ADDIS ABABA UNIVERSITY
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DEPARTMENT OF NURSING AND MIDWIFERY

COPING MECHANISM USED BY BREAST CANCER PATIENTS IN TIKUR ANBASSA SPECIALIZED HOSPITAL, ADDIS ABABA, ETHIOPIA, 2012.

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LIST OF ACRONYMS

- AARHB- Addis Ababa Regional Health Bureau
- AAU- Addis Ababa University
- ETB- Ethiopian Birr
- FOM- Faculty of Medicine
- HRQL- Health Related Quality of Life
- IRB- Institutional Review Board
- LMCs- Low- and Middle-income Countries
- NCR- National Cancer Registry
- OPD- Out Patient Department
- Pb- lead
- Ppm- Parts per million
- QOL- Quality of Life
- RCTs- Randomized Clinical Trials
- SPSS- Statistical Package for Social Science
- UK- United Kingdom
- U.S- United States

ABSTRACT

BACKGROUND INFORMATION:

Breast cancer is the leading cause of cancer related death among women worldwide .Many women adapt differently to having breast cancer and use different coping strategies to deal with the physical and psychological challenges of the disease. A review of the literature showed several factors that could influence the coping strategies of women with cancer, including demographic characteristics, educational level, positive thinking, and psychosocial support.

OBJECTIVE:

To assess coping mechanisms used by breast cancer patients in Tikur Anbassa Specialized Hospital, Addis Ababa, Ethiopia from October to May 2012.

METHOD:

The study was conducted in Tikur Anbassa Specialized Hospital from October to May 2012. An institutional based cross-sectional study was implemented. All breast cancer patients in the study hospital were enrolled. The total of 234 breast cancer patients obtained for interview by convenient non probability sampling technique. The data was collected using pretested structured questionnaire which was piloted on 10% of patients with the same hospital prior to data collection time. The final result of this study will be submitted to the concerned bodies. Data was entered into the computer, cleared, edited and coded before analysis. The data was analyzed by using SPSS 16.0 version. The results were presented by frequency tables, charts and figures. Moreover, cross tabulation made between selected variables and $p<0.05$ was considered significant.

RESULTS:

From a total of 234 breast cancer patients involved in the study area, 101 (43.2%) were at age range of 40-54 years. The majority of subjects 214 (91.5%) were ever married while 20 (8.5%) were never married. Among the study subjects 152 (65.0%) of the respondents were unemployed and the others 82 (35.0%) were engaged in some occupation. Among the educational status of the study population 90 (38.5%) had no formal education. Among the respondents 109 (46.6%) had no income.

Among 234 respondents 59.13% of them did not use seeking social support coping activities. The majority of the respondents 67.01% did not use planful problem solving coping activities. From a total of 234 respondents 68.3% did not use positive reappraisal coping activities. After controlling for confounding variables educational level was found to be the main predictor, independently and negatively associated with isolation with (OR=0.199,95%CI(0.102,0.211). Illiterates use isolation compared to literates.

CONCLUSIONS AND RECOMMENDATIONS:

Breast cancer disease indeed affects quality of life and the clients` coping in a dominant ways. Therefore, we need to encourage positive coping activities and discourage negative coping activities. Moreover, we need to incorporate social and psychological support in addition to the physical care. It is recommended that educators must design programs and curricula to provide information inclusive of both patients and caregivers. More research in field will help to solve existing as well as new problem.

CHAPTER ONE

1. INTRODUCTION

1.1 BACKGROUND INFORMATION

Breast cancer is the leading cause of cancer related death among women worldwide [1]. Annually breast cancer accounts 10% of all cancers and constituted 22% of all new cancers in women and during the year 2005, it caused 502,000 deaths in the world [2]. While industrialized countries experience a higher incidence rate due to widely available cancer screening programs, in such countries, they experience a much lower breast cancer mortality rate due to early detection. However, in developing countries, such as Ethiopia, the lack of widely available and accessible screening protocol leads to a higher mortality rate [3]. There is a paucity of high quality cancer data in many developing countries at the present time. Nonetheless, where they are available, increases in breast cancer incidence and mortality are seen, an observation often more apparent within recent birth cohorts, and a probable consequence of the adoption of western lifestyle [4].

Although breast cancer is the most common neoplasm among women in developing countries, if Africa is taken as a whole, it ranks second most frequent to cervical cancer [5]. However, it is the most common malignancy in North Africa and in urban settings within the sub-Saharan region such as Abidjan (Côte d'Ivoire) [6], and until recently also in Harare, Zimbabwe, although changes in the evolution of the AIDS epidemic have led to it now having been overtaken by Kaposi's sarcoma [7]. In the few datasets available on the study of time trends in Africa, increases in incidence, for example, are apparent [8]. There have been two fold increases in breast cancer incidence in Ibadan, Nigeria, and in Kampala, Uganda, between the 1960s and the

late 1990s. Steady increases in breast cancer mortality rates of the same order of magnitude have also been noted from the early 1960s in Mauritius [4].

Cancer diagnosis can lead to increased psychological and social distress due to the stressful nature of treatment and recovery as well as the uncertainty associated with their outcomes. Therefore, the life-threatening nature of breast cancer, along with the side effects of treatment, place great strain on patients and their families [9]. Thus, understanding the factors that are associated with psychological well-being of cancer patients during the post diagnosis period can help guide intervention and efforts to minimize distress among them [10].

