ADDIS ABABA UNIVERSITY

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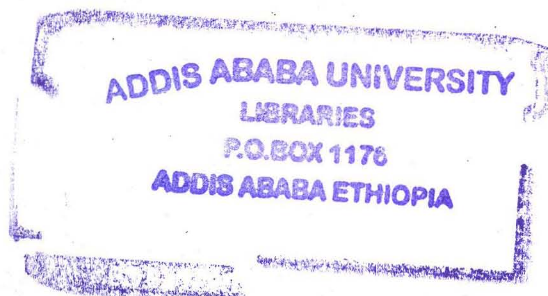
Psychosocial Problems of Women with Breast cancer:

The Case of Tikur Anbessa Hospital

By Tigist Ayele



June 2010

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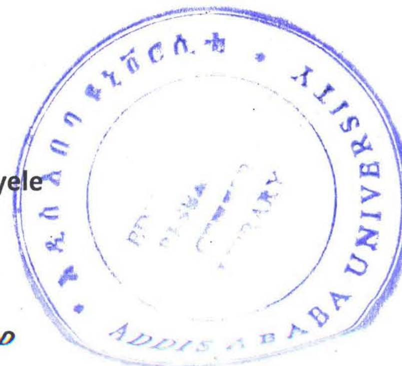
A Theses Submitted to the School of Graduate Studies of Addis Ababa University in Partial Fulfillment of the Requirements for Master's Degree in Counseling Psychology

By Tigist Ayele



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Psychosocial Problems of Women with Breast Cancer: The Case of Tikur Anbessa Hospital

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ACRONYMS

ACS	American cancer Society
ANOVA	Analysis of Variance
CAPO	Canadian Association of Psychosocial Oncology
ECA	Ethiopian Cancer Association
ESSS	Experienced Social Stigma Scale
HADS	Hospital Anxiety and Depression Scale
HKCF	Hong Kong Cancer Fund
MOSSS	Medical Outcomes Social Support Scale
NCI	National Cancer Institute
TAH	Tikur Anbessa Hospital
WWBC	Women with Breast Cancer

ABSTRACT

The objective of this study is to investigate the psychosocial problems of women with breast cancer at Tikure Anbessa Hospital in Addis Ababa. In this study also an attempt is made to assess the effect of certain factors (independent variables) namely age of the patient, types of treatment and time since diagnosis in exposure to the psychosocial problems. The dependent variables are anxiety, depression, social stigma, and lack of social support. To achieve this objective convenient sampling method was employed. Sixty women with breast cancer completed the Hospital Anxiety and Depression scale, Experienced Social Stigma Scale and Medical Outcome Social Support Scale. An in-depth interview and Focus Group Discussion were held with four patents. Descriptive statistics and analysis of variance were used to analyze data, and a p - value of less than 0.05 was considered statistically significant. The result obtained states that among sixty women with breast cancer, 73% experience anxiety symptom to anxiety disorder, 73% shows depression symptoms to depression disorder, 85% patients experience moderate to severe social stigma and 68% experienced moderate to lack of social support. The Conclusion is women with breast cancer experience anxiety, depression, social stigma and lack of social support.

CHAPTER ONE

INTRODUCTION

1.1 Background

There are different types of cancer diseases in the world and breast cancer is one of those feared diseases. It is a disease caused by the erratic growth and proliferation of cells that originate in the breast. Breast cancer is one of the major causes of death especially among women between 40 to 55 years of age. It is said to be the second cause of death, exceeded only by lung cancer. Growing older and having a family history of breast cancer are considered as some of the risk factors, which account for about a quarter of breast cancer cases. In other words majority of all breast cancer cases are due to other forces (American Cancer Society, 2005) as cited in Ethiopian Cancer Association (2007)

The cause of the disease as explained by some cancer researcher's face mostly on lifestyle choices among which cigarette smoking has the lion share. Other researchers and activists maintain that environmental pollution plays a major role in the increase cancer rates. They stress that many pesticides, food additives, industrial waste products and other chemicals have been linked to cancer (Yount, 2000). But the exact cause of the disease is still unknown. Cancer remains a major cause of mortality worldwide. Despite being potentially among the most preventable and treatable chronic diseases nearly 7 million lives were lost in cancer in 2005 alone. For many cancers, incidence rates could increase substantially in the future, with up to 15 million new cases in 2020, most of which will be in developing countries like Ethiopia (Ekortarl and Rowden, 2006).

More than 1 million new cases of breast cancer and death due to breast cancer diagnosed each year. More than 55 % of breast cancer related deaths occur in low- and middle-income countries. Such countries now face the challenge of effectively detecting and treating a disease that previously was considered too uncommon to merit the allocation of precious health care fund. In some of the lowest-income African countries like Ethiopia, the overwhelming reality of breast cancer is the high burden of mortality in the setting of relatively low incidence. The ratio of morality rate to incidence is 0.69 in Africa, as compared to 0.19 in North America. This high ratio results partly from incomplete reporting of the disease but largely reflects the high portion of women who survive with late-stage disease, which is not curable even in wealthy countries (Porter, 2008).

As reported on Zegeye (2009) Bogale Solomon, cancer specialist, said “cancer is used to be considered a disease of the rich in the developed world, but evidence shows startling discovery that, 60 percent of the cancer cases are move in the developing world”. Estimates show that mortality as the result of breast cancer in Ethiopia is very high when compared to other neighboring countries, with similar economic profiles. A large portion of people with breast cancer in Ethiopia come for medical care too late, or not at all, resulting in high mortality rate from the disease. Awareness about breast cancer is low and unclear among those who are aware of the disease, sense of hopelessness are common. Early signs and symptoms are frequently ignored and patients often first come to traditional healers for advice prior to seeking biomedical care. Studies show that women in Ethiopia particularly know nothing about breast cancer and in fact, have often never heard of the disease at all, so the initial symptoms whether a lump, rash, or pain, are unnoticed that these are an early signs of breast cancer and waiting until the symptoms become bothersome or problematic (Dye et al, 2008).

As Austin et al (2002) cited in Dye et al (2008) states that one of the predominant perspectives that commonly exist around breast cancer in Ethiopia is a sense of fatalism and hopelessness. In fact, in the context of the Health Belief Model, this sense of fatalism is often the most significant barrier to awareness of breast cancer, discussion around it and programs supporting early detection and treatment. In Ethiopia cancer is often assumed to have spiritual or other non-medical causes (breast feeding problem, genetic, sunlight, poor diet, cold exposure, curse, heat exposure etc...) which commonly lead patients to seek advice from traditional healers or priests. Because of poor prognosis and course of disease when diagnosed too late, these women feel a sense of isolation and stigma and avoid getting diagnosed, hide their diagnosis once made, or become embarrassed by their symptoms. A woman facing mastectomy, is concerned about how to assimilate into her life the scars, emotional distress, and disruption of family relations (Errico, 2005) cited in Dye et al (2008). Fear of actual abandonment is a common experience among breast cancer patients undergoing treatment, and as a result, many patients do not complete treatment (Aziz, 2004) cited in Dye et al (2008).

Cancer is relatively a common disease, but its consideration as shocking is not from its rarity but from its potential to devastate ordinary adaptive capacity. The risk, diagnosis, treatment, prognosis and recurrence of a medical illness such as cancer may constitute profoundly stressful events. The threat to life and bodily integrity is often considerable, and the experience of disfiguration, disability, pain and loss of social and occupational roles can trigger overwhelming feelings in a significant minority of affected individuals. The perceived lack of control imposed by the illness and the suddenness of the diagnosis may trigger intense fear, helplessness or terror (Gurevich et al, 2002). The disease does not only hurt the patients physically, but also brings social and psychological problems on the patients who receive a diagnosis of breast cancer. A young woman who suspects herself with inherited predisposition or seen one of her relative died with this disease may face daily fear.

1.2 Statement of the Problem

Women who received diagnosis of breast cancer are generally shocked and upset. Losing part of the body, pain and other consequences that come with the disease make women's life difficult. Many patients undergo mastectomy to treat breast cancer, however, the implications of this option are that patients are faced with the loss of their breasts which, alongside coming to terms with a diagnosis of cancer, has the potential to result in a multitude of psychosocial problems (Iwamitsu et al, 2005).

Breast cancer in Ethiopia is frequently perceived as irrevocably leading to death and women sometimes avoid getting to hospitals since the disease cannot be treated anyway (Dye et al, 2008). Since every human being dreams to have a better future, a mother would also like to see their children marry and have children of their own, also a young woman who plan to accomplish her career but suddenly diagnosis with breast cancer brings unpredictable life difficulties.

Study is shows that, the majority of women with early breast cancer experienced anxiety and /or depression within three months or with their initial surgery. In addition, studies identified anxiety disorder in 49.6 percent of women with breast cancer and depressive illness by 37.2 percent during the first three months after initial surgery (Hall et al, 1999). Errico et.al, (2005) cited in Dye et al (2008) indicated that breast cancer survivors from various parts of the world showed fear of being stigmatized and marginalized from their communities. Stigmatization and marginalization are problems faced by breast cancer patients in Ethiopia.

The following research questions guided this study

- What are the major psychological problems of women with breast cancer?
- What are the social problems that women with this disease face?
- What are the coping mechanisms that women with breast cancer mostly use?
- Is there any counseling service for these women with breast cancer?
- Is there age (below 50 and above 50) difference in exposure, Psychosocial problems (anxiety, depression, social stigma and lack of social support)
- Is there a type of cancer treatment (chemotherapy, tamoxifen and radiotherapy) differences in exposure to psychosocial problems?
- Is there time since diagnosis (less than 3 and greater than 3years) differences in exposure to Psychosocial problems (anxiety, depression, social stigma and lack of social support)

1.3 Objectives

General Objective

General objective of the study is to assess the psychosocial problems of women with breast cancer at Tikur Anbessa hospital in Addis Ababa.

Specific objective

- to investigate whether or not women with breast cancer show psychological problems like depression and anxiety,
- to explore whether or not women with breast cancer face social problems i.e. social stigma and lack of social support,
- assess the coping mechanisms that women with breast cancer use mostly,
- assess if there is any counseling service that is provide help for women with breast cancer,
- to examine if the age of the patient (below 50 and above 50), treatment type used by patient such as (chemotherapy, tamoxifen and radiotherapy) and the time since diagnosis (less than 3years and greater than 3 years) difference in exposure to psychosocial problems,
- forward recommendation for minimizing psychosocial problems (anxiety, depression, social stigma and lack of social support) of women with breast cancer.

1.4 Significance of the Study

Understanding the psychosocial problem of women with breast cancer is very important for psychologists and also for any helping professionals.

The researcher hopes that the study will be helpful in the following ways.

1. It helps to raise awareness about the psychosocial problems that many women with breast cancer face in their fight with this disease.
2. It helps to explore the relationship that exists between breast cancer disease and its consequence on the psychological as well as social interaction
3. Provide relevant information about the psychosocial problems of women with breast cancer for the concerned helping professionals and social services (health professionals, psychologists, and social workers).
4. It helps for helping professionals like (health professionals, psychologists, and social workers), educators and other interested researchers for further study.

1.5 Delimitation and Limitation of the Study

The study is delimited to one public hospital that is Tikur Anbessa Hospital the only hospital in Ethiopia that provides cancer treatment service for the whole country. The study also had some limitation, the sample drawn from only one hospital is small in size, and all women were asked to participate at the time scheduled for their medical visit. This is a stressful period of time, which may have influenced their responses. Most patients were relatively homogeneous in terms of time of diagnosis. Majority of participants were less than three years since diagnosis these aspects don't allow the researcher to generalize the findings.

1.6 Operational Definition of Terms

Psychosocial problems - Difficulties those women with breast cancer face associated with psychological and social aspect.

Cancer - A disease in which abnormal cell grow and reproduce uncontrollably and invade nearby tissues by spreading to other parts of the body through blood streams and hindering the activities of the normal cell (Dictionary of Cancer).

Breast cancer - A disease which happens as a result of the erratic growth and proliferation of cells that originates in the breast (Dictionary of Cancer).

Depression - women's with breast cancer feelings of sadness, despair, loss of energy, worthlessness and hopelessness, loss of pleasure in activities, changes in eating habits, and thoughts of death or suicide (Dictionary of Cancer).

Anxiety - Feeling of fear, dread, and uneasiness that may occur as a result of the disease.

Social Stigma – women's with breast cancer feeling of isolation, inequality, and uselessness with others.

Lack of social support: unavailable family, friends, neighbors, and community members in times of need to give psychological, physical and financial help.

Mastectomy - is the surgical removal of the breast for the treatment or prevention of breast cancer. (Encyclopedia of cancer)

Chemotherapy — the treatment of a disease by means of chemicals. In cancer, the chemicals selectively destroy cancerous tissue. Encyclopedia of cancer (2002)

Oncologist - a physician who specializes in the treatment of cancer. Encyclopedia

Radiotherapy – uses of high-energy x-rays to kill cancer cells. Encyclopedia of cancer

Tamoxifen – is a drug, which is used to treat or prevent breast cancer, for treating breast cancer and for preventing the cancer from spreading far outweighs. (Encyclopedia of cancer)

CHAPTER TWO

RELATED LITERATURE

2.1 General Concept of Cancer

Cancer is a disease in which abnormal cells grow and reproduce uncontrollably and invade nearby tissues by spreading to other parts of the body through blood streams and lymphatic systems hindering the activities of the normal cells (Ethiopian Cancer Association, 2007). Cancer is not one disease but a group of more than two hundred different diseases, each of which has its own behavior pattern and therefore its own chance of spreading to distant parts of the body and therefore threatens health and life. To lump them all together and think of them as one disease called "cancer" is not only inaccurate but is also very frightening. Because it makes this supposed single disease "cancer" appear to be infinitely variable and therefore entirely unpredictable and lethal, (Yount, 2000).

Cancer is what happens when a group of cells grows and multiplies in a disorderly and uncontrollable way and some of those cells are then able to invade into neighboring tissues. But apart from that process which they have in common- uncontrolled growth and then invasion-cancers vary enormously in their potential for causing harm or threatening life. Some cancers, for example, in addition to growing and invading, also have a high tendency to spread to distant parts of the body, and it is this that makes them dangerous and potentially lethal. Other cancers- in fact many of them- have a low tendency to do that and are much more likely to be cured at the first surgical operation. Some cancers (such as the two commonest types of skin cancer) almost never spread to distant areas of the body and are therefore never life threatening (Yount, 2000).

Laszlo (1987) cited in Yount (2000) pointed that the disease leads to death in direct and indirect ways. In the direct route, the cancer spreads over time to vital organs, such as the brain, liver, or lungs; it then competes for and takes most of the nutrients the organ tissues need to survive, thereby causing the organ to fail. Cancer kills indirectly in two ways: the disease itself weakens the victims and both the disease and the treatment can impair the patient's appetite and ability to fight infection.

Souhami & Tobias (2005) explained that it is often a costly disease to diagnose and investigate and treatment is time consuming labour intensive and usually requires hospital care. Ethiopian Cancer Association (2007) concerning cancer stated that in Ethiopia there is no cancer registry in the country, clinical record show that there are 120,500 cancer cases per day. The following are the top ten cancers seen at Tikur Anbessa Hospital Radiotherapy center: Cervix, Breast, Head and neck, Sarcoma, Leukemia and Lymphoma, Colorecal cancer, Kaposi's sarcoma, Skin cancer, Bladder cancer, Esophageal cancer. The causes and major risk factors of cancer as some findings so far shows that cancer causes are related to changes on genes. Such changes on genes are related to living habits such as tobacco smoking, unhealthy diet and physical inactivity, and environmental factors like exposure to infections and carcinogens, and longer life expectancy.

