom prevalence and management of cancer patients in Lebanon. *Journal of pain and symptom management, 44*(3), 386-399.
- Huijer, H. A. S., Doumit, M. A., Kelley, J. H., El Saghir, N., & Nassar, N. (2009). Living with breast cancer, a Lebanese experience.
- International Agency for Research on Cancer. (2013). *Latest world cancer statistics* [PRESS RELEASE N° 223]. Retrieved from https://www.iarc.fr/en/media-centre/pr/2013/pdfs/pr223_E.pdf
- Jacobsen, P. B., & Jim, H. S. (2008). Psychosocial Interventions for Anxiety and Depression in Adult Cancer Patients: Achievements and Challenges. *CA A Cancer Journal for Clinicians, 58*, 214–230.
- Kissane, D. W., Grabsch, B., Clarke, D. M., Smith, G. C., Love, A. W., Bloch, S., ... & Li, Y. (2007). Supportive-expressive group therapy for women with metastatic breast cancer: survival and psychosocial outcome from a randomized controlled trial. *Psycho-Oncology, 16*(4), 277-286.
- LEBANESE BREAST CANCER FOUNDATION (LBCF). (2011). Retrieved from <http://lbcfoundation.org/>
- Li, L., Yang, Y., He, J., Yi, J., Wang, Y., Zhang, J., & Zhu, X. (2015). Emotional suppression and depressive symptoms in women newly diagnosed with early breast cancer. *BMC women's health, 15*(1), 1.
- Li, X. M., Yan, H., Zhou, K. N., Dang, S. N., Wang, D. L., & Zhang, Y. P. (2011). Effects of music therapy on pain among female breast cancer patients after radical mastectomy: results from a randomized controlled trial. *Breast cancer research and treatment, 128*(2), 411-419.
- Lin, K. Y., Hu, Y. T., Chang, K. J., Lin, H. F., & Tsauo, J. Y. (2011). Effects of yoga on psychological health, quality of life, and physical health of patients with cancer: a meta-analysis. *Evidence-Based Complementary and Alternative Medicine, 2011*.
- Meraner, V., Giesinger, J., Kemmler, G., Taucher, S., Hubalek, M., Weber, B., et al. (2009). Development of a screening tool for the identification of psychooncological treatment need in breast cancer patients. *Psycho-Oncology, 18*, 974-983.

- Meyer, T. J., & Mark, M. M. (1995). Effects of psychosocial interventions with adult cancer patients: a meta-analysis of randomized experiments. *Health psychology, 14*(2), 101.
- Monti, D. A., Peterson, C., Kunkel, E. J. S., Hauck, W. W., Pequignot, E., Rhodes, L., & Brainard, G. C. (2006). A randomized, controlled trial of mindfulness-based art therapy (MBAT) for women with cancer. *Psycho-Oncology, 15*(5), 363-373.
- Nicole Culos-Reed, S., Carlson, L. E., Daroux, L. M., & Hatley-Aldous, S. (2006). A pilot study of yoga for breast cancer survivors: physical and psychological benefits. *Psycho-Oncology, 15*(10), 891-897.
- Öster, I., Magnusson, E., Thyme, K. E., Lindh, J., & Åström, S. (2007). Art therapy for women with breast cancer: The therapeutic consequences of boundary strengthening. *The Arts in Psychotherapy, 34*(3), 277-288.
- Programs. (2010). Retrieved from <https://onewigstand.wordpress.com/taking-care-of-you-and-your-needs/>
- Rao, M. R., Raghuram, N., Nagendra, H. R., Gopinath, K. S., Srinath, B. S., Diwakar, R. B., ... & Varambally, S. (2009). Anxiolytic effects of a yoga program in early breast cancer patients undergoing conventional treatment: a randomized controlled trial. *Complementary therapies in medicine, 17*(1), 1-8.
- Rehse, B., & Pukrop, R. (2003). Effects of psychosocial interventions on quality of life in adult cancer patients: meta analysis of 37 published controlled outcome studies. *Patient education and counseling, 50*(2), 179-186.
- Reuter, K., Raugust, S., Marschner, N., & Härter, M. (2007). Differences in prevalence rates of psychological distress and mental disorders in inpatients and outpatients with breast and gynaecological cancer. *European journal of cancer care, 16*(3), 222-230.
- Richa, H. P. (2010). The knowledge, practice, and attitudes of oncology physicians and nurses regarding the psychological assessment of adult cancer patients at the American University of Beirut Medical Center (AUBMC).
- Samarel, N., Fawcett, J., Krippendorf, K., Piacentino, J. C., Eliasof, B., Hughes, P., ... & Ziegler, E. (1998). Women's perceptions of group support and adaptation to breast cancer. *Journal of advanced nursing, 28*(6), 1259-1268.
- SANAD group- for breast cancer patients. (2016). Retrieved from <http://www.khcc.jo/section/sanad-group-breast-cancer-patients>
- Shaheen, N., Tabassum, N., & Andleeb, S. (2015). Pessimism, Optimism and Psychological Distress in Breast Cancer Women. *FWU Journal of Social Sciences, 9*(2), 125.