Research indicates that women with breast cancer in developing countries are at increased risk of physical and psychological morbidities after diagnoses. Indeed, the initial diagnosis may be associated with emotional and physical disturbances that can be as problematic as the treatment regimen; however, many women rely upon their coping mechanisms to deal with these physical and psychological challenges [11].The course of the disease may have some impact on coping, either in a direct manner via psychologically active paraneoplastic hormones, or in a more indirect manner through the emotional reaction of the patients to bodily symptoms [8].

There are so many classifications of coping strategies and there is no agreement on the exact classification, for example the study conducted by Hasida Ben-zur indicates that coping strategies were classified according to outcome in terms of their functional or adaptive value, and their effectiveness was assessed in terms of elimination of stressors and distress as well as preservation of social functioning and a sense of well-being. Other research has shown problem-focused coping to be more effective than emotion-focused coping in terms of neutralizing negative emotional reactions and improving performance levels [12]. Many women adapt differently to having breast cancer and use different coping strategies to deal with the physical

and psychological challenges of the disease. A review of the literature showed several factors that could influence the coping strategies of women with cancer, including demographic characteristics, educational level, positive thinking, and psychosocial support [10].

Some researchers have discussed the coping mechanisms used by breast cancer patients. However, this research has been limited to developed countries, which often have necessary resources available for early detection. To my knowledge there is no published paper in coping mechanisms used by breast cancer patients in Ethiopia (in east Africa). Therefore, the purpose of this study was to assess coping mechanism of patients with breast cancer and to assess factors that affect their coping mechanisms.

1.2 STATEMENT OF THE PROBLEM

Cancer of the breast in women is a major health burden worldwide [10]. It is the most common cause of cancer among women in both high-resource and low-resource settings, and is responsible for over one million of the estimated 10 million neoplasm's diagnosed worldwide each year in both sexes [11]. It is also the primary cause of cancer death among women globally, responsible for about 375,000 deaths in the year 2000 [11].

Although breast cancer is the most common neoplasm among women in developing countries, if Africa is taken as a whole, it ranks second most frequent to cervical cancer [5]. However, it is the most common malignancy in North Africa and in urban settings within the sub-Saharan region such as Abidjan (Côte d'Ivoire) [6]

It is a well-established fact that a diagnosis of breast cancer has not only physical, but also social and psychological implications because of the importance of the breast in a woman's body image, sexuality and motherhood [13]. Intense personal and interpersonal challenges accompany the first year surrounding a diagnosis of breast cancer, with affected individuals often attempting to manage complex decisions, arduous treatments, and confrontation of threats to life, well-being, and cherished relationships [14]. Although most women who face cancer adjust well over the long term, substantial individual variability occurs in reaction to diagnosis, and some women manifest extreme distress [14].

The manner in which different women respond to the diagnosis of breast cancer varies enormously. These variations may be due to individual coping strategies, personality factors, the level of social support available to them and, to a large extent, the consultation skills of her medical careers, especially the surgeon who breaks the bad news [13].

Traditionally health-care providers have measured outcome of treatment of disease by focusing on tumor response and disease-free survival. However, it has become increasingly apparent that the behavioral and functional impact of treatment on the patient is important [15].

In large part, because of the available treatment options and favorable prognosis for women diagnosed with insitu and early stage breast cancer, little attention has been given to quality of life issues in this population. Survival after breast cancer is strongly related to the stage at diagnosis, as increasing stage increases the risk of death [16]. However, length of survival following breast cancer diagnosis varies considerably, even after accounting for stage and treatment, thus suggesting that there are other important factors involved. As the population of breast cancer survivors in the world continues to grow, it is important to identify lifestyle and behavioral factors that may improve survival and quality of life [16].

Cancer is a family affair and not the patient's problem alone. Cancer creates a stressful situation for the entire family and affects each family member. The effect of cancer on family members, in turn, may affect the patient's adjustment to the illness. Little research, however, has been conducted on the distress and coping strategies of both breast cancer patients and their spouses [12].

A woman's marital status may buffer her from increased social isolation, mood disturbance, and pain following a cancer diagnosis. Being married or partnered may also improve body image and increase levels of post-traumatic growth and purpose in life following a breast cancer diagnosis however, quality of a marital relationship is also important to a woman's psychological adjustment to cancer diagnosis and treatment [17]. The study conducted by Lynne Wittenberg, 2010 shows that marital distress is associated with slower recovery into survivorship, worse health, and performance status. Among a sample of high-risk women anticipating genetic testing

for hereditary breast and ovarian cancer, unhappily married women reported more distress than either unmarried or happily married women [17]. In an interdependent cycle, greater spousal distress increases distress in women with breast cancer, the literature also points to the kinds of spousal support that are beneficial and detrimental. For instance, positive emotional support from one's partner has been linked to lower psychological distress and fewer depressive symptoms. In contrast, spousal negativity has a more harmful impact on women's overall well-being as it increases depression symptoms [17].

An important question is whether cancer-related marital communication is associated with either patient or partner psychological adaptation to cancer. There have been relatively few studies examining these associations [18].A cancer diagnosis may adversely impact marital and family relationships and change previously assigned family roles. Offering women psychotherapeutic interventions aimed at increasing emotional, social, and instrumental support may play a beneficial role in psychological adjustment for both their spouses and family, while improving their interpersonal communication as they cope with cancer [17]. Social support offered by peers with a similar cancer experience may be distinct and unique from other forms of social support for instance, some have noted that peers are more likely to understand the challenges of coping with cancer, and may experience less emotional distress when talking about cancer compared to patients' family and friends [17].