Souhami and Tobias (2005) explained the causes of cancer might largely be preventable. It seems probable that at least 50% of cancers could be avoided by lifestyle changes. Many substances present in the environment or in the diet have been shown to be carcinogenic and some of the factors are Ionizing radiation such as Atomic bomb and nuclear accidents which could cause leukemia and breast cancer, ultraviolet radiation which could cause skin cancer, inhaled or ingested carcinogens like cigarette smoking cancer of lung and bladder, atmospheric pollution also bring lung cancer, asbestos cause bronchial cancer, nickel, arsenic, chromates could bring lung cancer, aluminum and

aromatic amines cause bladder cancer, benzene also could cause leukemia and so on. Evidence is accumulating that diet and body weight are important determinants of cancer risks. American cancer society (1992) reported that the five years skin cancer over 80% of the patient survive at least 5 years. Breast cancer early detection permits over 90% of patients to survive at least 5 years. Lung cancer the five years survival rate is only 13%. Colorectal cancers if they can be detected early, over 85% of the patients survive at least 5 years. Prostate cancer can be detected in early stages when 5 years survival rates exceed 85%. Uterine & cervical cancer the 5year survival rate may be 90% depending on how early diagnosis is made

2.2 Breast Cancer

Both men and women have breasts. However, women's breasts are different because they are designed to make milk after pregnancy. Breasts are made up of milk glands. Breast cancer develops when some of the cells in the breast start to grow out of control. When this happens, a cancerous growth begins to appear somewhere inside the breast. Most breast cancers begin in the lining of the ducts though a small number start in the milk sacs. If not treated, cancer cells from the breast can spread to other parts of the body (ECA, 2007). There are about ten different kinds of breast cancer; some grow slowly while others develop faster (HKCF, 2006). The exact cause or causes of breast cancer remain unknown. Yet scientists have identified a number of risk factors that increase a person's chance of getting this disease. Certain risk factors, such as age, previous breast cancer, family history of breast cancer, genetic mutations, certain benign breast diseases, alcohol use, radiation exposure, hormone factors and obesity are some(Granholm and Olszewiski, 2008).

Risk of Getting Breast Cancer

According to Granholm and Olszewiski (2008), stated that scientists do not know exactly why breast cancer develops. But, they do know that there are some things, called risk factors, which can increase a person's chance of getting the disease. Research has shown that the following risk factors can increase an individual's chances of getting breast cancer:

• **Being a woman:** Being a woman is the main risk factor for getting breast cancer. White women are slightly more likely to develop breast cancer. African-American women are the second most likely, followed by Asian-American women and Hispanic women.

• **Getting older:** Although most breast cancers are found in women over the age of 50, younger women do get breast cancer. The risk goes up for all women as they get older.

• **Having had breast cancer in one breast:** The risk of getting breast cancer in the other breast is a little higher after you have already had one breast cancer. About 15 percent of women treated for cancer in one breast are likely to get cancer in the other breast later. But, remember; that means 85 percent of women treated for cancer in one breast do not get cancer in their other breast.

• **Having breast cancer in the family:** The risk of getting breast cancer increases for a woman whose mother, sister or daughter has had the disease. If one of these persons got breast cancer when they were 40 or younger, the risk to other family members is a little greater. Breast cancer in male family members also can increase the risk.

• **Carrying the gene:** Recent studies have shown that about 5-10 percent of breast cancers are passed down through families. Most of these breast cancers are caused by changes (mutations) in specific genes called the BRCA1 and the BRCA2 genes. Women

who inherit these changed genes have a very high risk, (from 60 to 80 percent) of getting breast cancer by the time they reach 70 years of age.

• **Female hormones:** Studies suggest that the longer a woman is exposed to estrogen (a female hormone), the greater the risk. That means you are at greater risk if you:- Have your first child when you are over the age of 30, have never had children, start your first menstrual period before age 12, stop your menstrual period after age 55, or are on hormone replacement therapy for more than 5 years.

• **Obesity:** Fat cells produce estrogen, so women who are overweight, (mostly an increased risk after the menopause) are likely to have higher levels of estrogen in their bodies, increasing their risk.

• **Drinking alcohol:** Having more than an average of one drink per day can increase a woman's risk of getting breast cancer. But, most women who develop breast cancer have none or few of the risks listed above, other than being a women and growing older. As you can see, much needs to be learned about what is causing most breast cancers.

NCI (2009) Treatment – women with breast cancer have many treatment options. The treatment that is best for one woman may not be best for another. The options are surgery, radiation therapy, hormone therapy, chemotherapy, and targeted therapy. Surgery and radiation therapy – are types of local therapy. They remove or destroy cancer in the breast Hormone therapy, chemo therapy, and targeted therapy are types of systematic therapy. The drug enters the blood stream and destroys or control cancer throughout the body.

2.3 Psychosocial Problems of women with Breast Cancer

Cicero (2009) stated that any diagnosis of cancer carries emotional, social, and physical challenges. Cancer patients face multiple stressful situations during the course of the illness. Moreover numerous studies suggest that psychosocial factors influence the progression of the disease and survival among patients.

Odigie et al, (2009) stated that psychosocial impact of breast cancer in the West have highlighted concerns about the effect of breast cancer and its treatment on psychological health, physical/sexual functioning, fertility, body image and social support. The severity of psychosocial distress experienced by breast cancer survivors varies by age, pre-existing psychological conditions, comorbid physical conditions and social support.

Han et al, (2005) study shows that breast cancer can cause significant losses in multiple life domains, including relationship, work, finance and recreation. The greater these losses, the more likely it is that a women's sense of autonomy and agency will be compromised. Even successful curative surgery, considerable improvement in treatment, and a good prognosis leave the patients and her family with uncertainty due to the permanent threat of cancer recurrence at the same or different tumor sites. Research indicates that psychosocial and behavioral variables such as self-efficacy beliefs and coping have an impact on patients' adjustment to cancer and related treatments.

Quintard and Lakdja (2008) stated that the diagnosis of a life threatening diseases as one of the most stressful life events and often induces emotional disturbances. Moreover, chemotherapy has been associated with durable effects on cognitive function and fatigue, as well as triggering menopause, while endocrine therapies may exacerbate menopausal or sexual symptoms and contribute to weight gain. Women

worry about hair loss due to chemotherapy and changes in breast skin due to radiation therapy. Mastectomy may also induce significant levels of psychological distress, negative body image, and changes in sexuality, although breast reconstruction may lead to early restoration of psychosocial health following surgery.

According to Meyerowitz (1980) cited in Hairris (1996) define that the psychosocial impact of breast cancer involve three areas: Psychological discomfort (anxiety, depression and anger): changes in life patterns (consequent to physical discomfort, marital or sexual disruption, and altered activity level) fears and concerns (mastectomy or loss of breast, recurrence, and death). Although women may have many more treatment options, the psychological concerns remain the same. In addition to these variables, the life stage at which the cancer occurs, previous emotional stability (personality and coping style), and the presence of interpersonal support should be included.

Age – or the point in the life cycle at which breast cancer occurs, and what social tasks are threatened or interrupted, is of prime importance. The threat to a sense of femininity and self-esteem occurs in all women, but it may be more difficult for a young woman whose attractiveness and fertility are paramount, especially for those who are single and without a partner. Researchers highlight several factors that may put younger women at greater risk for problems in adapting. These include the following: the "off-timedness" of a diagnosis in the younger patient; disruption of primary role as care giver and, increasingly, as breadwinner; and women's perception of having more to lose (including careers and chance to see offspring grown up). An estimated 14% of breast cancers occur in women younger than 45 years of age, with most of these (78%) in women between the age of 35 and 44 years.

Personality – contributing to adaptation relates to the patient herself, that is, her personality and coping patterns. Each woman has her own style of adaptation to stress, which is remarkably abiding quality. Studies of breast cancer patients suggest that women who use an active, problem-solving approach to the stresses of illness exhibits a less distressed mood and better adaptation. In addition, because adaptation to illness is necessarily a dynamic process, those who exhibit flexibility in their effort cope better.

Glanz and Lerman cited in Edward (1994) observed that although information- seeking and problem- solving skills may be critical during treatment planning use of denial and avoidant coping strategies during active chemotherapy or radiation may be more helpful in reducing or minimizing treatment side effects. Finally, women who are able to draw on and use available social resources and support adapt better as well. In contrast, women at risk for poor coping exhibit a passive, helpless, hopeless, or pessimistic stance in the face of illness, are rigid in their use of coping strategies, and tend to be socially isolated or to reject help when offered.

Prior personal association with breast cancer can also influence adjustment the memory of a mother's, sister's or grand mother's death from breast cancer, or that of a close friend, makes the diagnosis seem far more ominous and may result in greater levels of psychological distress during and after treatment. Some women with a high investment in their bodies cannot tolerate even the idea of loss or damage to a breast. Such women are at risk for delay in seeking consultation when a symptom occurs, they may also be at risk for problems in adaptation after treatment, particularly if hoped- for attempts to preserve cosmetic appearance are less than expected or must be abandoned because of the extent of disease.

Time - Baider et al (2004) study shows that 20% - 38% of women who receive a diagnosis of breast cancer experience high levels of psychosocial problems within the first year after diagnosis. A prospective study by (Bleiker et al, 2000) found that from 2

months to 2 years after breast cancer diagnosis one in five women reported a significantly high level of psychological problems about their cancer. Hall et al (1999) as cited in Iwamitsu (2005) study showed that the majority of women with early breast cancer experienced anxiety and/ or depression within 3 months of their initial surgery. In addition, they identified anxiety disorder in 49.6% of women with breast cancer and depressive illness in 37.2% during the first 3 months after their initial surgery.

Finally – **adjustment depends on the response from other significant people** – first from spouse or partner and also from family and friends. Because of the importance of social support to women's adaptation, this is addressed at greater length under the section on family adaptation.

2.3.1 Psychological Problems Accompanying Breast Cancer

Lueboonthavatchai (2007) stated that breast cancer is the most common type of cancer among women worldwide. For women, breast cancer is seen as a terrifying disease due to a high mortality rate. Moreover, the breast is considered as a symbol of womanhood and women's sexuality. Having breast cancer or receiving treatment; either surgical or adjuvant treatment, has been seen as a traumatic experience to women due to its impact on their self-image and sexual relationship. Most of the breast cancer patients have psychological reactions such as denial, anger, or intense fear toward their disease and treatment process. Many patients have psychiatric morbidities, especially anxiety and depressive disorders. Besides psychological problems in patients themselves, breast cancer also brings about a broad range of psychological reactions of their spouses or partners and their families.

Merckaert et al (2009) study shows that the diagnosis of cancer and its treatment is a stressful event that generates fears, uncertainties, distress between 10 and 50% of cancer patients experience high levels of distress. Untreated, distress may have long

term detrimental consequences on patients' compliance with treatment, survival, desire for hastened death and on both patients' and their relatives' life. (Walker & Eremin, 1996) as cited in Hoff (2001) stated that the diagnosis of breast cancer is frequently traumatic and it is known that many women are unable to take in the bad news. The majority of women with breast cancer the diagnosis of disease recurrence are associated with:-

- Shock and anger: "Why me?"
- Helplessness and hopelessness in regard to future normal functioning: "What's left for me now?"
- Shame about the obvious scar, or reduced physical ability and about dependence on others: "What will my husband think?"
- Anxiety about the welfare of spouse or children who depend on them: "How will they manage at home without me?"
- Sense of loss of bodily integrity and loss of goals the person hoped to achieve before the illness: "I don't think I will ever feel right again"
- Doubt of acceptance by others: "No one will want to be around me this way"
- Fear of death, which now must be faced, in the case of cancer:" It was almost the end" or "This is the end".
- Fear that one's sex life is over after diagnosis with cancer: "Am I condemned leading a celibate life now?"

Hoff (2001) reported that thoughts and perceptions – a woman with a mastectomy may perceive that all men will reject her because of the bodily alteration; in reality only some men would do so. A women who doesn't have a secure relationship with a man before a mastectomy may experience rejection; we can help such a women consider the values of a relationship with a man who accepts her primarily for her body. Women with stable relationship are seldom rejected by their husbands or lovers following a mastectomy.

Since cancer is linked with severe suffering and death, thoughts and suppositions about the disease are changed with discomfort and anxiety. It is a disease in relation to which people feel completely powerless and often also regard medicine as powerless. When one becomes aware of something in the body which one consciously/unconsciously connects with cancer, one becomes incredibly frightened and feels that one's life is threatened. The feelings awakened are sometimes so intolerable that one acts contrary to one's usual common sense. Most of one's psychological energy is expended on getting rid of the threat. One denies or suppresses thoughts about the symptoms, consequently preventing one-self from tackling their causes.

Love (2004) stated that psychological distress can arise from the patients' response to the side effects of treatment, loss of hair, nausea, changes to body image, as well as the fatigue and discomfort caused by treatment can all lead to emotional distress in patients. The extent to which these symptoms contribute to major distress is dependent, in part, on severity and functional limitations imposed, but there are wide variations between individuals. Reactions to treatment side effects can be monitored, as they might indicate the need for better preparation, more information about treatment and the provision of psychosocial support.

Receiving the diagnosis – both consciously and unconsciously, cancer is associated with death. Telling the patient the diagnosis often has violent and upsetting effects on her whole personality. The ability consciously to retain the knowledge of oneself as suffering from cancer and to make it merge with everything else which is inside one is a demanding adjustment. Even if a number of patients were partially prepared in various ways for the possibility of cancer, the definite knowledge was always something of a shock.

Radiotherapy – the treatments appear frightening in different ways. Radiotherapy, like cancer itself, is associated with what is dangerous, disturbing, and destructive. Pre-conscious/ unconscious psychological processes are of a type which struggle for consciousness. It may perhaps be fruitful to interpret the patients formulations that 'the mind' is affected; that you get 'scatter brained' or have difficulty in 'concentrating' as expressing the struggle going on inside them to hold off thoughts and feelings about what they are going through and the desire to concern themselves with such thoughts and idea. Now it becomes either/or, and what the patients consciously experience can perhaps be best described as a kind of confusion.

Breast operation – when they heard about the operation, they suddenly become aware of the deeper significance of the breast in relation to their identity as women: as if they suddenly had an increased consciousness of and access to the body image. As far as the breasts are concerned, since time immemorial they have been one of women's most prized physical attributes (Vigman, 1953) cited in Edward (1994). They have been portrayed in sculpture and painting, representing the 'eternal feminine beauty'. It is part of the feminine ideal in some culture to have well-shape and 'beautiful' breasts proportional to other parts of the body. The breast has been and is a symbol of fruit-fullness and motherhood. The ability of the breast to produce milk means that it can give life and milk production is unique to the female. The breasts are visible signs of female sexuality. (Patricia Crampton, 1982) cited in Hoff (2001) stated that woman may associate breast with many different kinds of feelings on the conscious or unconscious level. They may give her satisfaction and contribute to a positive self-esteem. They may also be, as it were, charged with exaggerated pride or with feelings of guilt or shame. The breast represents an integral part of the female body image. This means that when a woman is faced with the loss of a breast she may regard this as a threat to her feminine identity or an injury to her own personality and integrity.

Mastectomy – because it was for so long the standard treatment for breast cancer, and still continues to be recommended for large number of women, there is considerable research on the impact of loss of one or both breast on women's physical, social, and emotional functioning. Among the effects documented are feelings of mutilation and altered body image diminished self-worth, loss of a sense of femininity, decrease in sexual attractiveness and function, anxiety, depression, hopelessness, guilty, shame, and fear of recurrence, abandonment and death. Whereas mourning for the loss of a cherished body part and the threat to life are universal, the extents to which other sequels are experienced seem variable.

Harris et al (1996) research indicates that from 10% to 56% of women studied 1 to 2 years after mastectomy experience some degree of social or emotional impairment. Although most women report improvement in emotional and physical well-being over time, for a significant minority (20% to 25%) of these problems may persist beyond 2 years after treatment. Women with breast cancer reveled that greater psychological distress than surgical or healthy controls, related to social and interpersonal relationship, these emotionally healthy women did not experience serious psychiatric sequels such a suicidal ideation only women with stage II disease who had undergo chemotherapy had significantly higher distress at 1 year.

Hanson et al (2000) study show that Women receiving chemotherapy have reported increased levels of psychological problems and difficulties with psychosocial function.

2.3.1.1 Depression

Kissane et al., (1998) cited in Kim & Bloom, (2004) stated that receiving a diagnosis of breast cancer is a significant stressor for women; this may be due to the fact that although breast cancer has become more treatable, many women have died from this illness. The diagnosis of cancer often causes psychiatric morbidity such as depression and anxiety. (Pandey et al, 2007) study shows that there is ample evidence that psychological morbidity among cancer patients often go unrecognized until they are specifically sought. This is more so in patient with depression as these patients are reluctant to complain about their symptoms and also because the prominent symptom is not always the obvious one. Up to 20% of the patent may show severe depression, grief, lack of control personality change, anger and anxiety.