- Shamseddine, A. I., & Musallam, K. M. (2010). Cancer epidemiology in Lebanon. *Middle East Journal of Cancer, 1*(1), 41-44.
- Shamseddine, A., Saleh, A., Charafeddine, M., Seoud, M., Mukherji, D., Temraz, S., & Sibai, A. M. (2014). Cancer trends in Lebanon: a review of incidence rates for the period of 2003–2008 and projections until 2018. *Population health metrics, 12*(1), 1.
- Shamseddine, A., Sibai, A. M., Gehchan, N., Rahal, B., El-Saghir, N., Ghosn, M., ... & Seoud, M. (2004). Cancer incidence in postwar Lebanon: findings from the first national population-based registry, 1998. *Annals of epidemiology, 14*(9), 663-668.
- Shapiro, C. L., & Recht, A. (2001). Side effects of adjuvant treatment of breast cancer. *New England Journal of Medicine, 344*(26), 1997-2008.
- Spiegel, D., Butler, L. D., Giese-Davis, J., Koopman, C., Miller, E., DiMiceli, S., ... & Kraemer, H. C. (2007). Effects of supportive-expressive group therapy on survival of patients with metastatic breast cancer. *Cancer, 110*(5), 1130-1138.
- Spiegel, D., Kraemer, H., Bloom, J., & Gottheil, E. (1989). Effect of psychosocial treatment on survival of patients with metastatic breast cancer. *The Lancet, 334*(8668), 888-891.
- Support Groups. (2016). Retrieved from <http://umm.edu/patients/support-groups>
- Support Groups. (2016). Retrieved from <https://www.mdanderson.org/patients-family/diagnosis-treatment/patient-support/support-groups.html>
- SVENSK, A. C., Öster, I., Thyme, K. E., Magnusson, E., Sjödin, M., Eisemann, M., ... & Lindh, J. (2009). Art therapy improves experienced quality of life among women undergoing treatment for breast cancer: a randomized controlled study. *European journal of cancer care, 18*(1), 69-77.
- Tehrani, A. M., Farajzadegan, Z., Mokarian, F., & Zamani, A. R. (2011). Belonging to a peer support group enhance the quality of life and adherence rate in patients affected by breast cancer: a non-randomized controlled clinical trial. *Journal of Research in Medical Sciences, 16*(5).
- Telch, C. F., & Telch, M. J. (1986). Group coping skills instruction and supportive group therapy for cancer patients: a comparison of strategies. *Journal of consulting and clinical psychology, 54*(6), 802.
- Vadiraja, H. S., Rao, M. R., Nagarathna, R., Nagendra, H. R., Rekha, M., Vanitha, N., ... & Ajaikumar, B. S. (2009). Effects of yoga program on quality of life and affect in early breast cancer patients undergoing adjuvant radiotherapy: a randomized controlled trial. *Complementary therapies in medicine, 17*(5), 274-280.

- Wellisch, D. K., Hoffman, A., Goldman, S., Hammerstein, J., Klein, K., & Bell, M. (1999). Depression and anxiety symptoms in women at high risk for breast cancer: pilot study of a group intervention. *American Journal of Psychiatry*.
- What are the key statistics about breast cancer?. (2016, February 22). Retrieved from <http://www.cancer.org/cancer/breastcancer/detailedguide/breast-cancer-key-statistics>
- Winston, A., Rosenthal, R. N., & Pinsky, H. (2011). *Learning supportive psychotherapy: An illustrated guide*. American Psychiatric Pub.
- Wituk, S. A., Shepherd, M. D., Warren, M., & Meissen, G. (2002). Factors Contributing to the Survival of Self-Help Groups. *American journal of community psychology*, 30(3), 349-366.
- Wood, M. J., Molassiotis, A., & Payne, S. (2011). What research evidence is there for the use of art therapy in the management of symptoms in adults with cancer? A systematic review. *Psycho-Oncology*, 20(2), 135-145.
- World Health Organization. (2014). *Cancer country profiles 2014* [Lebanon]. Retrieved from http://www.who.int/cancer/country-profiles/lbn_en.pdf
- Yavuzsen, T., Karadibak, D., Cehreli, R., & Dirioz, M. (2012). Effect of group therapy on psychological symptoms and quality of life in Turkish patients with breast cancer. *Asian Pacific Journal of Cancer Prevention*, 13(11), 5593-5597.