Women with breast cancer are under ongoing stress because breast surgery entails disfiguring mastectomy or lumpectomy [12]. Coping may influence the course of the disease, either in a direct manner via psycho-neuroimmunological mechanisms (e.g., active coping might increase and depressive coping decrease natural killer cell activity), or in an indirect manner via

compliance, such as when patients who cope actively might receive a higher amount of chemotherapy whereas those who are depressed might discontinue such therapy earlier [19].

While industrialized countries experience a higher incidence rate due to widely available cancer screening programs, in such countries, they experience a much lower breast cancer mortality rate due to early detection. However, in developing countries, such as Ethiopia, the lack of widely available and accessible screening protocol leads to a higher mortality rate [3].

There is a paucity of high quality cancer data in many developing countries at the present time [4]. Currently there is no published paper which asess coping mechanism and factors that affect coping mechanism of breast cancer patients in Ethiopia and in many developing countries. Therefore, this study will be the base line data for those who are interested to conduct similar study in these countries. Moreover, this study was aimed at assessing how breast cancer patients adjust to the alterations in their lives caused by this ongoing stressful experience that presumably depends on their coping strategies and assessing the factors that affect their coping mechanism.

1.3 SIGNIFICANCE OF THE STUDY

Data from cancer patients suggest that engagement-oriented coping mechanisms are coupled with better psychological outcomes, such as higher quality of life, while disengagement-oriented coping mechanisms are associated with worse outcomes [20]. Therefore, enforcing engagement-oriented coping strategies helps patients with breast cancer to have a better quality of life.

The purpose of this study was to explore coping mechanisms of breast cancer patients in the study hospital. Moreover, this study will help as a planning tool for future clinical care, guide an individual nursing care and for the provision of appropriate nursing care for breast cancer patients. There is no study conducted in the study area related to this topic. Therefore, this study will be the base line data for those who are interested to conduct similar study.

CHAPTER TWO

2. LITERATURE REVIEW

In United Kingdom (UK), breast cancer affects 1 in 12 women, accounting for 19% of all new cases of cancer among women and approximately 15,000 die of breast cancer every year (5% of all female deaths) [13]. According to the study conducted in India, the age-adjusted incidence figures for breast cancer published by the National Cancer Registry for 1984 for three areas (Mumbai, Bangalore, Madras) are reported to be 23.07, 20.4, and 18.4 per 100,000 female populations, respectively, and nearly 15,000 women die of breast cancer each year in India [13].

While breast cancer has long been recognized as a major public health burden in high-income countries, the majority of cases actually occur in low- and middle-income countries (LMCs), and it is expected that incidence rates will rise most rapidly in these locations [21]. The relative burden of mortality is also higher in less developed countries than in more developed countries, as indicated by higher mortality : incidence ratios (0.44 versus 0.29, respectively) [21]. The study conducted by Wadler, 2011 shows that current global initiatives focus on developing and implementing resource-appropriate guidelines and strategies to improve breast health care and breast cancer outcomes in LMCs. Common challenges cited for resource-poor countries include limited health care infrastructure, later stages at diagnosis, and competing health care priorities [21].

Breast cancer ranks second in global cancer incidence and is the most common cancer diagnosis among Nigerian women [22]. According to the study conducted by Temidayo (2010), while breast cancer incidence has been shown to have stabilized or to be decreasing in some Western countries, the breast cancer burden has steadily increased in many developing countries with

traditionally low incidence rates. Among factors proposed to contribute to the rising incidence in these societies are secular changes in lifestyle and reproductive factors [22].

Breast cancer incidence in Nigerian women has significantly increased during the past three decades in parallel with the rapid industrialization of that country; this suggested that the associated widespread contamination of the soil and of the water supplies by lead (Pb) and other industrial metals was a major contributing cause [23]. Because of its many domestic, industrial, and automotive uses, Pb is of particular concern as it has been shown to promote the development of mammary tumors in murine mammary tumor virus-infected female C3H mice at levels as low of 0.5 ppm Pb in the drinking water [23].

Awareness and knowledge about breast cancer vary among communities and population groups worldwide. While studies conducted to assess breast cancer knowledge among women showed satisfactory level in some places, other reports, especially from developing countries like Nigeria revealed inadequate knowledge and awareness about the disease [24]. Although, patients in communities with high level of awareness usually present with less advanced stages of breast cancer as a result of adoption of screening methods, those in communities with low level of awareness often present late [24]. The study conducted by Ibrahim states that early detection and treatment of breast cancer is associated with better chance of long-term survival however in Nigeria, about two-third of patients with this disease present with advanced stages therefore therapy offers minimal benefit. Reports from Western Europe and North America revealed reduction in mortality from breast cancer due to adoption of screening methods for detection of early diseases [24].