Wellisch and Lindberg (2001) study shows that depression is not only important for the distress it produces but also it may have an impact on individuals' physical well-being. Certainly in terms of suicidality, depression does claim lives, representing a considerable risk factor for suicide. In addition to suicide, depression is also associated with increased mortality and morbidity due to medical conditions and accidents, including longer hospitalizations, poorer prognoses for recovery, and reduced motivation for rehabilitation among chronically ill patients. It has been speculated that depression may interfere with the ability of medically ill or at-risk individuals to follow health regimes or to seek medical treatment. (Hjerl et al, 2003) studies show that depression was a negative prognostic factor after breast cancer. The prognostic effect was dependent on stage of breast cancer and whether depression occurred pre-or postoperatively. Unnatural death could not explain the higher mortality, since the negative prognostic effect persisted after censoring unnatural death. Finding that postoperative depression increased mortality in patients with early-stage breast cancer is in accordance with results form a cohort study of early stage breast cancer patients. It is difficult to explain

why preoperative depression had no effect in early-stage breast cancer, when such an effect was found in late-stage breast cancer. One reason could be that the negative prognostic effect of depression was weak or absent in the earliest stage of the tumor growth. It is also difficult to explain why postoperative depression late-stage breast cancer patients shows no negative prognostic effect when an effect was seen for early-stage patients. May be the negative effect of depression was relatively weak compared with the negative tumor-related, prognostic factors in late-stage patients.

It is clear that for a woman to have a mother diagnosed with breast cancer constitutes a traumatic event that elicits extreme fear, the perception of hopelessness, and the potential for physical injury or death. For many individuals, depression appears to begin precisely with traumatic events such as parental loss or a threat to their attachment objects. Given the importance that actual or perceived risk to a parent has in the development of long-term depression the fact that most women attending high-risk breast cancer clinics have a mother with the disease emphasizes the importance of closely attending to patients' depressive symptomatology.

Wellisch and Lindberg (2001) study show that depressive affect and the depressive cognitive style with which these patients may present may affect their emotional well-being and health – related behaviors. In addition, having a mother with breast cancer places the daughter at risk for developing the disease herself and constitutes a separate stressor that elicits fear, a sense of helplessness, and the potential for physical injury or death. It seems then that having a mother with breast cancer constitutes a sort of double traumatic stressor, one involving a threat to an attachment object and one threatening the person herself. In this context, earlier exposure to maternal breast cancer is likely to be associated with depression, anxiety, and other forms of responses to traumatic stress.

2.3.1.2. Anxiety

Edward (1994) stated that most people respond to cancer with anxiety and dread. It is one of the disease which is most feared, both because it is a serious disease and because we still don't really know how cancer arises. Often the cases people hear and know most about are those that were not cured. Anxiety may be described as experience of discomfort, tense expectation, insecurity, helplessness escalated to panic, feeling of catastrophe possible tendencies towards repugnance, nausea, and other negative symptoms.

In the widest sense, the feeling of anxiety can be said to be comparable with a psychological sensation of pain. This mobilizes the individual's protective functions, so that the source of the discomfort is a voided or destroyed. Similarly, the ego may be aroused to try to control the anxiety- inducing situation by means of various activities of an intellectual nature. Thus the function of anxiety (like the function of pain) is obviously important to survival. "Unconscious anxiety" means that through various psychological defense mechanisms the individual succeeds in keeping thoughts and ideas unconscious which would otherwise arouse emotions of anxiety. "Anxiety" in this case is a concept used hypothetically to understand certain neurotic behavior which would otherwise appear quite unreasonable to the on looker. Anxiety –fear, fear is a special case of anxiety in which one knows what the anxiety is really about otherwise, the deeper object of anxiety is unconscious (Cullbeng, 1970) cited in Edward, (1994). Helplessness, separation from security objects, frustration, and anxiety over the strength of instinctive drives, anxiety over bodily damage, and super-ego anxiety are some situation.

It is not difficult to imagine several of the danger situations described above being activated in a woman who is given a diagnosis of breast cancer. It is not unusual for patients who are given a serious diagnosis or admitted to hospital to experience great

helplessness in the face of what is happening to them. Moreover, to women the breasts symbolize an important part of female identity. They contribute to feelings of security by assuring women of her womanhood. Loss of the breast may arouse both separation anxiety and bodily damage anxiety owing to lack of time, general stress, and lack of suitable training, patients are sometimes treated in hospital in a way which disappoints them. Patients may also have in their contacts with the medical personnel. Disappointments of one or the other type may lead to anxiety through frustration. Moreover, people often have a kind of ideal picture of how they would like to function as patients. When it proves difficult to fulfill this ideal the patient may feel that she is violating the rules as to the proper way to behave. This may then lead to the activation of "super-ego" anxiety. Finally breast cancer represents a realistic threat to the women's life and breast.

Burgess et al (1988) cited Iwamitsu et al, (2005) reported that high levels of anxiety were associated with psychological maladjustment, including hopelessness and helplessness in response to the diagnosis and low internal locus of control and hypothesized that patients with breast cancer who chronically feel anxiety in daily life would feel more psychological distress under stress than those who do not generally feel anxiety. Furthermore, it is hypothesized that breast cancer patients who suppress anxiety and negative emotion would feel comparatively greater psychological distress after the disclosure of their diagnosis, compared with patients who did not suppress anxiety and negative emotion. According to Iwamitsu et al (2005) breast cancer patients with high anxiety also reported more psychological distress than those with low anxiety. Finding suggests that a high level of trait anxiety as a personality characteristic is also a key factor in psychological adjustment to cancer. It is interesting to note that the highly anxious benign tumor patients felt more psychological distress at their first visit to the outpatient clinic, compared with their second visit, when they were told the diagnosis.

2.3.2 Social Problems that Occurs to Women with Breast Cancer

2.3.2.1. Social Stigma

American Cancer Society, (1998) cited in ESA (2007) reported that breast cancer, although not an "infectious" or contagious disease is still a stigmatized disease. Society expects women to try to prevent the onset of the cancer, and when it occurs, to continue to function normally within their usual roles. A woman must make crucial decisions about her own treatment plan, decisions that make her responsible for her recovery...and any and all negative side-effects along the way. If a woman is not "sick-in-bed", she will probably carry on with her life and her role, but she will likely feel a change from within. Something very significant has happened to her that has set her apart. That a woman diagnosed with breast cancer has the potential to experience the feeling of being so "marked", is proof enough that there is a stigma attached to this all-too - common disease.

Kozikowski (2005) stated that the stigma of cancer is further compounded by the stigma of not having a normal and symmetrical body. Through television programs, the remarks of statesmen, advertisements, pornographic magazines, and trinkets that hang on rearview mirrors, the imagery that "good – nice – big breasts" are better than smaller breasts which are better than deformed breasts, affects women's perceptions of their own bodies as well as the expectations of their partners. For the majority of women who face the stigma of a "deformed" body that is missing some of its "parts," negative feelings tend to center on how others – husbands, partners, other women – will perceive women after the loss of a breast. While some women are confronting breast cancer's stigma by refusing to give into the idea that they are abnormal, sick, or dying, others are facing stigma by means of the empowering metaphors they have chosen to adopt.

Following their diagnoses of breast cancer, the women confronted the various forms of stigma, fear of dying, and fear of recurrence. Women who underwent the removal of a breast were also forced to endure changes in their bodies that made some feel as though they were no longer female, attractive, or sexually appealing to their partners. Upon the loss of a breast, a woman immediately faces the societal construct of what her body should, but now does not, look like. Many women after a mastectomy felt "deformed," "crippled," and "no longer attractive." Many of the women who had mastectomies remarked that they were unable to look at themselves undressed in front of the mirror, and that when they did stand in front of the mirror, they made sure not to look below their shoulders.

According to Erving Goffman (1963) cited in Kozikowski (2005) in his essay on stigma and its effect on identity, early use of the term among the Greeks referred specifically to the bodily marks signifying that an individual was "a blemished person, ritually polluted, to be avoided, especially in public places". Many women who had mastectomies were sensitive to the stares they received, particularly when it was known among neighbors and acquaintances that they had lost a breast. In the book *History of the Breast*, Marilyn Yalom writes that in Western cultures breasts are viewed as "sexual ornaments –the crown jewels of femininity".

The stigma of breast cancer in developing countries, particularly in women living in poorer communities, is having a profound impact on treatment and survival. Zeba Aziz from the Allama Iqbal Medical College in Lahore, Pakistan, has been comparing the outcome of 286 women with breast cancer based on their socio-economic status. "Poorer people are not seeking help and do not have easy access to care," said Aziz, speaking at the European Society for Medical Oncology Congress. For them breast cancer carries a stigma that greatly lowers self-esteem. This results from both sexes viewing women as sexually unattractive. Emotional and physical abandonment is a

common end result. Gross ignorance also leads to breast cancer being considered contagious. "We have seen women being isolated to the point of not being allowed to touch their children or use the household utensils," she said.

Dye et al (2008) report that because of the stigma attached to breast cancer, many women deny their condition, believing that a painless lump is nothing to worry about. In fact, some local general practitioners are unaware of the dangers of breast cancer, adding to the delay in early diagnosis and adequate treatment. Study shows that disability and disfigurement carry strong stigma that impacts the entire family, in fact women with breast cancer are secluded and rarely disclose their illness to others and have no social support outside of close family member (Beyene, 1999) as cited Dye et al (2008).The experience of stigma is documented by Beyene in Ethiopia in 1999, that disability and disfigurement carry strong stigma that impacts the entire family, in fact women with breast cancer are secluded and rarely disclose their illness to others and have no social support outside of close family member. A recent report by (Errico et al, 2005) cited Dye et al (2008) on breast cancer survivors from various parts of the world showed that women commonly have fears of being stigmatized and marginalized from their communities because of myths about cancer. Fear of abandonment is a common occurrence among breast cancer patients undergoing treatment, and as a result, many patients do not complete treatment. Study found that because of the poor prognosis and course of disease when diagnosed too late, patients often explain that feel a sense of isolation and stigma and avoid getting diagnosed, hide their diagnosis one made, or become embarrassed by their symptoms.

2.3.2.2 Lack of Social Support

Landmark et al (2002) as cited in Gonzalez et al (2005) stated that lack of social support contain emotional, practical and informative dimensions. The emotional dimension includes love, friendship and solidarity. The practical dimension includes physical nearness, such as practical help in the house, especially in the early phases after diagnosis, or after an operation. The informative dimension includes information, advice and counseling. These dimensions emerge as implicit and interactive. Results indicated that the social support the women received in relation to the three dimensions seemed to influence their ability to cope with the strain of living with breast cancer. Lack of social support seemed to have the opposite effect due to the multiple responsibilities held by women at the workplace and at home,

Landmark et al (2002) as cited in Gonzalez et al (2005) study results indicate that several women experienced lack of understanding from their families, friends and colleges. Teenagers seemed to have special difficulty relating to their mothers' illness 'Tough' is an expression women use to describe relationships with children. At the same time women see that children suffer as a result of their illness. Women felt that friends and neighbors, seemingly without reason, withdrew from contact. 'Friends we had are not those we thought they were. They withdrew one after the other, and restricting of time that urge the working women to postpone their own affairs for the sake of family member showed that the most important form for lack of social support was experienced in relation to women's contact with organizations and institutions, mainly with health services. Lack of social support from the hospital where they received treatment was experienced as a great strain and burden. This was most apparent in the lack of continuity in treatment. Time spent in just waiting was difficult. Routines for follow-up seemed disjointed.

Carlson et al (2004) cited in Mc Dowell et al (2009) study show that lack of social support to the women's health status, the women tended to do the household tasks by themselves, with no or little help from their family members or housekeeping services. The family members who helped the women in household tasks were usually their children, especially their daughters, or their own mothers. Mothers-in-law rarely helped the women in household tasks but frequently became a burden to the women. Compared with a family in Western society, the developing country family is characterized by patriarchal order and undemocratic relationships between men and women. Women are supposed to be responsible for all household tasks, and men were responsible for work outside the home (e.g., income earning and social relations with others) including employed women, were responsible for most household tasks, their "second shift" (Hochschild, 1989) cited as cited in Gonzalez et al (2005)and felt guilty when they could not complete this work. Accepting the traditions and lower status in their families, the women did household tasks by themselves, suffered the burdens, and relieved stress only by crying.

Study indicates that patriarchal culture negatively influenced the meanings of breast cancer and that women with breast cancer suffered more during the breast cancer transition. The findings of study also show a lack of knowledge and informational support related to breast cancer diagnosis and treatment processes among women with breast cancer along with a lack of physical, psychological, and social support from their family members and friends. Their cultural heritage had a victim-blaming tendency and viewed women's health problems as trivial. Speaking about women's bodily experiences was taboo, and women rarely discussed their bodily experiences relative to the disease even among themselves. Their culture emphasized the importance of family as a social unit, and women tended to place their own needs below those of other family members.

A lack of social support and intrinsic cultural beliefs were postulated to be a negative influence on the choice of screening (Carlson et al, 2004) cited in Mc Dowell et al (2009). Women who stated that time and cost were concerns for regular screening were more likely to be married and/or have children. If the social support network, including employers, colleagues in the workplace, family, and friends, can be improved through appropriate health education campaign, then it is likely that a more positive attitude toward preventive health care will be provided.

2.4 Coping Strategies

Cancer places considerable demands on the patients such as having to deal with physical symptoms, treatment side effects, and changes in relationships, changes in self-image, the unpredictability of disease, uncertainty about the future, unmet expectations about recovery, and vulnerability to recurrence of disease. Cancer also threatens the patient's sense of meaning to life and of connectedness with herself and the environment (Visser et al, 2009). Without question, the experience of diagnosis and treatment of breast cancer causes distress. The manner in which women cope with this crisis, however, can play a significant role in their emotional adjustment.

Coping refers to behavioral and cognitive ways through which people attempt to deal with a situation they perceive as exceeding their resources (Lazarus et al, 1984) or block their path toward desired goals (Carver, Scheier & Pozo, 1992 as cited Culver et al, 2002).Getting a diagnosis and making a treatment plan can be a relief for some women as it marks the beginning of the adjustment period. (Liow, 1993) in a brief report pointed that most women, however, experience shock and find it difficult to believe. Five coping styles have been distinguished.

1. Denial – rather not know any details; reject the seriousness.

2. Fighting spirit – positive, hopeful and wanting lots of information

3. Stoic acceptance – quite acknowledgment or pointless worry
4. Anxious/ depressed Acceptance – excessive anxiety or depression but manage to carry on with daily life
5. Helplessness/ Hopelessness – extreme pessimism and social dysfunction; feel helpless and with draw in preparation for death

Denial of illness is a well recognized phenomenon in clinical practice, and was studied in different disease contexts. Anna Freud described denial as an unconscious defense against painful and overwhelming aspects of external reality, contrary to other defense mechanisms which serve to protect the ego against instinctual demands. Denial seems to reduce distress, whereas passive escape mechanisms turned out to decrease psychological well-being.

Adjustment can be employed as a term referring to the individual's cognitive and behavioral adaptive mechanism in dealing with the specific threat of cancer. For instance, there is empirical evidence that adoption of a fighting sprit/ an attitude of optimism when confronted with a realistic appraisal of the illness) is associated with decreased anxiety and depression, where as helplessness, anxious preoccupation, and fatalism are associated with increased anxiety and depression. Moreover, some studies of psychological attitudes following cancer diagnosis such as helplessness and hopelessness have been associated with a poor outcome whereas a fighting spirit or denial have been associated with longer survival (Cicero et al, 2009). Quintard and Lakdja (2008) state that active coping, such as fighting-sprit, is considered a positive predictor of psychological adjustment to severe disease including cancer.

According to Lazarus and Folkman's (1988) as cited in Schou et al (2005) stress and coping theory outcomes that occur in response to a stressor (i.e. receiving breast

cancer) are influenced by the attributes of the individual (i.e. personality trait, demographics), the individual's cognitive appraisal, a women copes with the diagnosis of breast cancer depends largely upon her appraisal of whether the diagnose poses a threat, a challenge or potential harm/loss, or some combination of these and the coping strategy she use. Appraisal and coping processes are influenced by characteristics of the person and environment, and thus likely to have both stable and variable aspects.

A large body of research has demonstrated that optimism has beneficial effects on people wellbeing and health (Scheier et al, 2001 as cited Schou et al, 2005) study found that pessimism predicted disruption in social and recreational activities among breast cancer patients. (Brenes et al, 2002) found that pessimism was associated with poorer physical functioning among adults with knee pain. In view of the evidence that optimists report better quality of life, it seems important to address the pathways through which optimism operates. One important mechanism could be that optimists use different coping strategies when confronting stressful events than pessimists (Carver et al., 1993; Segerstrm et al., 1998; Epping-Jordan et al., 1999; Schou et al., 2004). These differences in coping strategies may also result in differences in quality of life of women with breast cancer. Studies found that optimists used more acceptances, active coping and less avoidance/denial than pessimists. However, emotional well-being is not the only important outcome for medical patient's health-related quality of life.

2.5 Counseling Support for Cancer Patients

Kapusta (2003) stated that the job of the counselor is not to solve patient's problems. Instead, talking to counselor may suggest directions that cancer patients can explore to find their own way through difficulties. Counselor may deal with issues associated with brain tumors such as depression, anger and changes in Personality. They are also experienced in addressing the identity, self-esteem and body issues often associated with the disfigurement caused by surgical treatments for head and neck, breast and other cancers.

Counseling is part of an integrated team approach to treating patient needs in a holistic way. Most cancer centers offer individual counseling by psychologists, psychiatrists, social workers and chaplains, as well as pain and symptom management nurse and physicians specialists. Counselors do much of their work one-on-one with patients, but they also work with families. The counselors in settings where cancer treatments are given required have specific psychosocial oncology training (Kapusta, 2003).

Liow (1993) a brief review stated that the complexity of the relationship between stress and illness is one of the main reasons why there are no simple tried and tested recipes to be counselor. In a stressful situation, people use a variety of different coping strategies: some worry, some ignore the problem, some seek solitude, some seek family support and some seek religion. In general, the task of counseling is to optimize the coping strategy, and for cancer patients this would mean helping them find their own means of dealing with the emotional stress of having a life-threatening illness. Six major counseling techniques have been identified for use with breast cancer patients.

Directive – directs patients prescriptively

Informative – gives information to aid understanding

Confrontational – challenges unhelpful thinking and behavior

Cathartic – permits safe emotional expression

Catalytic –reflectively helps with goals of patient

Supportive – acceptance and empathy for fears and needs

The greatest benefit of psychosocial care is the patients and families may experience a significant improvement in their life. Without emotional support, people can struggle unguided with issues of their own mortality, with complex questions about quality and quantity of life, and with the burden of coping with treatments and suffering, both physical and emotional. Through counseling, patients able to better equipped to enjoy fulfilling and productive life.

Kapusta (2003) state that patients who receive emotional support are better equipped to cope with the relationship problems and the fear, depression and anxiety that are a normal part of dealing with cancer. Counseling can help to ease tensions within the family, and help the person to get on with the important job of coping with the disease and its treatment. Counselors have a deep sensitivity to the fact that the life of every person with cancer is unique. Counseling work is about tailoring an individualized approach to each situation, some of unique needs of the cancer patient that counselor support are categories in to five main categories: informational, psychological such as dealing with fear, managing anger, opening up(express themselves fully), guilt (feelings of guilt), depression, stress, identity and self –image, fatigue, anxiety, and social issues such as communication issue, addressing family issues, changes in relationships, and spiritual questions and soon.

Summary

The forgoing review of the past research reports several point in light with the psychosocial problems of women with breast cancer. Breast cancer remains the most common tumor in women that brought complex psychological and social impacts on patient's life. Researchers indicate that special attention must be directed to the psychosocial well-being of women with breast cancer, also addressing that the psychosocial needs of breast cancer patients improve quality of survival and may even enhance length of survival.

CHAPTER THREE

THE RESEARCH DESIGN AND METHODOLOGY

The general methods employed in order to achieve the objectives stated in the earlier chapter were a two-phased project. The first phase included a quantitative survey of psychosocial problems of women's with breast cancer. The second one was a qualitative interview made with a focused group discussion and in depth interview with selected participants. This mixed design has an advantage of triangulation of data collection by questionnaires from the participant. The purpose of the triangulation was mainly to get adequate information so as to be able to look into the major psychosocial problems of women with this disease.

3.1 Sampling Technique

The hospital and participant selection are described below

3.1.1 Hospital Selection

There is only one government hospital in the country working intensively on women with breast cancer. Tikur Anbessa hospital was selected purposively and used as a site for the study. It must be clear that women with breast cancer coming to this hospital are not representative of women with breast cancer population for quite a few reasons. (Dye, 2008) study showed that in Ethiopia not many women know about the existence of the medical help for breast cancer (lack of awareness/lack of knowledge about breast cancer). Some of those who are aware of the existence of the medical help refuse to accept it in principle and go elsewhere to seek help / traditional, spiritual healer. The medical alternative is in acute shortage in the country, centers are available only in Addis Ababa and other provincial cities and there are many problems which prevent a lot of patients from coming or being brought to hospital.

3.1.2 Techniques for selecting women with breast cancer

Patients participating in the study consisted of a convenient sample of 64 women who had received a diagnosis of breast cancer. And follow up visit at Tikur Anbessa hospital, all of the patients were approached during one of their routine follow-up visits.

3.2 Variables included in the study

In order to meet the objective of the research, there were four dependent variables such as depression, anxiety, social stigma and lack of social support and three independent variables age, types of treatment and time since diagnosis.

3.3 Instruments

To get the desired information regarding psychosocial problems of women with breast cancer the following instrument were used.

3.3.1 Hospital anxiety and depression scale

The HADS was developed from its predecessor, the Leeds Scale for Depression and Anxiety, specifically for use with medically ill patients. To achieve this aim, the developers committed items related to somatic problems, which potentially could be confounded with physical illness. It is a short, 14-item self reported scale and provides scores on two dimensions, depression and anxiety. The seven depression items are enjoyment of things, bring a sense of humor, cheerfulness, feeling slowed down, loss of interest in appearance, looking forward to enjoying things, and enjoyment of books, radio, or television. The seven anxiety items comprise: feeling tense and wound up, feel something awful is about to happen, have worrying thoughts, sit at ease and feel relaxed, having 'butterflies' in stomach, feel restless, have sadden feelings of panic. The authors compared scores on these self-report scales with their own ratings of depression and anxiety severity rather than with formal diagnoses. From their analyses, they recommended cut-off scores on each of the two scales of 11 for 'probable' caseness (love, 2004).

Reliability

HADS instrument reliability study done by (Thomas et al, 2005) show that Chronbach's alpha for the tool was 0.85, while for the anxiety and depression subscales it was 0.81 and 0.71, respectively.

Test- retest reliability

Mystakidou (2004) indicated that Hospital anxiety and depression scale scores were remarkably consistent across time ($p < 0.0005$).

Internal consistency

It has been recommended that internal consistency, as measured with Chronbach's coefficient should be at least 0.60 for a self–report instrument to be reliable and at least 0.80 when used as a screening instrument (Nunnally & Bernstein,1994). Several studies conclude that HAD scale fulfils these criteria. Chronbach's apha has been found to be 0.78 – 0.93 for HAD-A and 0.82 – 0.90 for HAD-D (Moorey et al 1991; El-Rugaie and Absood, 1995; Lisspers et al 1997;Wettergren et al, 1997; Savard et al, 1998; Hammerlid et al, 1999; Stordal et al 2001 cited in Mykletun et al 2001). The stability of the findings on the internal consistency of the HAD scale in various languages supports the robustness of the scale as a screening instrument.

Validity

Several studies have documented and confirmed its validity in varying clinical settings and translations HADS was found to be cross – culturally stable as the original tool. Mystakidou et al (2004) found that HAD scale discriminated well between subgroups of patient, indicating that anxiety scores were significantly higher in patients with a poor performance status compared with patients with a good or moderate performance status.

Concurrent Validity

Mystakidou et al (2004) study show that concurrent validity revealed that, compared to the commonly used questionnaire STAI-S for anxiety, the correlations to HAD- Anxiety and HAD- Depression were moderate to high.

Scoring

Snaith (2003) state each item had been answered by the patient on a four point (0 - 3) response category, so the possible scores ranged from 0 to 21 for anxiety and 0 to 21 for depression. An analysis of scores on the two subscales of a further sample in the same clinical setting enabled provision of information that a score of 0 to 7 for either subscale could be regarded as being in the normal range, a score of 11 or higher indicating probable presence ('caseness') of the mood disorder and a score of 8 to 10 being just suggestive of the presence of the respective state.

3.3.2 Medical Outcome Social Support Scale

MOS social support survey a total of 19 functional support items hypothesized to measure emotional, informational, tangible, affectionate support, and positive social interaction was developed to assess the perceptions of the availability of different functional aspects of support (Sherbourne and Stewart, 1991 as cited in Shyu, 2004). Emotional support contains 4 items measuring the expression of positive affection, empathetic understanding, and encouragement feeling expression. Informational support contains 4 items measuring the provisions of advice, information, guidance or feedback. Tangible support contains 4 items measuring the offering of material aid or behavioral assistance. Affectionate support contains 3 items measuring the expression of love and affection. Positive social interaction contains 4 items measuring the availability of other persons to share fun with you. For each item, the respondent was asked to indicate how often each support was available to them if they needed them.

Reliability

Yu et al (2004) study shows that MOS-SSS was found to be a reliable measure, with a reported Chronbanch's alpha of .97 for the overall scale and .91 - .96 for the four subscales. The 1year test-retest reliability was as high as .78.

Internal consistency

Nunally and Bernstein (1994) as cited in Yu et al (2004) internal consistency of the MOS-SSS was a Chronbach's alpha of .98 for the overall scale and .93 to .96 for the subscale. The items were homogeneous to the scale, as there was no significant increase in the Chronbach's alphas when any item was left out. The MOS-SSS was also supported as a stable measure, with an intra-class correlation coefficient.

Concurrent validity

Shyu et al (2004) better role performance related health outcomes, including higher scores in role physical and role emotion subscale in MOS- social functioning, were found to have a stronger association with a higher score in the tangible social support subscale than with other types of social support.

Construct validity

Yu et al (2004) study finding indicated that construct validity by confirmatory factor analysis demonstrated the four-factor structure the 19 items in measuring the support functions. High standardized factor loadings of each item to the respective subscales of tangible supports (.76-.93), affectionate support (.86-.92), emotional and informational support (.82-.92), and positive social interaction (.91-.93) were reported. The structure of the MOS-SSS was further affirmed by convergent and discriminant validity.

Scoring

Response options were: none of the time (1), a little of the time (2), some of the time (3), most of the time (4), and all of the time (5). For each scale, simple algebraic sums

were computed, and then the raw scale scores were transformed into a scale of 0 to 100. The higher the score, the better the perception of social support is. The reliability and validity of the measure in an American population of adult with chronic illness has been established Sherbourne & Stewart (1991).

3.3.3. Experienced Social Stigma Scale

Due to the lack of an appropriate stigma measure in the literature for cancer patients the researcher adopts from other research Koller et al (1996) included some item and note that both the concepts of experienced social stigma and negative affect relate to negatively toned aspects of every day personal experience.

Reliability

The reliability of the instruments was assessed by Chronbach alpha using the data collected during the pilot survey yielded reliability coefficient of .83 in a four point scale.

Concurrent Validity

Koller et al (1996) study shows that wording of all scales was straightforward and, at face validity, captured the conception underlying them. In addition, correlations with other scales provided information regarding concurrent and discriminate validity.

Scoring

16 items measured on a four- point scale ranging from 0 Very often, 1 Often, 2 Sometimes and 3 Never adopted from Koller et al (1995). The four scale positive and negative affect and social stigma have specifically adopted for this study from item 9 to 16 reversed the value of item. A higher score for individual are feel more stigmatized and lower scorer less stigmatized feeling.

3.3.4 Focus Group Discussion and Case Study

Focus group discussion guide was also developed for women with breast cancer in order to discuss the coping mechanisms mostly used by the patients. And in-depth interview guide was also developed for selected women with breast cancer who received radiotherapy treatment to discuss the psychosocial problems.

3.4 Pilot testing

The researcher first translated the three scales (HADS, MOS-SSS and ESS) in to Amharic. A psychologist from Addis Ababa University translated the items independently, the translation was compared and improvements in phrasing were made in some of the items in the researcher translation. The improved translation was then pilot tested on 20 women with breast cancer who are in follow up treatment program. Women with breast cancer took part in the piloting were selected through convenient sampling method.

The purpose of the pilot study was to collect data that would be used for screening items measuring the level of anxiety, depression, social support availability, and level of social stigma. It was also to find out if the wording, instruction and response categories of the instrument as a whole were clear and comprehensible to respondents. Face –to – face contact with close family members was done and respondents were asked if any emotional problems after diagnosis, to what extent their support is helpful, and what are the mostly used coping mechanisms by the patient and the like. The researcher also noted respondent's levels of understanding the question while reading and questions which were frequently asked for further clarification were improved. Finally, the responses of the pilot group were subjected to item analysis, correlation of items with the overall score was computed and the results of the item analyses are presented below in a summary form.

Reliability of the instruments was assessed by Chronbach alpha using the data collected during the pilot survey. The computation yielded reliability coefficient of HADS 0.84, (0.77 anxiety, 0.75 depression), ESSS 0.85 and MOSs scale 0.93.

3.5 Ethical Consideration of the Research

Ethical review of the instrument was made in Tikur Abessa Hospital by director of radiotherapy before administering the questionnaire. The researcher explained the objective and ethical consideration of the research to the respondents in written and oral form make sure that they understood everything. The researcher informed all study participants that they have the right to withdraw from the study at any time and assured the respondents in complete privacy. Finally, before administration of the questionnaire the researcher expressed thanks to them for their willingness to participate in the study.

3.6 Procedure of Data Collection

After the scales were improved and the necessary changes have been made, the final survey was carried out from March 1- April 30, 2010 in the selected hospital. Almost similar procedures were followed in the selected hospital while conducting the final survey. And the procedures used to select women with breast cancer were stated orderly as follow:-

- Getting a permission from the medical director of TAH and also director of radiotherapy
- Finding volunteer nurses to help the researcher in the process of obtaining the target samples
- Selecting sample using convenient sampling method
- Getting subjects and introducing the researcher and the purpose of the research

- Orally inform and get the informed consent so as to assure that they are willing to participate in the study
- Read the questionnaire if they can't read
- Restating questions that were not clear or difficult to understand
- The three scales took 20- 30 minutes on average
- Finally, making sure that all the questions are answered and give thanks

In order to collect data from women with breast cancer who receive radiotherapy treatment selected from Tikur Anbessa Hospital the following procedures were followed:-

- Getting permission letter from the medical director TAH and also director of radio therapy
- Selecting samples using purposive sampling method
- Getting subjects and introducing the researcher and the purpose of the research
- Obtaining verbal informed consent to assure that they are willing to participate in the study
- Conducting the focus group discussion with participant women with breast cancer
- In-depth interview with women with breast cancer who receive radiotherapy
- Making sure that all the questions are answered
- Giving thanks

3.7 Method of Data Analysis

SPSS version 15.0 was used to enter, clean and analyze the quantitative data. Questionnaires that were not properly filled or inconsistent were excluded. Analysis of variance was employed to find out the specific effects of each independent variable on the psychosocial problem of women with breast cancer.

- Level of Anxiety

  Age x types of treatment x time since diagnosis

- Level of Depression

  Age x types of treatment x time since diagnosis

- Level of Social Stigma

  Age x types of treatment x time since diagnosis

- Level of lack in Social Support

  Age x types of treatment x time since diagnosis

Analysis of variance is selected because it is helpful to address the specific aims of the study, that is, difference among groups in relation to the psychosocial problems. Qualitative descriptions were also used for semi-structured interview questions and case study. Supplementary analysis using simple correlation was made in order to examine relationships among the four dependent measures.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

The data presentation and analysis section of the paper provides the basic details of data collected with their respective significance for the research conducted.

4.1 Demographic Characteristics

Table 1 - Demographic Characteristic of women with breast cancer

Characteristics of WWBC	Category	Frequency	Percent
Age (year)	20 – 49	37	62
	50 – 79	23	38
Educational status	Primary and less	22	37
	Secondary and above	38	63
Marital status	Married	43	72
	Single	17	28
Types of treatment	Chemotherapy	30	50
	Tamoxifen	30	50
Time since diagnosis (years)	Less than 3	47	79
	Greater than 3	13	21

As can be seen from table 1above, out of the total women's with breast cancer samples (N=60). 37(62%) subjects were (20 – 40) while 23(38%) were above 50 years of age. The respondent's academic status shows that 63% of them were secondary school and above level, 37% of the informants had primary and less. Out of the total respondents treatment types, 50% were chemotherapy users while the rest 50% were tamoxifen. The respondent's regarding time since diagnosis, 79% were less than 3 years while the rest 21% were greater than 3years.