Data from South Africa's National Cancer Registry (NCR) show breast cancer as the leading cancer among women. The study conducted by Brianna M. shows that South African women have a 1 in 29 lifetime risk of developing breast cancer, with an age-standardized incidence rate of 30.6 per 100,000 populations. These rates vary by race group, with Black women having the lowest (16.3) and White women the highest (69.4) rates of breast cancer diagnosis. The NCR is a pathology-based, rather than a population-based registry therefore these statistics underestimate cancer incidence in South Africa. These statistics belie marked disparities in stages of cancers at diagnosis, survival rates and overall breast cancer in South Africa [25]. However, the indication of disparities along racial lines adds urgency to the call for expanded access to breast cancer screening, diagnostic services, and treatment, particularly through community-based approaches [25].

Recent medical advances have resulted in earlier detection and hence improved treatment outcomes, Cancer diagnosis, however, can lead to increased psychological and social distress due to the stressful nature of treatment and recovery as well as the uncertainty associated with their outcomes [10]. Thus, understanding the factors that are associated with psychological well-being of cancer patients during the post diagnosis period can help guide intervention efforts to minimize distress among them. According to the study conducted by Mohammed Al-Azri, 2009, women with breast cancer in developing countries are at increased risk of physical and psychological morbidities after diagnoses. Indeed, the initial diagnosis may be associated with emotional and physical disturbances that can be as problematic as the treatment regimen. Nonetheless, many women rely upon their coping mechanisms to deal with these physical and psychological challenges [10]. It is unclear whether emotional responses to breast cancer diagnosis differ between older and younger individuals. Several studies have reported moderate

associations between younger age and higher emotional distress, whereas others showed no or reverse associations [26].

According to Junghyun Kim, Coping refers to ‘cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands and conflicts’. There are many ways to categorize coping strategies. One of the most commonly used categories is active coping versus passive/avoidant coping, active coping efforts are aimed at facing a problem directly and determining possible viable solutions to reduce the effect of a given stressor. Meanwhile, passive/avoidant coping refers to behaviors that seek to escape the source of distress without confronting it [27]. Setting aside the nature of individual patients or specific external conditions, there have been consistent findings that the use of active coping strategies produces more favorable outcomes compared to passive coping strategies, such as less pain as well as depression, and better quality of life. On the other hand, relying on passive/avoidant coping strategies is associated with increased depression and anxiety [27].

Coping is a consistent predictor of people’s well-being during the cancer trajectory [28]. Several studies on coping with cancer have demonstrated associations between adaptive coping behaviors and better physical and mental health, lower negative effect, and better social functioning. Women who engage in problem solving and positive reappraisal, for instance, are less likely to be depressed than women who instead wish for the problem to go away People may use multiple forms of coping with cancer at the same time. For example; a patient who is in denial may likewise be disengaging from the situation. Therefore, patterns of concomitant coping are not always predictable, because they vary by context and by population [28].

A previous study showed that paid work increased a woman's self-confidence, a belief in her coping abilities, and a sense of general well-being; as the financial status of women improved, her ability to engage in the use of positive coping methods increased and, thus, her general well-being improved [10]. Also, it was found that educated women were better in adapting coping strategies and that women who were less educated, single, divorced, or widowed had a greater use of cognitive defenses such as denial; therefore, if the woman was educated, the use of emotion-focused coping strategies increased and the levels of distress decreased [10].

The distress of rural cancer patients has been found to be similar to that of urban cancer patients however, in rural communities, termed by some authors as the "medically underserved", socially isolated patients may be at higher risk for poor coping and health problems may be intensified by geographic isolation, distance, lack or cost of transportation, and limited resources [29]. Some patients are at higher risk for mood disturbance than others, and certain coping strategies improve adjustment. For example according to the study conducted by Cheryl Koopman, there is evidence that breast cancer patients who learn to use more direct and confrontational coping strategies are less distressed than those who use avoidance and denial. Beneficial effects of coping have been found for acceptance, the use of humor, and positive reframing on the other hand, avoidance coping strategies have been found to be associated with poorer social functioning in women with advanced breast cancer [29].

Individuals are embedded in a web of social ties and these social connections can influence individual well-being by creating a positive social environment and by buffering the negative impacts of stressful life events [26]. Some characteristics of cancer patients' social networks have been found to be associated with their health outcomes, for example, breast cancer patients who were socially isolated had a significantly elevated mortality risk compared with those who

were more socially integrated and had more close relatives and friends therefore, having more support providers was also associated with better survival [26]. These findings suggest that the structural characteristics of social networks may impact cancer patients' overall health outcomes through social integration or social support. Although the amount of available support resources influences cancer patients' psychological well-being, the stressful nature of the illness and time-consuming treatments may result in a reduction of such resources that are available to or accessible by them therefore, cancer diagnosis has been shown to influence the social relationships patients have with their friends and families [26].

According to Christina D, 2005, Social support refers to support received (e.g. informative, emotional, or instrumental) or the sources of the support (e.g. family or friends) that enhance recipients' self-esteem or provide stress related interpersonal aid. The diagnosis of a potentially life-threatening disease, such as breast cancer, disrupts not only the life of the patient but also the lives of those closest to the patient [9]. Therefore, social support has been known to offset or moderate the impact of stress caused by illness specifically for breast cancer patients, social support has been found to reduce stress associated with a cancer diagnosis, bring positive changes in their lives, and improve emotional well-being. Therefore, coping is considered as a process or state that can be affected over time by external factors (e.g. social support) [27].