4.2 Psychological problems of women with breast cancer

4.2.1 Anxiety

The first research question whether women with breast cancer show anxiety or not a frequency table is performed and presented below

Table 2 - Anxiety level of women with breast cancer

Anxiety	Frequency	Percent
0 – 7 Normal	16	27
8 – 10 anxiety symptom	18	30
11 and above anxiety disorder	26	43
Total	60	100

As shown in table 2, 43 % of patients showed anxiety disorder, 30% anxiety symptom and only 27% of participants showed clinically non significant level of anxiety.

4.2.2 Depression

Table 3 – Depression level of women with breast cancer

Depression	Frequency	Percent
0 – 7 Normal	16	27
8 – 10 depression symptom	16	27
11 and above depression disorder	28	46
Total	60	100

Table 3, above indicates that 46.6% of the informants showed depression disorder. 27% of the participants showed depression symptom and 27% of the respondents experienced depression in normal level.

4.3 Social Problems of women with breast cancer

4.3.1 Social Stigma

Table 4 – Social Stigma on Women with Breast Cancer

Social stigma		Frequency	Percent
0 – 15	non stigmatized	9	15
16 – 32	moderate stigmatized	37	62
33 - above	Severely stigmatized	14	23
Total		60	100

As shown in table 4 above, 62% of the participants showed moderate social stigma, 23% sever level of social stigma. Only 15% of the participants showed non stigmata.

4.3.2 Lack of Social Support

Table 5 – Lack of Social Support for Women with Breast Cancer

Lack Social support		Frequency	Percent
0 – 30	lack social support	9	15
31 – 62	Moderate social support	32	53
63 – above	Strong social support	19	32
Total		60	100

As shown in the above table, 53% of participant's responded having a moderate social support and 32% of patients responded having strong social support, only 15% were having lack of social support.

4.4 Differences in the manifestations of psychosocial problems

Differences in the manifestation of the psychosocial problems (anxiety, depression, social stigma and lack of social support) have been investigated to see if it is related with other variables. The next part of the result focuses on answering research questions raised in relation to differences.

4.4.1 Differences in the Anxiety level

For the research question, "Is there an age difference in exposure to anxiety?, analysis of variance was examined by taking anxiety as a dependent variable, patient's age as an independent variable.

Table – 6 Summary Table of One - Way ANOVA of Anxiety and age

	Sum of Squares	df	Mean Square	F
Between Groups	189.792	1	189.792	2.534
Within Groups	511.192	58	8.814	
Total	700.983	59		

As can be seen from table 6 above, there was no statistically significant mean difference between the two groups of women with breast cancer groups of age (20 – 49) and (50 – 79) in terms of anxiety manifestation, $F(1,58)= 2.534$, $p<0.05$

Table – 7 Effects of treatment on Anxiety

	Sum of Squares	df	Mean Square	F
Between Groups	46.817	1	46.817	4.151
Within Groups	668.167	58	11.279	
Total	714.983	59		

As shown in table 7 above, the results indicated that there was statistically significant mean difference between the two groups' users of chemotherapy and tamoxifen in terms of anxiety manifestation, $F(1,58)= 4.151$, $p<0.05$

Table 8 - Effects of time since diagnosis on Anxiety

	Sum of Squares	df	Mean Square	F
Between Groups	46.817	1	46.817	4.064
Within Groups	668.167	58	11.520	
Total	714.983	59		

As shown in table 8, the result indicated that there was statistically significant mean difference between the groups < 3years and > 3years in manifestation anxiety, $F(1, 58) = 4.064$, $p<0.05$

Table 9 – Three – Way Summary Table ANOVA on WWBC Anxiety level

Dependent Variable: Anxiety level

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	266.438(a)	5	16.301	6.622	.000
Intercept	2061.021	1	2061.021	256.119	.000
Age	47.383	1	47.383	5.888	.019
Treatment	16.507	1	16.507	2.051	.158
Time	15.921	1	15.921	1.978	.165
age * treatment	3.304	1	3.304	.411	.524
age * time	10.658	1	10.658	1.324	.255
treatment * time	.000	0	.	.	
age * treatment * time	.000	0	.	.	
Error	434.545	54	8.047		
Total	6135.000	60			
Corrected Total	700.983	59			

a R squared =.380(Adjusted R squared = .323)

The figures in the three – way analysis of variance are examined, at above table 15. It shows that the main effect age was found statistically significant and the test was not statistically significant for other variables.

4.4.2 Differences in the Depression level

Based on the research question, "Does the age of a patient make any differences in exposure to depression?" to answer the question, analysis of variance was carried out taking depression as a dependent variable and age of the patient of women with breast cancer as an independent variable.

Table 10 - Summary Table of One – Way ANOVA on WWBC Depression level and age

	Sum of Squares	df	Mean Square	F
Between Groups	74.014	1	74.014	6.862
Within Groups	625.586	58	10.786	
Total	699.600	59		

The above table shows that there was statistically significant difference between participant women with breast cancer on depression across different age groups (20 - 49 and 50 - 79), $F(1,58)= 6.862$, $p<0.05$

Table – 11 Summary Table of One - Way ANOVA of Depression and the treatment type

	Sum of Squares	df	Mean Square	F
Between Groups	48.600	1	48.600	4.330
Within Groups	651.000	58	11.224	
Total	699.600	59		

The above table shows that there was statistically significant difference between participant women with breast cancer on depression across the treatment type used by patients (chemotherapy and tamoxifen), $F(1, 58) = 4.330$, $p<0.05$

Table 12 - Summary Table of One - Way ANOVA of Depression and time

	Sum of Squares	df	Mean Square	F
Between Groups	25.785	1	25.785	2.220
Within Groups	673.815	58	11.617	
Total	699.600	59		

Table 12 shows no statistically significant difference between the groups. It means that women with breast cancer who diagnosis at any different time group, F (1, 58) = 2.220, p<0.05

Table 13 – Three – Way Summary Table ANOVA on WWBC Depression level

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	141.228(a)	5	28.246	2.732	.028
Intercept	2392.350	1	2392.350	231.364	.000
Age	9.733	1	9.733	.941	.336
Treatment	27.100	1	27.100	2.621	.111
Time	5.058	1	5.058	.489	.487
age * treatment	.251	1	.251	.024	.877
age * time	13.689	1	13.689	1.324	.255
treatment * time	.000	0	.	.	.
age * treatment * time	.000	0	.	.	.
Error	558.372	58	10.340		
Total	6462.00	60			
Corrected Total	699.600	59			

b R Squared = .202 (Adjusted R Squared = .128)

When value of the three – way analysis of variance are examined, it is found in table 13 that, the interaction effects (age, time since diagnosis, and treatment) indicated no statistically significant difference.

4.4.3 Differences in the Social Stigma

In order to answer the research question, does the age of the patient make a difference in exposure to social stigma? Analysis of variance was examined taking social stigma as a dependent variable and age of the patient as an independent variable.

Table 14 – Summary Table of One – Way ANOVA on WWBC Social Stigma and age

	Sum of Squares	df	Mean Square	F
Between Groups	8.249	1	8.249	.105
Within Groups	4543.934	58	78.344	
Total	4552.183	59		

The above table indicates that there is no statistically significant mean difference between the age groups on level of exposure in social stigma, $F(1, 58) = .105$, $p<0.05$

Table 15 - Effects of types of treatment on Social Stigma

	Sum of Squares	df	Mean Square	F
Between Groups	20.417	1	20.417	.261
Within Groups	4531.767	58	78.134	
Total	4552.183	59		

Table 15 indicated that there was no statistically significant difference in social stigma level of women patients with breast cancer patients taking different types of treatment (chemotherapy and tamoxifen).

Table 16 – Effects of time on Social Stigma

	Sum of Squares	df	Mean Square	F
Between Groups	79.350	1	79.350	1.029
Within Groups	4472.833	58	77.118	
Total	4552.183	59		

As shown in table 16 above, the results indicates that there was no statistically significant mean difference among women with breast cancer in different groups F (1, 58) = 1.029, p<0.05

Table 17 – Three – Way Summary Table ANOVA on WWBC social stigma

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	303.135(c)	5	60.627	.770	.575
Intercept	16146.713	1	16146.713	205.204	.000
Age	156.844	1	156.844	1.993	.164
Treatment	6.749	1	6.749	.086	.771
Time	54.401	1	54.401	.691	.409
age * treatment	15.679	1	15.679	.199	.657
age * time	207.032	1	207.032	2.631	.111
treatment * time	.000	0	.	.	.
age * treatment * time	.000	0	.	.	.
Error	4249.048	54	78.686		
Total	40911.000	60			
Corrected Total	4552.183	59			

c R Squared = .067 (Adjusted R Squared = -.020)

According to table 17 above, the three main effects (age of the patient, type of treatment used by the patient and the time since diagnosis) as previously seen were found to be not significant at an alpha 0.05 level. In general, the main and interaction effects of the three independent variables are examined. All the three independent variables (main effects) are unable to bring a statistically significant difference consistently in all the analysis made above. All the interactions also are not significant.

4.4.4 Differences in the Lack of Social Support

In order to answer the research question, "Is there age difference in exposure to lack of social support?" analysis of variance is examined taking lack of social support as a dependent variable and age of the patient as an independent variable.

Table 18 – Summary Table of One – Way ANOVA on WWBC lack of social support and age

	Sum of Squares	df	Mean Square	F
Between Groups	69.294	1	69.294	.256
Within Groups	15713.556	58	270.923	
Total	15782.850	59		

As can be seen from table 18 above, there is no statistically significant mean difference between two age group (20 -49) and (50 – 79) in terms of experienced lack of social support, $F(1, 58) = .256, p<0.05$

Table 19 – Effects of treatment type on lack of social support

	Sum of Squares	df	Mean Square	F
Between Groups	120.417	1	120.417	.446
Within Groups	15662.433	58	270.042	
Total	15782.850	59		

As shown in table 19 above, the result indicated that there is no statistically significant mean difference between the groups in facing lack of social support problem, $F(1, 58) = .466, p<0.05$

Table 20 – Effects of time since diagnosis on lack of social support

	Sum of Squares	df	Mean Square	F
Between Groups	244.017	1	244.017	.911
Within Groups	15538.833	58	267.911	
Total	15782.850	59		

As can be seen from the above table, there is no statistically significant mean difference between the two groups in terms of experienced lack of social support, F(1,58) = .911, p<0.05

Table 21 – Three – Way Summary Table ANOVA on the Lack of Social Support

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1569.687(b)	5	313.937	1.193	.325
Intercept	96287.414	1	96287.414	365.824	.000
Age	956.631	1	956.631	3.635	.062
Treatment	50.640	1	50.640	.192	.663
Time	145.032	1	145.032	.551	.461
age * treatment	22.578	1	22.578	.086	.771
age * time	1142.926	1	1142.926	4.342	.042
treatment * time	.000	0	.	.	.
age * treatment * time	.000	0	.	.	.
Error	14213.163	54	263.207		
Total	200265.000	60			
Corrected Total	15782.850	59			

d R Squared = .099 (Adjusted R Squared = .016)

When value of the three – way analysis of variance are examined, it is found in table 21 that, the interaction effects (age and time) indicated statistically significant difference. But the rest interaction effects indicated statistically no significant difference. To sum up, an attempt was made to examine the main and interaction effects of the three independent variables up on the reported lack of social support. The main effects exhibited no statistically significant differences.

Table - 22 Correlations among the four Dependent Variables (Anxiety, Depression, Social Stigma and Lack of Social Support)

Psychosocial	Anxiety	Depression	ESS	MOS
Anxiety	1	.738(**)	.063	-.043
Depression		1	.143	-.094
ESS			1	-.810(**)
MOS				1

** Correlation is significant at the 0.01 level (2-tailed).

We can see there is strong positive correlation between anxiety and depression and also strong negative correlation between social stigma and lack of social support. There is no significant correlation regarding psychological and social relation.

4.5 The Coping mechanisms that women with breast cancer use mostly

In this part, information gathered through Focused Group Discussion concerning coping mechanisms with patients and semi – structured interview with close family members were presented.

I. Response of women with breast cancer

Different issues were raised with groups and discussed but based on the research objectives the participants major responses focused on the coping mechanism which were mostly used by women's with breast cancer. Respondents indicated that even if it is difficult to predict what will happen about tomorrow but always being religious was their hope.

The following quotes describe what are the coping mechanisms that women with breast cancer mostly used.

P1 - *"What I used mostly to cope with this disease is by thinking all situations positively, strictly follow up the doctors instructions, avoid using traditional medicine and gathering the necessary information which helps me to fight the disease. The other thing is being strong and work hard such as walking, cooking so as to develop self resistance. I accomplish all the jobs myself because others may become bored. In addition to that I made myself happy by listening to the radio, appreciating nature, giving love to others and pay tribute to others. I do not blame anyone for my sicknesses even myself, because it is part of life. Most of all being optimistic can help me to cope with this disease.*

P2 – *"I really feel sad every day when I thought about my children because they do not have father. He left them when I became sick. My first son is 13 years old since the day his father left us; he is the sole bread winner working as a daily labourer. Survival seems very hard to me and I wish to die instead of seeing such situations but I wish to stay in life to serve my children because no one supports them. And I believe in God, he will never let me down".*

P3 – *"I lost all my hope and I do not have the chance to see my children grow old. My always fear is; who is going to help them and stand by their side? But my God father always advised me "instead of crying and being sad, believing in God and left everything for God is better" so I believe God can take care of them better than me and helps me to survive".*

P4 – *"I forget things quickly because my stomach is empty and I am afraid to beg people to help me because they may be bored and hate to see me. So until now I am alive and I do not know how to handle it. Only God is my hope for my future".*

II. Case Study

In order to answer the research question "Does the type of treatment used by patients such as chemotherapy, tamoxifen and radiotherapy bring any difference in patients' psychosocial problems?" Because of small number of women with breast cancers who use radiotherapy, the researcher conducted a case study with four participants. All participants first perceived the disease as a tumor which can easily be removed rather than a life threatening disease.

The following quotes describe what the first feeling of the patients had been when they were diagnosed with breast cancer.

> Participant (E – age 30) – *"Before I got married there was a tiny tumor around my chest I did not give any consideration first but after I got married and had my first child the tumor become large in size and I felt some pain I believed it will disappear easily. I felt shock, anger and sadness after I heard one of my breasts should be removed."*

> Participant (A - age70) – *"About the feeling I was not surprised because I spent too many types of disease and it is just a tumor as the doctors said I will be cured thanks to God all of my children's are getting old enough I left nothing to worry."*

> Participant (F – age 40) – *"I received a diagnosis after some tumor appeared around my breast. It didn't bothered me at first but some years later I felt pain, because I have no idea or any knowledge about breast cancer even never heard of it and at first the doctors told me it is a curable disease and I am lucky because the cancer is not spread to other part of my body, so it was nothing for me at first, but after I heard that I should have surgically removed one of the breasts It made me feel angry, sad I mean not simple sadness I was crying for months very depressed thinking what will be the future I don't have a child even never got married just run to fulfill some of my wishes and losing a breast for a women means very difficult, now a day's I stop wearing the clothes I want, not only I lost my breast but self confidence, health, happiness, job every part of my life gets disrupted. What makes me worry the most is how I will go to tell my family, still it is difficult tell them the bad news."*

Participant (T – age 45) –*"I was abroad for work. I came to Ethiopia to visit my children and I found a tumor under my arm, had a diagnosis in one clinic and referred me to TAH, I did not think it is a sever disease. The doctor told me that it already changed to cancer I never expected as such serious until began the cancer treatment because before the treatment there was no pain. How it made me feel? Especially after began treatment it really made me sad, and hopeless especially after I heard the cancer spread all over my bone couldn't walk, couldn't sit just waiting the last day. "*

Who did you turn for support?

From (n = 4) participant half responded that, they have strong family support since diagnosis, while the remaining half indicated that they lack in family support.

Participant (E – age 30) - *"No one except my mother, she has taken care of my child, I did not pay a rent for house even if I did not have a job she fed me for the past three years and until now. Because my husband left out from home and having a baby without any income was difficult for me so I went back to my mother's house though it made me felt guilty and loser."*

Participant (A – age 70) – *"My children, I lost my husband before 15 year since then all of my children support me financially or in anything I want."*

Participant (F – age 40) – *"No one, because I did not tell anyone."*

Participant (T – age 45) - *"My families, since the beginning until this day they are with me but do not ask me about medical helper especially nurses I have no idea may be because they are very busy, feel tired or personal problem they didn't treat (talked) to us well."*

What bothered you during your breast cancer experience?

The result shows that 4 of them were responded that receiving chemotherapy was very difficult experience than any other treatment.

> Participant (E – age 30) - *"What really bothered me by now is, how could I finish my treatment safely? I don't want anything to interrupt me just to finish as soon as I can. And what really makes me think more about the reoccurrence of the disease I lost one of my breasts and after that still the tumor is found again and it makes me worry too much what will happen next is my always fear. Taking chemotherapy treatment - was really devastating even if it treats cancer it was the worst medicine that I have ever taken. It hurts me physically, socially; I mean the relationship with my husband. After taking chemotherapy it was really difficult to sleep with him again."*

> Participant (A – age 70) – *"The treatment was really bothersome especially chemotherapy, I suffered a lot because it left my hand swell, diarrhea, hair loss, vomiting. It really hurts me a lot; To the contrary radiotherapy is a better treatment.*

> Participant (F – age 40) – *"chemotherapy treatment was devastating I even hate the room, after I received the medicine the whole day putting my mouth to a plate vomiting I had , hair loss, diarrhea, mouth sores, loss of appetite , darkness of finger, felt so tired. When you come to social life I stopped working since I lost my breast because it was a little bit difficult for me to go back there, I just preferred to be alone. To the contrary it hurts me sitting without job, financially and psychologically it was not good to me. Before being diagnosed I was happy and free to speak with everyone, but now I limited myself from all social interaction."*

> Participant (T – age 45) – *"What really bothered me was that I had strong belief to survive but just because the doctors postponed my appointment as they said due to shortage of medicine or other reason the disease spread to my whole body and they terminated the medicine, I took chemotherapy 5 times and stopped the treatment because of shortage of blood in my body, then I begin to feet back pain, stop walking, the pain became more serious than ever, then after I began to use radiotherapy my health improving and become good."*

To what extent you and your family discuss about the disease?

All the participant women's responded that they never talked about it because of many reasons; only one participant responded that her children discussed about it.

> Participant (E – age 30) – *"Not at all, my mother always stops me not to speak because she believes that the tumor will spread to other body and will be difficult to treat."*
>
> Participant (A – age 70) – *"My children discuss with each other but I have no idea about it."*
>
> Participant (F – age 40) - *"Not at all, I want to talk about it with no body."*
>
> Participant (T – age 45) – *"Not at all, because of fear to discuss about the disease I do not want no one to mention about it because I have been suffering so I don't want no one to mention about it at all ."*

Stigma

From the participants three of women's responded that they did not face stigma. Only one participant responded that she had faced stigma.

> Participant (F – age 30) - *"I had a baby and I believe I should feed him my breast, so it made things worse because my husband started speaking some bad words like "do not feed the child a disease". But I was feeding him the healthy one because it is helpful for the child's health. People around my place started to stigmatize me because I lost my hair and weight, the color of my nail changed, I was vomiting after treatment, I lost appetite and other things made them think I had HIV and everybody asked me if I had HIV test."*

CHAPTER FIVE

DISCUSSION

The overall objective of the research is to explore psychosocial problems of women with breast cancer.

5.1. Occurrence of Psychosocial Problems in women with breast cancer

5.1.1 Psychological problems

I. Anxiety

The result indicated that, 27% of women with breast cancer showed normal level of anxiety, 30% anxiety symptom and the remaining 43% sever anxiety disorder. It means that 73% shows anxiety symptom to higher level of anxiety disorder and this finding is consistent with many previous researches, for instance, Segrin et al (2007). Anxiety is one of the dominant psychological problems associated with breast cancer. These conditions present clinically significant symptoms of anxiety in response to identifiable stressors, which result in marked impairment in social or occupational functioning. They are particularly problematic, as they are the disorders most likely to go unrecognized and untreated in these patients.

II. Depression

One of the specific objectives of the present study was to examine whether women with breast cancer show depression. And the result indicated that 27% of women with breast cancer showed normal level of depression, similarly 27% of women with breast cancer showed depression symptom, the remaining 46% show severe depression. This is consistent with the previous studies finding by Lueboonthavathai (2007). Depression in breast cancer ranged from 1.5% to 46% the wide range occurrence of depression in breast cancer.

5.1.2 Social problems

I. Social Stigma

One of the specific objectives of the study is to investigate if women with breast cancer face social stigma. The result indicates that 61.7% face moderate stigma, 23.3% face a severe stigma 15% face no stigma. It means that women with breast cancer (85%) face stigma and the finding was consistent with many previous researches, such as Dye et al (2008). It explains that women with breast cancer in Ethiopia feel sense of isolation and stigma, and avoid getting diagnosed, hide their diagnosis once made, or become embarrassed by their symptoms.

II. Lack of Social Support

The present study indicates that 53% of women with breast cancer got moderate social support since diagnosis, 32% of patient's strong social support and the remaining 15% of patients got poor social support. It means that women with breast cancer (68%) shows poor to moderate social support documented by Beyene (1999) as cited in Dye et al (2008) women with breast cancer lack social support outside close family members.

5.2 Differences in the manifestation of psychosocial problems

5.2.1 Anxiety and Depression

I. Age

The present study result indicated that there was no statistically significant age difference in experiencing anxiety. The result shows that women with breast cancer with irrespective of their age difference seem to experience anxiety. This is consistent with the finding by Maraste et al (1992). I.e. In the younger and older age groups the occurrence of severe anxiety was not significantly different in mastectomies or conservatively operated patients.

The present study also indicated that, there was statically significant age difference in experiencing depression. The result shows that women with breast cancer among the age group (20 – 49 and 50 – 79 years) experience different levels of depression. This result coincide with other past finding of higher levels of depressive symptoms among unmarried and childless women patients, evidence that age is inversely related to distress, such that younger women report more symptoms of depression than older women (Stanton et al., 2000) cited in Compas and Luecken (2002).

II. Types of Treatment

The result of the present study indicates that there was statistically significant difference between two types of treatment i.e. chemotherapy and tamoxifen in experiencing anxiety and depression. This result coincide with some other findings for instance, Hason (2000). The study reported that women receiving chemotherapy have reported increased levels of psychological problems such as anxiety and depression, difficulties with psychosocial function and increased levels of uncertainty when compared with women not receiving chemotherapy.

III. Time since diagnosis

The finding of the present study indicates that there is statistically significant difference in experiencing anxiety in different groups. This result agrees with finding, Baider et al (2004). The study shows that 20% - 38% of women who receive a diagnosis of breast cancer experience high levels of anxiety disorder within the first year after diagnosis. But the present study indicates that there was no statistically significant difference in experiencing depression. This indicates that women with breast cancer with irrespective of their difference in time since diagnosis seem to experience similar level of depression. These results agree with finding by Hjerl et al (2003). This showed that there was no statically significant difference in depression between time differences in diagnosis.

5.2.2 Social Stigma

I. Age

The result of the present study indicates that, there is no statistically significant difference in age of the patient facing social stigma. The result indicates that women with breast cancer in any age seem to experience social stigma. This result agrees with finding by Kozikowski (2005) qualitative study with different age group experiencing stigma.

II. Types of Treatment

Investigation was carried out to determine if types of treatment variation brought significant difference in exposure to social stigma and the finding of the present study shows those types of treatment as an independent factor did not bring any significant difference in social stigma. Women with breast cancer face similar level of social stigma irrespective of difference in types of treatment. This is consistent with qualitative study finding by Kozikowski (2005) surgery, chemotherapy, radiation or tamoxifen any cancer treatment user of women reported experienced stigma.

III. Time Since diagnosis

The finding of the present study indicates that there was no statistical significant time since diagnosis difference in experiencing social stigma. The result shows that women with breast cancer with irrespective of their time difference since diagnosis (less than 3year and greater than 3years) seem to experience social stigma. For instance, the finding by Kozikowski (2005) qualitative study found out that with different women who were living with the disease experienced stigma.

5.2.4 Lack of Social Support

I. Age

To explore whether different age group of women with breast cancer brought variations in the availability of social support, analysis of variance was made. The finding indicates that no statistically significant differences observed among age groups. This indicates that women with breast cancer irrespective of age (below 50 and above 50 years of age) difference face lack of social support. This is consistent with the finding by Budin (1996) which indicated that the age of women with breast cancer is not significantly related to perceived social support.

II. Types of Treatment

The type of treatment used by women with breast cancer difference in experiencing lack of social support was not found statistically significant. This means both chemotherapy and tamoxiefn user of women with breast cancer showed in which similar level of lack of social support. This is also a case in the findings by Budin (1996) that there were no significant differences perceived in social support, or types of treatment used by breast cancer patients who were receiving radiation therapy as compared to those who were not or those with reconstruction compared to those without. Those receiving chemotherapy as compared to those who were not receiving had significantly higher scores on the perceived social support.

III. Time since Diagnosis

Analysis of variance was made to see if there is time since diagnosis of breast cancer difference while facing lack of social support. And it was found that there was no statistically significant time since diagnosis. The difference indicates that both categories (less than 3 years and above 3years) had similar level of lack of social support.

5.3 Coping mechanisms of Women with Breast Cancer

The information obtained from women with breast cancer and with their close family members rendered is discussed below

5.3.1 Focus Group Discussion among women with breast cancer

According to the result from this discussion participant women's with breast cancer indicated that mostly their use of coping mechanism is dependent on religion, positive thinking and hard working. This result is in line with Gall et al (2009), breast cancer patients used religious strategies more frequently than women with a being diagnosis; however, the patterns of use were similar across time for the majority of strategies.

5.3.4 In Depth interview among Women with breast cancer who receive radiotherapy

The results obtained from in depth interview among women with breast cancer patients followed radiotherapy treatment. The majority of the patients had no awareness about breast cancer as well as the seriousness of the illness until they began the cancer treatment. When this result is compared to the finding by (Dye et al, 2008) it was evidenced that women in Ethiopia typically know nothing about breast cancer, and in fact, have never heard of the disease at all.

The present study indicated that, women below age 50 had experienced psychological difficulties such as felt shock, grief, loss, anger, hopelessness, loss of happiness and lack of confidence after they had their breast surgically removed. Especially women who did not have their own children and never got married face strong psychosocial difficulties than these women above age 50. This is consistent with the finding by Wong-Kim and Bloom (2005) compared to older women who states that young women have more

difficulty adjusting to the breast cancer diagnosis, and report more symptoms of psychological and social problem.

The result obtained from the present study show that half of the participants had strong social support. On the contrary, the remaining participants responded that there is lack of social support after diagnosis of breast cancer. It has also been reported by half of the respondents that they had a divorce experience after their breast was surgically removed. This is consistent with the qualitative findings by Kozikowski (2005) states that after treatment the women were more tired needed help and maintaining home they were also responsible for cooking, cleaning and caring for everyone who lived in their home. Study done by Gilbar and Zusman (2007) also found that in the case of women who have cancer, the spouse's vulnerability is heightened because the husband finds himself in a double and conflictive role.

Respondents in the present study argued that destitute cancer patients lack organizational support i.e. governmental and non – governmental organizations do not welcome to help them. Because there was no fund for them so the organization prefer the patients to be HIV carriers instead of cancer patient to getting the support they want.

Chemotherapy cancer treatment reported by patients in the present study had serious physical, social and psychological problems. This is consistent with finding by Love (2004), chemotherapy is a major stressor; several studies have reported that between one quarter and one third of women undergoing chemotherapy experienced psychosocial problems.

Majority of participants responded that they never discussed about the issue of breast cancer, the reason was lack of knowledge about the cancer. When they talk about breast cancer, as they believe that the disease can spread all over their body, fear of

stigma, and fears to talk for family are some of the reasons. This is consistent with qualitative finding by Kozikowski (2005), he said that some women worried that their diagnosis would make them a physical and psychological burden to the family. And some women perceived their diagnoses and treatment "my problem" and kept it a "secret," choosing to deal with it privately. Considering cancer as a contagious disease people who are not cancer patients stigmatize cancer patients as HIV carrier when they lose weight and hair. This is consistent with qualitative finding by Kozikowski (2005) some women worried they would be physically deformed after the loss of a breast, or labeled as a cancer patient with hair loss after chemotherapy.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 SUMMARY

The overall objective of this research is to explore the psychosocial problems of women with breast cancer at Tikur Anbessa Hospital in Addis Ababa. More specifically, the objectives of the study are:

- To identify whether women with breast cancer show (experience) psychological problems such as depression and anxiety,
- To identify whether women with breast cancer face social problems such as social stigma and lack of social support,
- To assess the most commonly used coping mechanisms,
- To assess if there is any counseling service that provides support for women with breast cancer
- To examine if the age of the patient (less than 50 or greater than), treatment types used by the patient such as (chemotherapy, tamoxifen and radiotherapy) and the time since diagnosis (less than 3 or greater than), has difference in exposure to psychosocial problems (anxiety, depression, social stigma and lack of social support)?

To answer such questions the study was conducted at Tikur Anbessa Hospital in Addis Ababa. The research was carried out on 60 women with breast cancer (on follow up visit) who receive chemotherapy and tamoxifen and on 4 women with breast cancer receiving radiotherapy. 4 close family members of women with breast cancer and 4 professional helpers working with cancer in radiotherapy department at Tikur Anbessa Hospital also took part in the study by means of interview.

In order to secure relevant data that help to answer the set questions, the following instruments were used:

- three scales i.e. hospital anxiety and depression scale, experienced social stigma scale and medical outcome social support scale,
- semi – structured interview with close family members of women with breast cancer and professional helpers,
- Focused Group Discussion with women on whom the study was conducted,
- In-depth interview with radiotherapy users' women with breast cancer.

Data obtained from the above mentioned sources were analyzed using both quantitative and qualitative methods of analysis. Data obtained from the three scales were intended to show the occurrence of the psychosocial problems (anxiety, depression, social stigma, and lack of social support). Percentages show the occurrence of the problem. Age of the patient, types of treatment used and differences in time since diagnosis were analyzed using analysis of variance method. A three way ANOVA was used to see the main and interaction effects. Data gathered from semi-structured interviews and in depth interview were analyzed using qualitative descriptions of the obtained responses.

The results regarding the occurrence of the psychosocial problems indicated that from the psychological aspect 30% of women with breast cancer showed anxiety symptoms and 43% anxiety disorder. While 27% of women with breast cancer showed depressive symptoms and 47% depression disorder, from the social aspect 62% of women with breast cancer face moderate social stigma and 23% face strong social stigma, and 53% of women with breast cancer available moderate social support 15% of patients lack in social support.

Results from the analysis of variance revealed that there was statistically significant differences between age of the patient and types of treatment with psychological problem i.e. anxiety and depression, in time since diagnosis there was statistically significant difference with anxiety contrasting to depression. Also the results from analysis of variance shows that there were no statistically significant difference between age of the patients, types of treatment and time since diagnosis in facing social problems i.e. social stigma and lack of social support.

The main and interaction effects of the three – way ANOVA, the main effect for age of the patient is found to bring statistically significant mean differences in anxiety level and the interaction (age of the patient and time since diagnosis) indicated statistically significant differences in lack of social support. But the rest main and interaction effects of the three – way ANOVA came up with statistically was not significant results.

The result obtained from the qualitative study revealed that most of participant women with breast cancer had lack of knowledge or awareness about breast cancer before the diagnosis. In addition to that, after diagnosis they prefer not to talk about the disease with other family members in the belief that the disease can spread all over their body. Lack of social support such as divorce, lack of helping organization for destitute women with cancer, lack of good communication with helping professionals, and un-proportional number of medical helpers are major problems reported by participants.

Cancer treatment chemotherapy reported by the participants had physical side effects on the patients such as weight loss, hair loss, sexual problem and others. Social problems like disagreement with others, isolation, and stigma are mostly mentioned, and psychological problems like anger, grief, fear of death, hopelessness. Patients reported that the treatment had painful side effects.

6.2 CONCLUSIONS

The major findings of the study are as follows:

- Women with breast cancer showed psychological problem such as anxiety and depression
- Women with breast cancer face social problems such as social stigma and lack of social support
- There was statistically significant difference between age groups (20 – 49 and 50 - 79) difference in experiencing anxiety and depression symptoms
- There was statistically significant difference between types of treatment (chemotherapy and tamoxiefn) in experiencing anxiety and depression symptoms
- There was no statistically significant difference between age of the patient, types of treatment and time since diagnosis in experiencing social problem i.e. social stigma and lack of social support.
- Majority of Ethiopian Women with breast cancer mostly used religion as a major coping mechanism
- There was no counseling or psychological service for women with breast cancer at Tikur Anbessa Hospital in radiotherapy department, professional helper tries to help these women by providing individual counseling while medical follow up.
- Majority of women with breast cancer in Ethiopia lack knowledge and awareness about breast cancer before diagnosis.
- There are insufficient helping organizations for poor cancer patients in the country. Helping organizations do not welcomes to help cancer patients because there is no fund for them and in that sense it is better being HIV carrier instead of cancer patient.