Formal and informal peer-support programs for cancer patients are becoming increasingly more common, particularly for women with breast cancer, recent reviews of papers examining peer support in observational, nonrandomized contrast group, and randomized clinical trials (RCTs) conclude that cancer patients show increased satisfaction, and often lower distress when paired with peer volunteers [17].

Extensive research has been devoted to the link between psychosocial factors and the patient's adjustment to cancer, in the context of breast cancer; studies indicate significant correlations between such factors as sexual-appearance concerns (e.g., scars, prostheses, and reconstruction), chemotherapy, loss of ovarian function, and fertility after treatment and the psychological adjustment to illness [12]. In addition, recent studies have shown that coping strategies are differentially associated with distress related to breast cancer. Significantly, appropriate adjustment to cancer depends on the totality of the cognitive, emotional, and behavioral responses to the diagnosis by the patients and their significant others [12] .Past research has shown that emotional support by the family is related to a positive outlook on life among women with advanced breast cancer and that a family environment characterized by more expressiveness and less conflict predicts better adjustment of cancer patients [12].

Breast cancer constitutes a major life stressor, with 20 to 46 percent of women suffering from clinically significant levels of depression and anxiety following diagnosis and treatment [28]. The importance of studying patterns of communication during a health stressor is apparent from numerous studies demonstrating that adjustment to cancer is related to patients' social interactions, in particular, patterns of relating among married couples have implications for psychological well-being, perceptions of pain, and relationship satisfaction [28].

As with other serious illnesses, cancer poses profound physical and psychological challenges. Religion is a common way to cope with these challenges, for example, Johnson and Spilka reported that 85% of women with breast cancer turned to religion to cope, religious coping can be conceptualized in different ways such as, most studies assess the frequency of church attendance or prayer, with the assumption that these behaviors are a response to the stressors in question. The problem with this assumption is that global measures of religious involvement may

reflect dispositional religiousness rather than how people draw from religion during crises and another method involves determining the degree to which religion is involved in coping [30]. Some scales include religious items that are subsumed by a broader dimension of coping. For example, the Ways of Coping Scale includes two religious items ‘‘found new faith’’ and ‘‘I prayed,’’ that are part of a ‘‘Positive Reappraisal’’ coping factor. Finally, some scales, such as the Religious=Spiritual Coping Scale (RCOPE), assess a range of coping methods, which can be categorized as positive or negative. Positive religious coping (e.g., benevolent religious appraisals, religious forgiveness, etc.) reflects a secure relationship with God and is associated with improved quality of life in persons with cancer. In contrast, negative religious coping (e.g., reappraisals of God’s powers, feeling abandoned or punished by God, etc.) reflects a tenuous relationship with God and is associated with worse well-being in people with cancer. Unlike dispositional measures of religiousness, these measures focus more specifically on how people actually use religion in times of crisis [30].

Coping strategy (or strategies) an individual utilizes when facing a stressor may be dependent on the type of stressor encountered. Returning to the context of cancer recurrence, intrusive/avoidant thoughts and negative emotions may prompt different ways to cope when there is a worsening of physical symptoms. For example, seeking social support may be an obvious, easy choice to lessen one's anxiety, but it may not be as easy for those suffering from fatigue, pain, or nausea and vomiting from chemotherapy [31]. Understanding the processes that govern the role of coping strategies in managing stress would provide important information about how and under what circumstances patients have more positive (or even successful) outcomes rather than negative (or more vulnerable) ones [31].

Lazarus and Folkman describes that Coping strategies represent behavioral and cognitive efforts to deal with stressful encounters. Lazarus and Folkman classified coping strategies as either problem-focused or emotion-focused, delineating the function of coping as dealing with the problem or with its emotional and physiological outcomes, respectively [12]. Coping is a process and contextual, and there are no assumptions on good or bad coping therefore, the actual coping process refers to the person's efforts to reduce, minimize, master or tolerate the person–environment transaction that has been appraised to be demanding [20].

CONCEPTUAL FRAMEWORK

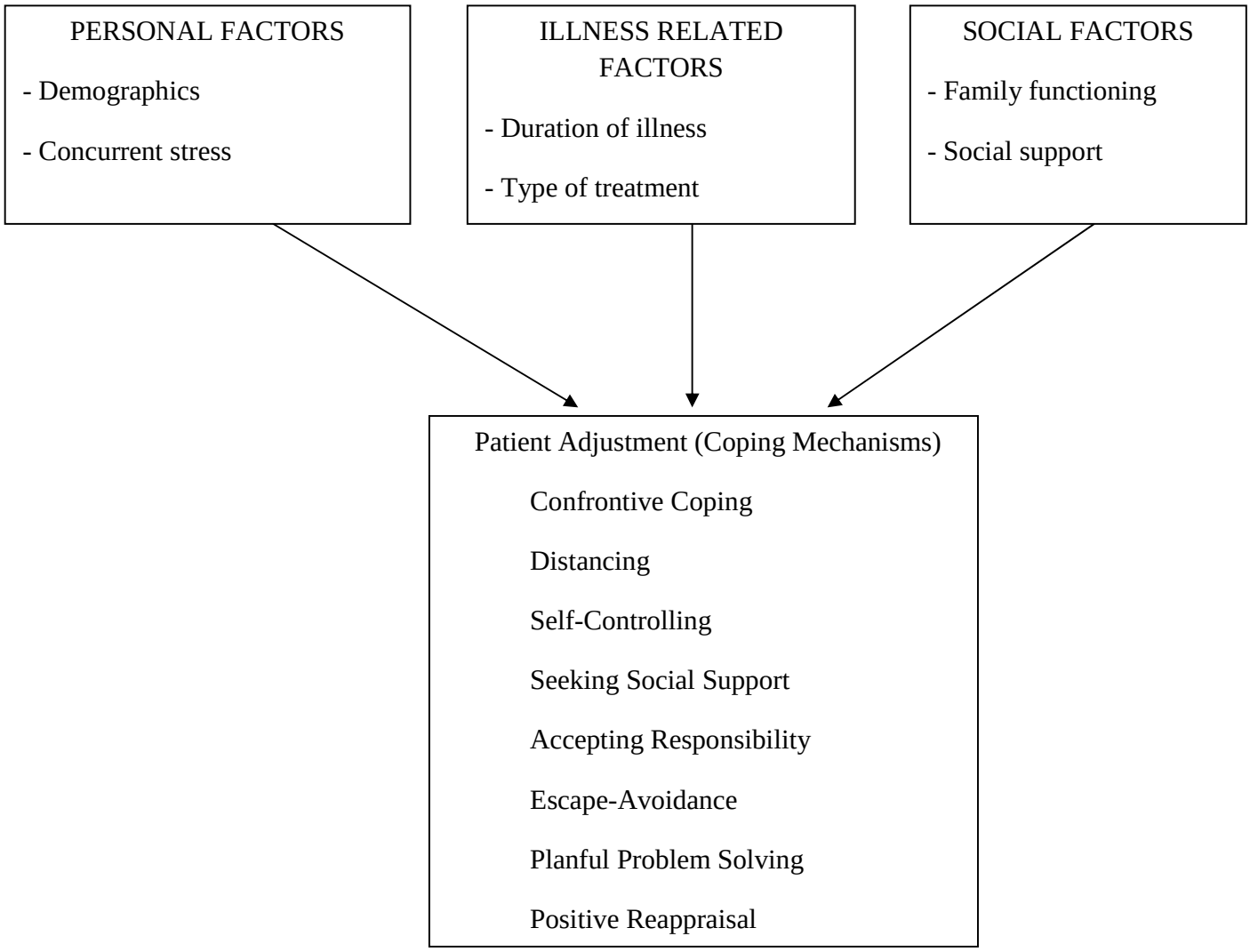


Fig.1 This conceptual framework is adopted from Lazarus and Folkman and is modified based on the objective of the study.

CHAPTER THREE

3. OBJECTIVE

3.1 GENERAL OBJECTIVE

To assess coping mechanisms used by breast cancer patients in Tikur Anbassa Specialized Hospital, Addis Ababa, Ethiopia

3.2 SPECIFIC OBJECTIVES

- To describe coping mechanisms used by breast cancer patients in Tikur Anbassa Specialized Hospital, Addis Ababa, Ethiopia
- To assess the relationship between socio demographic characteristics and coping mechanisms used by breast cancer patients
- To assess the relationship between illness related factors and coping mechanisms used by breast cancer patients

CHAPTER FOUR

4. METHODOLOGY

4.1. STUDY AREA AND PERIOD

The study was conducted in Tikur Anbessa Specialized Hospital, Addis Ababa, Ethiopia from October to May 2012. Addis Ababa is the Capital city of Ethiopia and it has a population size of over 3 million (303809) with annual growth rate of 2.1 [32]. Addis Ababa is located between 8055' and 9005' North Latitude and between 38040' and 38050' East Longitude and the total Land area is 54,000 hectares [32]. The city has thirteen governmental hospitals, of which, 5 are under Addis Ababa Regional Health Bureau (AARHB) and 5 are specialized referral (central) Hospitals, two defense forces (military) referral hospitals and one hospital under army force [32]. Furthermore the city has 27 health centers under the AARHB and 6 health centers are expected to be opened soon [33]. Tikur Anbassa Specialized Hospital is located at the center of the city which functions as a referral center for all sorts of patients coming from every side of the country. This hospital is one of the only two University Hospitals in Ethiopia and the largest general public hospital in Addis Ababa. It is also the only hospital in the country which has Oncology unit.

The Oncology unit is established in 1994 by one oncologist, one radiologist and two nurses and start service [33]. The cancer care service is given in the following rooms: Radiotherapy section (Room), Chemotherapy administration Room, in patient ward, cancer Plan room, and Emergency room for cancer patient and OPD to screen cancer patients. The main activities done in oncology unit are: chemotherapy, radiotherapy and concurrent therapy but surgical therapy of cancer is done in surgery unit [34]. The unit classified the patients as new case, treatment and follow up

services. Now it has four oncologists, four radiologists and twelve nurses are staff of oncology unit [34].

4.2. STUDY DESIGN

Institutional based Cross sectional study was conducted at Tikur Anbassa Specialized Hospital.

4.3. POPULATION AND SAMPLE SIZE DETERMINATION

4.3.1. SOURCE POPULATION

All breast cancer patients in Addis Ababa were the source population of the study.

4.3.2. STUDY POPULATION

All breast cancer patients who were visiting Tikur Anbassa Specialized hospital during the study period were included in the study.