6.3 RECOMMENDATION

For the entire nation, there is only one hospital, four oncologists, and one cobalt machine for people in the country. This indicates that the issue about breast cancer is almost forgotten by the governmental, non – governmental organizations and the community as a whole. According to Prenner (2009) cancer is a disease that has got less consideration in developing nations like Ethiopia and the focus is on preventing and treating communicable disease like HIV/AIDS and tuberculosis but cancer is growing faster and people are under educated about cancer, the number of cancer cases is expected to double in the coming years.

- The present finding indicated that women with breast cancer showed psychological problems such as anxiety and depression. Helping professionals most of the time undetected these problems early, and early undetected anxiety and depression disorder adversely affects the patients over all function, such as:

  - Impairment at the time of medication in treatment, such as acceptance of chemotherapy (arm swelling)
  - Greater pain, poor physical functioning, higher medical cost and longer hospital stay, shortening of their life span
  - Social and role functional limitation are some of the problems

  So in order to decrease such problems, professional helpers need to identify the psychosocial problems and refer to psychological helpers at early stage.

- The finding indicated that women with breast cancer face problems like lack of social support and stigma from the society. Strong social support especially from spouse could play a vital role in helping them to cope with their problems.

- The finding of the study revealed that counseling (psychological) service for women's with breast cancer is not available. By considering this, instead of leaving the burden of every treatment task for the professional helpers, other concerned bodies need to share the duty of the patients wellbeing.
- The researcher through Focused Group Discussion, learned that community based support services is very necessary to help the patient to share idea, get peer support, share vital coping mechanisms, exchange experience, share knowledge, discuss the necessary issues, and develop peer counseling skills.
- Raising the awareness of various sections of the community about the nature, magnitude and consequences of the problem of women with breast cancer through different mass media is one of the key preventive processes.
- As the findings indicated, women with breast cancer mostly used religion as a major coping mechanism. Patients also communicate most of their problem with their religious leader (father) as a result of this, creating awareness about the nature of the disease for religious fathers is very important to help the patient to have early detection and to visit the nearby hospital.
- The finding indicated that, getting helping organization for cancer patients is difficult. This study further showed being HIV positive is preferable than being breast cancer patient to get help from helping organization. Thus, due consideration need to be given by governmental or non–governmental organizations and the society as a whole to establish a helping institution for these patients.

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Appendices

Addis Ababa University

School of Graduate Studies

Department of Psychology

The primary goal of this study is to find out the psychosocial problems of women with breast cancer. The study has two parts first assessing the psychological problems and secondly assessing the social problems that women with breast cancer mostly face. The information you give will be kept confidential and be only applied for the study. Your frank information helps to reach the goals of the study.

General Information

1. For women with breast cancer

1.1. Age ______
1.2. Educational status ______________________________
1.3. Marital status ______________________________
1.4. Types of treatment ______________________________
1.5. Time since diagnosis ______________________________

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Instruction: This questioner consists of 14 items, please read or listen each question carefully, and then select one response that is best describes your feeling by singing in the box, please be sure that your selection needs to be only one. Thank you for your cooperation!

1. I feel tense or "wound up"
   - □ Most of the time
   - □ A lot of the time
   - □ From time to time occasionally
   - □ Not at all

2. I get a sort of frightened feeling as if something awful is about to happen
   - □ Very definitely and quite badly
   - □ Yes, but not too badly
   - □ A little, but it doesn't worry me
   - □ Not at all

3. Worrying thoughts go through my mind
   - □ A great deal to the time
   - □ A lot of the time
   - □ From time to time, but not too often
   - □ Only occasionally

4. I can't sit at ease and feel relaxed
   - ☐ Definitely
   - ☐ Usually
   - ☐ Not often
   - ☐ Not at all

5. I get a sort of frightened feeling like ' butterflies' in the stomach
   - ☐ Not at all
   - ☐ Occasionally
   - ☐ Quite often
   - ☐ Very often

6. I get sudden feelings of panic
   - ☐ Very often indeed
   - ☐ Quite often
   - ☐ Not very often
   - ☐ Not at all

7. I feel restless as I have to be on the move
   - ☐ Very much indeed
   - ☐ Quite a lot
   - ☐ Not very much
   - ☐ Not at all

8. I still enjoy the thing I used to enjoy
    - ☐ Definitely as much
    - ☐ Not quite so much
    - ☐ Only a little
    - ☐ Hardly at all
9. I can laugh and see the funny side of things
    - ☐ As much as I always could
    - ☐ Not quite so much now
    - ☐ Definitely not so much now
    - ☐ Not at all
10. I feel cheerful
    - ☐ Not at all
    - ☐ Not often
    - ☐ Sometimes
    - ☐ Most of the time
11. I feel as if I am slowed down
    - ☐ Nearly all the time
    - ☐ Very often
    - ☐ Sometimes
    - ☐ Not at all

12. I have lost interest in my appearance

- □ Definitely
- □ I don't take as much care as I should
- □ I may not take quite as much care
- □ I take just as much care as ever

13. I look forward with enjoyment to things:

- □ As much as I ever did
- □ Rather less than I used to
- □ Definitely less than I used to
- □ Hardly at all

14. I can enjoy a good book or radio or TV program

- □ Often
- □ Sometimes
- □ Not often
- □ Very seldom

በአዲስ አበባ ዩኒቨርስቲ

በድህረ ምረቃ ትምህርት ቤት

የሳይኮሎጂ ትምህርት ክፍል

መመሪያ: የዚህ ጥናት ዋና ዓላማ በጡት ካንሰር በሽታ ምክንያት ሊከሰቱ የሚችሉ የስነልቦና እና ማህበራዊ ችግሮች ካሉ መፈተሽ ነው:: ከዚህ ጥናት የሚገኘው መረጃ ችግሩን ለመቀነስ በሚደረገው ጥረት ላይ ከፍተኛ አስተዋጽኦ ይኖረዋል:: መጠይቁ ሁለት ዋና ክፍሎች አሉት:: የመጀመሪያው ክፍል በስነልቦና ችግሮች ዙሪያ ሲሆን ሁለተኛዉ ክፍል ደግሞ በማህበራዊ ግንኙነቶች ዙሪያ የሚያተኩር ነው:: ለጥያቄዎቹ የሚሰጡት መልሶች በሚስጥር የሚያዙና ለጥናቱ ዓላማ ብቻ የሚውሉ ይሆናሉ:: የእርስዎ ግልፅ የሆነ መልስ የጥናቱን ዓላማ ከግብ ለማድረስ በጣም አስፈላጊ ነው::

አጠቃላይ መረጃ

1.1 መለያ ኮድ -----------------------------------

1.2 ዕድሜ -----------------------------------

1.3 የትምህርት ደረጃ -----------------------------------

1.4የጋብቻ ሁኔታ -----------------------------------

1.5የሚከታተሉት የህክምና ዓይነት ----------------------------

1.6 በሕክምናው ላይ የቆዩበት ጊዜ ----------------------------

በአዲስ አበባ ዩኒቨርስቲ

በድህረ ምረቃ ትምህርት ቤት

የሳይኮሎጂ ትምህርት ክፍል

መመሪያ: ይህ መጠይቅ 14 ጥያቄዎችን ይዟል እባክዎን እያንዳንዱን ጥያቄ በጥሞና በማንበብ ወይም በማዳመጥ የእርስዎን ስሜት በትክክል የሚገልፁትን ምርጫዎችን በሳጥን ውስጥ ምልክት ያስቀምጡ እባክዎን ለእያንዳንዱ ጥያቄ አንድ ምርጫ መምረጥዎን እርግጠኛ ይሁኑ።

1. የመበሳጨት ወይም የመቆጣት ስሜት የሚሰማኝ

- ☐ ዘወትር ነው
- ☐ አብዛኛውን ጊዜ ነው
- ☐ አንዳንድ ጊዜ ነው
- ☐ የለም

2. በውስጤ የሚያስጨንቅ ስሜት እና መጥፎ ክስተት ይከሰት ይሆናል ብሎ የመፍራት ስሜት የሚሰማኝ

- ☐ እጅግ በጣም ነው
- ☐ በጣም ነው
- ☐ በመጠኑ
- ☐ የለም

3. በአእምሮዬ በተደጋጋሚ የሚመላለሱና የሚያስጨንቁ ሐሳቦች የሚከሰቱት

- ☐ ዘወትር ነው
- ☐ አብዛኛውን ጊዜ ነው
- ☐ አንዳንድ ጊዜ ነው
- ☐ የለም

4. ተረጋግቶ እና ተዝናንቶ የመቀመጥ ስሜት

- ☐ እጅግ በጣም አለ
- ☐ በጣም አለ
- ☐ በመጠኑ አለ
- ☐ የለም

5. የሚያስፈራ ስሜት በሆዴ ውስጥ የመረበሽ ስሜት የሚሰማኝ

- ☐ የለም
- ☐ አንዳንድ ጊዜ
- ☐ አብዛኛው ጊዜ
- ☐ ዘወትር ነው

6. በድንገት የመረበሽ ስሜት የሚሰማኝ

- ☐ ዘወትር
- ☐ አብዛኛውን ጊዜ
- ☐ አንድንድ ጊዜ
- ☐ የለም

7. እረፍት የማጣት ስሜት የሚሰማኝ

- ☐ እጅግ በጣም ነው
- ☐ በጣም ነው
- ☐ በመጠኑ
- ☐ የለም

8. ከአሁን በፊት መስራት የሚያስደስቱኝ ነገሮች አሁንም የሚያስደስተኝ

- ☐ እጅግ በጣም ነው
- ☐ በጣም ነው
- ☐ በመጠኑ ነው
- ☐ የለም

9. በመሳቅ በመጫወት ነገሮችን በአስደሳች ጎናቸው ለማየት የምችለው/የምሞክረው

- ☐ ዘወትር በተቻለ መጠን ነው
- ☐ እንደበፊቱ ባይሆንም በመጠኑ
- ☐ ብዙም የሚያስደስተኝ ነገር የለም
- ☐ የለም

10. የደስታ ስሜት የሚሰማኝ

- ☐ የለም
- ☐ አንዳንድ ጊዜ
- ☐ አብዛኛው ጊዜ
- ☐ ሁልጊዜ ነው

11. የድካም ስሜት የሚሰማኝ

- ☐ ዘወትር ነው
- ☐ አብዛኛውን ጊዜ ነው
- ☐ አንዳንድ ጊዜ ነው
- ☐ የለም

12. በአለባበሴም ሆነ እራሴን የመጠበቅ ፍላጐት

- ☐ ምንም ፍላጎት የለኝም
- ☐ ብዙ ትኩረት አልሰጠውም
- ☐ ትኩረት መስጠት ያለብኝ ያህል አላስበውም
- ☐ ለራሴ መስጠት የሚገባኝን ያህል ራሴን እጠብቃለሁ

13. ወደፊት የሚያስደስት እና የተሻለ ነገር ይኖራል ብዬ እጠብቃለሁ

- ☐ እጅግ በጣም
- ☐ በጣም
- ☐ በመጠኑ
- ☐ የለም

14. አስደሳች የቴሌቪዥን፣ የሬዲዮ ፕሮግራሞችን መከታተል የሚያስደስተኝ

- ☐ ዘወትር ነው
- ☐ አንዳንድ ጊዜ ነው
- ☐ አልፎ አልፎ ነው
- ☐ የለም

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Instruction: These questions helps to know believe that your family and friends have on you, please read or listen carefully and respond your best selection. Thank you again for your cooperation!

Item	Very often	often	Some times	Never
My relatives and friends are too worried about me				
My relatives and friends are nice also understanding				
My relatives and friends believe things will be fine				
My relatives and friends are show me better treatment than before				
My relatives and friends tries to makes me feel happy				
My relatives and friends helping me to cope with this disease				
My relatives and friends show me they are with me in good/ bad time				
My relatives and friends shows me more support than ever				
My relatives and friends have no more confidence in my ability				
My relatives & friends annoy me by their consistent talking about my illness				
My relatives and friends treat me like a baby				
My relatives and friends are treated me as if cancer was contagious				
My relatives and friends are feel bad about my diagnosis of cancer				
My relatives & friends are nice but not able to understand my problem				
My relatives and friends are not necessary for me to cope with this				
My relatives & friends are tiring because of their over protection				

በአዲስ አበባ ዩኒቨርስቲ

በድህረ ምረቃ ትምህርት ቤት

የሳይኮሎጂ ትምህርት ክፍል

መምሪያ፡ ቀጥሎ የተዘረዘሩት ጥያቄዎተ የቤተሰቦቾትና ጓደኞቾትን አመለካከት ለማወቅ የሚረዳ ሲሆን ይህን ይበልጥ ሊገልፅ የሚችለውን በጥሞና በማንበብ ወይም በማዳመጥ መልስ ይስጡ ስለትብብርዎ በድጋሚ አመሰግናለሁ፡፡

ተ.ቁ		ዘወትር	አብዛኛውን ጊዜ	አንዳንድ ጊዜ	በጭራሽ
1	ቤተሰቦቼ እና ጓደኞቼ ስለ እኔ በጣም ይጨነቃሉ				
2	ቤተሰቦቼ እና ጓደኞቼ በጣም ጥሩዎች እና አስተዋዮች ናቸው፡፡				
3	ቤተሰቦቼ እና ጓደኞቼ ነገሮች መለካም እንደሚሆኑ ያምናሉ				
4	ቤተሰቦቼ እና ጓደኞቼ ጥሩ እንክብካቤ ከመቼውም በበለጠ ያሳዩኛል				
5	ቤተሰቦቼ እና ጓደኞቼ እኔን ለማስደሰት ይጥራሉ				
6	ቤተሰቦቼ እና ጓደኞቼ ይህን በሽታ ለመቋቋም እረድተውኛል				
7	ቤተሰቦቼ እና ጓደኞቼ በጥሩም ሆነ በችግር ጊዜ አብረውኝ እንደሚሆኑ የገልፁልኛል				
8	ቤተሰቦቼ እና ጓደኞቼ በጣም ጥሩ ድጋፍን ያሳዩኛል				
9	ቤተሰቦቼ እና ጓደኞቼ በእኔ ችሎታ ላይ ያላቸው እምነት ቀንሷል				
10	ቤተሰቦቼ እና ጓደኞቼ ስለእኔ መታመም ብዙውን ጊዜ አንስተው በሚያወሩ ጊዜ ያስቆጣኛል				
11	ቤተሰቦቼ እና ጓደኞቼ እንደ ህፃን ልጅ ይመለከቱኛል				
12	ቤተሰቦቼ እና ጓደኞቼ በሽታውን ተላላፊ አድርገው ያዩታል				
13	ቤተሰቦቼ እና ጓደኞቼ ሰለእኔ ካንሰር መታመም መጥፎ ስሜት ይሰማቸዋል				
14	ቤተሰቦቼ እና ጓደኞቼ በጣም ጥሩ ሆነው ስለ ነገር ግንኙነቶችን አልተገነዘቡልኝም				
15	ቤተሰቦቼ እና ጓደኞቼ በሽታውን ለመቋቋም አያስፈልጉኝም				
16	ቤተሰቦቼ እና ጓደኞቼ እኔን በመንከባከብ በጣም ተስላችተዋል				

Addis Ababa University

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Department of Psychology

Instruction: This question consists of 19 groups of statements people sometimes look to others for companionships, assistance, or other types of support. How often is each of the following kinds of support available to you if you need it? Please read or listen carefully and circle one of the numbers which is best for you. Thank you for your cooperation!