4.3.3. INCLUSION CRITERIA

- All breast cancer patients
- Breast cancer patients in all age groups

4.3.4. EXCLUSION CRITERIA

- Mentally incompetent patients
- Other Cancer patients (other than breast cancer)

4.4. SAMPLE SIZE DETERMINATION

The sample size estimation was determined by using the following statistical formula

$$n = \frac{(Z\square/2)^2 P(1-P)}{d^2}$$

Where: n= the sample size

Z= Z score value at 95% confidence interval i.e. 1.96

P= Prevalence of breast cancer taken as 0.5 (50%)

D= Marginal of error

$$n = \frac{(1.96)^2 x 0.5 x 0.5}{(0.05^2)}$$

$$= 384$$

Since the total population involved is less than 10,000, I use the sample size correction formula.
N= 600

$$N_f = \frac{n_i}{1 + \frac{n_i}{N}}$$

Hence the final sample size= 234

4.5. SAMPLING TECHNIQUE

Convenient non probability sampling was used until the determined sample size were interviewed and included in the study.

4.6. DATA COLLECTION INSTRUMENT

Data was collected using structured questionnaire. The questionnaire used to assess coping mechanism contains 50 items that is adopted from Lazarus and Folkman. The assessment tool contains the patients' socio demographic characteristics, most of all coping strategies practiced by all patients and social support in the process of coping mechanisms. The questionnaire was prepared in English and translated into Amharic and then into English.

4.7. PRETEST

Since there is no study previously conducted in the study area in the same topic, for validity and reliability the data collection instrument was piloted on 10% of breast cancer patients who were illegible in the same hospital before the study period. Since the clients in the study hospital did

not have an appointment before one month and the data collection is within one month, there was no bias. After the pretest, any misunderstanding of the questionnaire was cleared by the investigator and also unclear items were written in clear and easily understandable language.

4.8. DATA COLLECTION TECHNIQUE

The researcher contacted Addis Ababa University medical school and medical director of the study hospital and obtained permission to invite patients with breast cancer disease to participate in the study. The data was collected by using standardized questionnaire.

Data was collected by 9 BSc graduate Tikur Anbassa specialized hospital nurses and translator was used whenever necessary since patients may come from different parts of the country.

4.9 VARIABLES

4.9.1. DEPENDENT VARIABLES

- Coping mechanism used by patients with breast cancer disease

4.9.2. INDEPENDENT VARIABLE

- Background variables (Age, sex, ethnicity, religion, marital status and occupational Status)
- Type of cancer treatment (Chemotherapy, Radiation therapy and/or surgery)
- Educational status
- Socioeconomic status
- Personal factors
- Illness related factors

4.10. OPERATIONAL DEFINITIONS

1. Coping mechanism - specific efforts, both behavioral and psychological, that people employ to master, tolerate, reduce, or minimize stressful event (breast cancer) that is measured using a nominal scale of four components namely not used, used somewhat, used quite a bit and used a great deal.

2. Social support- support received (e.g. informative, emotional, or instrumental) or the sources of the support (e.g. family or friends) that enhance recipients' self-esteem or provide breast cancer related interpersonal aid that is measured using an ordinal scale of two components namely yes and no.

3. Confrontive coping- Aggressive efforts to alter the situation and suggests some degree of hostility and risk-taking. It has three components that are measured using a nominal scale of four components namely not used, used somewhat, used quite a bit and used a great deal.

4. Distancing- cognitive efforts to detach oneself and to minimize the significance of the situation. It has six components that are measured using a nominal scale of four components namely not used, used somewhat, used quite a bit and used a great deal.

5. Self-controlling- efforts to regulate one's feelings and actions. It has four components that are measured using a nominal scale of four components namely not used, used somewhat, used quite a bit and used a great deal.

6. Seeking social support- efforts to seek informational support, tangible support, and emotional support. It has six components that are measured using a nominal scale of four components namely not used, used somewhat, used quite a bit and used a great deal.

7. Accepting responsibility- acknowledges one's own role in the problem with a concomitant theme of trying to put things right. It has three components that are measured using a nominal scale of four components namely not used, used somewhat, used quite a bit and used a great deal.

8. Escape-avoidance- wishful thinking and behavioral efforts to escape or avoid the problem. Items on this scale contrast with those on the Distancing scale, which suggest detachment. It has nine components that are measured using a nominal scale of four components namely not used, used somewhat, used quite a bit and used a great deal.

9. Planful problem solving- deliberate problem-focused efforts to alter the situation, coupled with an analytic approach to solving the problem. It has ten components that are measured using a nominal scale of four components namely not used, used somewhat, used quite a bit and used a great deal.

10. Positive reappraisal- efforts to create positive meaning by focusing on personal growth. It often also has a religious dimension. It has five components that are measured using a nominal scale of four components namely not used, used somewhat, used quite a bit and used a great deal.

11. Positive (good) coping- the type of coping in which the respondents scored used quite a bit and used a great deal (2 and 3) in confrontive coping, self-controlling, seeking social support, accepting responsibility, planful problem solving and positive reappraisal coping activities or the respondents scored not used and used somewhat(0 and 1) in distancing and escape-avoidance coping activities.

12. Negative (poor) coping- the type of coping in which the respondents scored used quite a bit and used a great deal (2 and 3) in distancing and escape-avoidance or the respondents scored not

used and used somewhat (0 and 1) in confrontive coping, self-controlling, seeking social support, accepting responsibility, planful problem solving and positive reappraisal coping activities.