	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Emotional/informational support					
Someone you can count on to listen to you when you need to talk	1	2	3	4	5
Someone to give you information to help you understand a situation	1	2	3	4	5
Someone to give you good advice about a crisis	1	2	3	4	5
Someone to confide in or talk to about yourself or your problems	1	2	3	4	5
Someone whose advice you really want	1	2	3	4	5
Someone to share your most private worries and fears with	1	2	3	4	5
Someone to turn to for suggestions about how to deal with a personal problem	1	2	3	4	5
Someone who understands your problems	1	2	3	4	5
Tangible support					
Someone to help you if you were confined to bed	1	2	3	4	5
Someone to take you to the doctor if you needed it	1	2	3	4	5
Someone to prepare your meals if you were unable to do it yourself	1	2	3	4	5
Someone to help with daily chores if you were sick	1	2	3	4	5
Affectionate support					
Someone who shows you love and affection	1	2	3	4	5
Someone to love and make you feel wanted	1	2	3	4	5
Someone who hugs you	1	2	3	4	5
Positive social interaction					
Someone to have a good time with	1	2	3	4	5
Someone to get together with for relaxation	1	2	3	4	5
Someone to do something enjoyable with	1	2	3	4	5
Additional item					
Someone to do things with to help you get your mind off things	1	2	3	4	5

በአዲስ አበባ ዩኒቨርስቲ
በድህረ ምረቃ ትምህርት ቤት
የሳይኮሎጂ ትምህርት ክፍል

መመሪያ: ይህ መጠይቅ 19 ጥያቄዎችን የያዘ ሲሆን የጥያቄዎቹ አላማም የሰው ልጅ የሌሎችን አብሮነት፣ ትብብርን እና እርዳታን ይፈልጋል፡፡ እርስዎ በምን ያህል ከሌሎች ሰዎች እነኝህን ነገሮች እንደሚያገኝ ለማወቅ የሚረዱ ናቸው፡፡ እባክዎ ትክክለኛውን መልሶች እርስዎን የሚወክሉትን በጥሞና በማንበብ ወይም በማዳመጥ መልስ ይስጡ፡፡

ተ/ቁ	ተግባር	በጭራሽ	በጣም ውስን ጊዜ	አንዳንድ ጊዜ	አብዛኛውን ጊዜ	ሁልጊዜ
1	ሐሳብዎትን ለማካፈል በሚፈልጉበት ወቅት ሐሳብዎን የሚጋራሎት ሰው ለምን ያህል ጊዜ ያገኛሉ	1	2	3	4	5
2	አንዳንድ መረጃዎችንም ሆነ ያልተረዷቸው ነገሮች ካሉ መረጃዎችን በመስጠት የሚረዳዎት ሰው ለምን ያህል ጊዜ ያገኛሉ	1	2	3	4	5
3	ችግሮች በሚያጋጥምዎት ወቅት ስላጋጠሙት ችግር ምክርን የሚሰጡት ሰው ለምን ያህል ጊዜ ያገኛሉ	1	2	3	4	5
4	ጥሩም ሆነ መጥፎ ነገሮች ሲያጋጥመምዎት የሚያወያየት ሰው ለምን ያህል ጊዜ ያገኛሉ	1	2	3	4	5
5	ጥሩ ምክሮችንስ የሚሰጥዎ ሰው	1	2	3	4	5
6	የግል ሚስጥሮትንም ሆነ ጭንቀቶትን የሚጋራሎት	1	2	3	4	5
7	ችግሮች ባጋጠሙት ወቅት ችግሮቹን ሊወጡበት የሚረዳዎት ምክር የሚሰጥዎ ሰው	1	2	3	4	5
8	ችግሮትን የሚገነዘብሎት ሰው	1	2	3	4	5
9	ታመው አልጋ ላይ ሲውሉ የሚያግዞት ሰው	1	2	3	4	5
10	ሐኪም ቤት መሄድ በሚፈልጉበት ወቅት የሚወስዶትሰው	1	2	3	4	5
11	ምግብ ማብሰል ቢያቅቶት የሚረዳዎት ሰው ለምን ያህል ጊዜ ያገኛሉ	1	2	3	4	5
12	ሲታመሙ የእለት ስራዎትን የሚያግዝዎ ሰው ለምን ያህል ያገኛሉ	1	2	3	4	5
13	ፍቅርንና አክብሮትን የሚያሳዩት ሰው	1	2	3	4	5
14	እርስዎን ተወዳጅና ተፈላጊ ሰው መሆኖትን የሚገልፅሎት ሰው	1	2	3	4	5
15	እርስዎን በመደገፍ እንክብካቤን የሚያሳዩዎት ሰው ለምን ያህል ጊዜ ያገኛሉ	1	2	3	4	5
16	ከእርስዎ ጋር ጥሩ ጊዜያትን አብሮ የሚያሳልፍ ሰው	1	2	3	4	5
17	ከእርስዎ ጋር አብሮት የሚዝናና እና እርስዎን የሚያዝናና ሰው	1	2	3	4	5
18	ከእርስዎ ጋር በመሆን አስደሳች ነገሮችን የሚያደርግ ሰው ለምን ያህል ጊዜ ያገኛሉ	1	2	3	4	5
19	እርስዎን ለማዝናናት ብሎም ከሃሣብ ለማዳን የሚረዳዎት ሰውስ	1	2	3	4	5

Addis Ababa University

School of Graduate study

Department of Psychology

Focus Group Discussion

Instruction: The purpose of this research is to study the psychosocial problems of women with breast cancer at Tikur Anbessa Hospital in Addis Ababa. The information gathered through this discussion is helpful to reduce the psychosocial problems of women with breast cancer. All the response will be kept confidential. Thank you for your participation!

1. Please tell me how your breast cancer was discovered and how that made you feel?
2. Who did you turn for support?
3. Please tell me things that bothered you during your breast cancer experience and how did you handle them?
4. Please tell me what type of strategies you used to cope with breast cancer?

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Department of Psychology

In depth Interview

Instruction: The purpose of this research is to study the psychosocial problems of women with breast cancer at Tikur Anbessa Hospital in Addis Ababa. The information gathered through this discussion is helpful to reduce the psychosocial problems of women with breast cancer. All the response will be kept confidential. Thank you for your participation!

General Information

1.1. Age ______________________________

1.2. Marital status ______________________________

1.3. Types of treatment ______________________________

1.4. Time since diagnosis ______________________________

1. How your breast cancer was discovered and how that made you feel at first?
2. With whom you live now and who did you turn for support?
3. What kind of problems mostly face from the society or family member?
4. Please tell me things that bothered you during your breast cancer experience and how did you handle them?
5. Did you discussed about the disease or any issue about breast cancer with your family?

Piloting Results of Hospital Anxiety and Depression Scale

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded	0	.0
	Total	20	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.840	14

Item Statistics

	Mean	Std. Deviation	N
feel tense/wound up	1.4000	.68056	20
feeling something awful is about happen	1.2000	.61559	20
have worrying thoughts	1.2500	.71635	20
sit at ease and feel relaxed	1.5000	.60698	20
sort of frightened feeling	1.0500	.68633	20
sudden feeling panic	1.0000	.64889	20
feel restless	.9000	.64072	20
enjoy the things	1.3000	.73270	20
see the funny side of things	1.2000	.61559	20
feel cheerful	1.5000	.60698	20
feel slowed down	1.2000	.69585	20
lost interest in appearance	1.3500	.98809	20
enjoyment to things	1.4000	.75394	20
enjoyment TV, radio	1.0000	.72548	20

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
feel tense/wound up	15.8500	27.187	.507	.828
feeling something awful is about happen	16.0500	27.313	.553	.826
have worrying thoughts	16.0000	27.895	.376	.837
sit at ease and feel relaxed	15.7500	27.776	.485	.830
sort of frightened feeling	16.2000	25.747	.722	.814
sudden feeling panic	16.2500	29.355	.210	.845
feel restless	16.3500	27.292	.530	.827
enjoy the things	15.9500	26.366	.578	.823
see the funny side of things	16.0500	26.155	.749	.815
feel cheerful	15.7500	29.145	.265	.842
feel slowed down	16.0500	27.734	.414	.834
lost interest in appearance	15.9000	26.200	.403	.840
enjoyment to things	15.8500	25.924	.620	.820
enjoyment TV, radio	16.2500	27.776	.385	.836

Reliability statistics for Anxiety

Cronbach's Alpha	N of Items
.768	7

Reliability statistics for Depression

Cronbach's Alpha	N of Items
.755	7

Piloting Results of Social Stigma questionnaire

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded	0	.0
	Total	20	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.850	16

Item Statistics

	Mean	Std. Deviation	N
too worried about me	.9500	1.05006	20
nice & understanding	1.6000	.88258	20
believe things will be fine	1.7500	.78640	20
better treatment than before	1.9500	.68633	20
help me to be happy	1.4500	.68633	20
helping me to cope	1.2500	.85070	20
show me they are with me	1.0500	.75915	20
support me than ever	1.9500	.60481	20
loss confidence in my ability	1.0000	1.16980	20
annoy me by consistent talking	2.1000	.91191	20
treat me like a baby	1.7000	1.08094	20
as if cancer was a contagious	1.1000	1.11921	20
feel bad diagnosis of cancer	1.6500	.93330	20
not able to understand	1.4500	1.05006	20
need not anybody support	1.1500	1.03999	20
show less interest after diagnosis	.9500	.82558	20

Item- Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
too worried about me	22.1000	58.516	.420	.845
nice & understanding	21.4500	59.208	.470	.842
believe things will be fine	21.3000	56.642	.769	.828
better treatment than before	21.1000	58.726	.681	.834
help me to be happy	21.6000	57.200	.838	.828
helping me to cope	21.8000	55.747	.779	.827
show me they are with me	22.0000	56.737	.792	.828
support me than ever	21.1000	60.621	.571	.840
loss confidence in my ability	22.0500	53.839	.650	.831
annoy me by consistent talking	20.9500	58.050	.539	.838
treat me like a baby	21.3500	76.134	-.580	.898
as if cancer was a contagious	21.9500	54.997	.609	.833
feel bad diagnosis of cancer	21.4000	60.568	.339	.849
not able to understand	21.6000	60.147	.314	.851
need not anybody support	21.9000	60.200	.315	.851
show less interest after diagnosis	22.1000	55.253	.850	.824

Piloting Results of Medical Outcome Social Support Scale

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded	0	.0
	Total	20	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.927	19

Item Statistics

	Mean	Std. Deviation	N
Listen to you need to talk	3.8000	1.10501	20
Give you information to help	3.3500	1.42441	20
Give you good advice	3.5000	1.10024	20
Confide in or talk about yourself	3.9500	1.14593	20
Advice you really want	3.7000	1.03110	20
Share your most private worries	3.8500	1.22582	20
Turn to for suggestions	3.8000	1.05631	20
Understand your problems	3.5500	.99868	20
Help you were confined to bed	3.9500	.99868	20
Take you to the doctor	4.5000	.82717	20
Prepare your meals were unable	4.4000	.88258	20
Help with daily chores	3.7500	1.11803	20
Shows you love and affection	4.1000	.85224	20
Love and make you feel wanted	4.1000	.91191	20
Who hugs you	3.9500	.82558	20
Have a good time with	3.8000	1.28145	20
Get together with for relaxation	3.1500	1.30888	20
Do something enjoyable with	3.3000	1.03110	20
Do things with to help you	3.7000	.92338	20

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Listen to you need to talk	68.4000	156.358	.745	.920
Give you information to help	68.8500	160.029	.447	.929
Give you good advice	68.7000	159.695	.621	.923
Confide in or talk about yourself	68.2500	155.882	.733	.921
Advice you really want	68.5000	162.263	.565	.924
Share your most private worries	68.3500	151.924	.819	.918
Turn to for suggestions	68.4000	163.621	.497	.926
Understand your problems	68.6500	160.976	.639	.923
Help you were confined to bed	68.2500	158.303	.751	.921
Take you to the doctor	67.7000	162.958	.688	.922
Prepare your meals were unable	67.8000	171.116	.272	.930
Help with daily chores	68.4500	165.208	.407	.928
Shows you love and affection	68.1000	169.674	.350	.928
Love and make you feel wanted	68.1000	162.621	.633	.923
Who hugs you	68.2500	166.513	.515	.925
Have a good time with	68.4000	155.726	.650	.923
Get together with for relaxation	69.0500	153.208	.717	.921
Do something enjoyable with	68.9000	155.779	.829	.919
Do things with to help you	68.5000	158.684	.801	.920

Inter – Item correlation of Hospital Anxiety and Depression Scale

	Anx1	Anx2	Anx3	Anx4	Anx5	Anx6	Anx7	Dep1	Dep2	Dep3	Dep4	Dep5	Dep6	Dep7
Anx1	1	.302	.000	.127	.293	.000	.217	.169	.553	.382	.267	.407	.390	.640
Anx2		1	.119	.563	.349	.395	.187	.560	.444	.282	.516	.138	.499	-.118
Anx3			1	.424	.616	.566	.631	.050	.358	-.182	.211	-.056	.292	.000
Anx4				1	.442	.267	.406	.473	.282	.000	.125	.395	.230	-.120
Anx5					1	.118	.371	.492	.598	.190	.419	.361	.570	.423
Anx6						1	.380	-.111	.132	-.134	.466	-.246	.323	-.335
Anx7							1	.291	.587	.000	.047	.224	.414	.226
Dep1								1	.443	.473	.186	.647	.248	.297
Dep2									1	.282	.516	.225	.612	.471
Dep3										1	.000	.219	.115	.359
Dep4											1	-.031	.441	.104
Dep5												1	.226	.514
Dep6													1	.289
Dep7														1

Inter – Item Correlation of Experienced Social Stigma Scale

	Ess1	Ess2	Ess3	Ess4	Ess5	Ess6	Ess7	Ess8	Ess9	Ess10	Ess11	Ess12	Ess13	Ess14	Ess15	Ess16
Ess1	1	.261	.366	.435	.325	.368	.333	.162	.343	.115	.079	.184	-.126	.499	-.089	.483
Ess2		1	.682	.487	.400	.421	.503	.256	.306	.183	-.519	.309	.332	.204	.069	.477
Ess3			1	.463	.609	.570	.639	.415	.572	.624	-.464	.448	.305	.335	.370	.709
Ess4				1	.609	.654	.510	.628	.459	.429	-.447	.418	.382	.252	.159	.646
Ess5					1	.699	.763	.564	.590	.597	-.589	.624	.587	.361	.417	.692
Ess6						1	.713	.537	.476	.509	-.601	.691	.381	.339	.491	.543
Ess7							1	.350	.533	.449	-.366	.675	.397	.366	.257	.676
Ess8								1	.446	.487	-.427	.319	.247	-.128	.682	.627
Ess9									1	.395	-.208	.523	.193	.171	.130	.817
Ess10										1	-.449	.351	.229	.060	.483	.496
Ess11											1	-.539	-.579	-.014	-.473	-.313
Ess12												1	.338	.318	.258	.518
Ess13													1	-.046	.328	.386
Ess14														1	-.161	.209
Ess15															1	.316
Ess16																1

Inter-Item Correlation of Medical outcome Social Support Scale

	mos1	mos2	mos3	mos4	mos5	mos6	mos7	mos8	mos9	mos10	mos11	mos12	mos13	mos14	mos15	mos16	mos17	mos18	mos19
mos1	1.000	.548	.476	.532	.222	.598	.280	.773	.706	.518	.140	.213	.190	.543	.335	.565	.604	.795	.660
mos2		1.000	.319	.398	.147	.544	.084	.487	.531	.335	-.243	-.107	.230	.215	.150	.213	.507	.606	.324
mos3			1.000	.480	.696	.644	.770	.551	.359	.289	.379	.150	.056	.210	.087	.373	.347	.650	.466
mos4				1.000	.432	.631	.383	.531	.642	.527	.333	.236	.329	.358	.331	.781	.461	.637	.582
mos5					1.000	.629	.908	.271	.240	.309	.428	.388	.156	.202	.476	.271	.269	.337	.453
mos6						1.000	.504	.673	.681	.545	.156	.202	.317	.391	.356	.549	.638	.745	.702
mos7							1.000	.359	.090	.181	.486	.267	.023	.131	.350	.280	.251	.348	.313
mos8								1.000	.662	.223	-.084	-.153	.117	.225	.163	.543	.538	.802	645
mos9									1.000	.478	-.036	.318	.439	.526	.380	.485	.691	.731	.839
mos10										1.000	.288	.598	.299	.768	.424	.645	.608	.617	.482
mos11											1.000	.480	.154	.471	.246	.214	-.100	.035	.220
mos12												1.000	.304	.645	.556	.257	.387	.160	.433
mos13													1.000	.461	.307	-.029	.269	.323	.441
mos14														1.000	.566	.423	.560	.470	.600
mos15															1.000	.388	.494	.204	.463
mos16																1.000	.584	.645	.525
mos17																	1.000	.706	.605
mos18																		1.000	.708
mos19																			1.000

Declaration

I, the undersigned, declare that this thesis is my original work and has not been presented for a degree in any other university and that all sources of material used for the thesis have been dully acknowledged.

Candidate Name:

Signature____________________

Place: Institute of Psychology

Addis Ababa University

School of Graduate Studies

Date of Submission: June, 2010

This thesis has been submitted with my approval as a thesis advisor.

Name ______________________________

Signature ___________________________

Date _______________________________