4.11 QUALITY ASSURANCE OF THE STUDY

For validity and reliability of the study; data collection instrument was piloted on 10% of patients with the same hospital prior to data collection time before being applied to the study subjects. Any misunderstanding of the questionnaire was cleared by the investigator and also unclear items were written in clear and easily understandable language. The investigator checked the data daily for completeness and consistency. There was supervision of the data collectors while interviewing the patients and the completed questionnaires was randomly cross-checked.

The investigator checked the questionnaire at daily basis for consistency and completeness. Moreover, the instrument used for this study was standardized and adapted from Susan Folkman, Ph.D.

4.12. DATA ANALYSIS

Each complete questionnaire was assigned to a unique code and analyzed using EPI INFO latest version (3.5.1) statistical packages and then transported to latest version of SPSS (16.00) for analysis. The data entry was made by the principal investigator to minimize errors. The total (50) measures of coping are categorized into eight components namely confrontive coping, distancing, self-controlling, seeking social support, accepting responsibility, escape-avoidance, planful problem solving and positive reappraisal. Each component contains coping activities which has similar (related) concepts. This category is adopted from Susan Folkman, Ph.D. The responses not used (0) and used somewhat (1) are categorized as not used since both responses indicates that the client does not use the variables in a satisfactory way to say that they use it. The responses used quite a bit and used a great deal are categorized as used since both responses

indicate that the respondent uses the variables. Summary statistics such as Frequencies, proportions, measures of central tendencies and measures of variation was used to describe the study population in relation to socio-demographic and other relevant variables. The degree of associations between dependent and independent variables was assessed using crude Odds ratio with 95% confidence interval. Binary logistic regression analysis was performed using SPSS latest version (16.00) statistical program to control potential confounding variables (Adjusted OR).

4.13. ETHICAL CONSIDERATION

Ethical clearance was secured from Addis Ababa University, Faculty of Medicine Institutional Review board (IRB) and permission was obtained from the study hospital. Official letter was obtained from the school of Nursing, Faculty of Medicine of Addis Ababa University to concerned officials to get permission and cooperation for the study. Each respondent was asked for their willingness before data collection and they were informed about the purpose of the study, the right to refuse, and assured anonymity and confidentiality. Participants were not asked to write their name and verbal consent was obtained prior to each interview.

4.14. DISSEMINATION OF THE RESULT

The final result of this study will be submitted to College of Health Science department of Nursing and Midwifery, Addis Ababa University School of Medicine and other concerned officials such as Tikur Anbassa Specialized Hospital, Ministry of Health and Addis Ababa Regional Health Bureau. Efforts will be made to present the result of the study at nursing conferences. The result of this study will be used by Hospitals as planning tool for future clinical care, guide an individual nursing care and for provision of appropriate nursing care for breast cancer patients.

CHAPTER FIVE

5. RESULTS

5.1 BACKGROUND VARIABLES

From a total of 234 breast cancer patients involved in the study area, 101 (43.2%) were at age range of 40-54 years and 90 (38.5%) were at age range of 25-39 years, 35 (15.0%) were at age range of 55-69 years; while 8 (3.4%) were at age range of 70-84 years (See Table 1).

The dominant religion of the study population was Orthodox 170 (72.6%) followed by Muslim 34 (14.5%), Protestant 28 (12.0%) and Catholic 2 (0.9%) respectively. The majority of subjects 214 (91.5%) were ever married while 20 (8.5%) were never married. Among the study subjects 152 (65.0%) of the respondents were unemployed and the others 82 (35.0%) were engaged in some occupation. The major ethnic compositions of the study population were Amhara 120 (51.3%) followed by Oromo 54 (23.1%), Tigrea 27 (11.5%), Gurage 27 (11.5%) and others 6 (2.6%) (See Table 1).

Among the educational status of the study population 144 (61.5%) were literates while the others 90 (38.5%) were illiterates. Among the respondents 109 (46.6%) had no income, 54 (23.1%) earned greater than 700 birr, 29 (12.4%) earned 320-500 birr, 25 (10.7%) earned 501-700 birr and 17 (7.3%) earned less than 320 birr (See Table 1).

Among all the study subjects the majority 103 (44.0%) heard their first diagnosis of cancer 1-3 years ago followed by 73 (31.2%) less than one year, 37 (15.8%) 3-5 years and 21 (9.0%) heard their first diagnosis of breast cancer for greater than 5 years. Two hundred thirteen (91.0%) study subjects received combination and hormonal therapy and the others 17 (7.3%) received chemotherapy, 2 (0.9%) received radiotherapy and the rest 2 (0.9%) received surgery alone. Out

of 234 respondents the majority of the study subjects 171 (73.1%) had social support and the rest 63 (26.9%) had no social support or any support group (See Table 1).

Table 1: Sociodemographic characteristics of breast cancer patients at Tikur Anbassa Specialized hospital, 2012.

	PART ONE-SOCIO DEMOGRAPHIC DATA	Frequency n:234	Percentage (%)
1	Age		
	1. 25-39	90	38.5
	2. 40-54	101	43.2
	3. 55-69	35	15.0
	4. 70-84	8	3.4
2	Ethnicity		
	1. Amhara	120	51.3
	2. Oromo	54	23.1
	3. Tigrea	27	11.5
	4. Gurage	27	11.5
	5. Others	6	2.6
3	Religion		
	1. Orthodox	170	72.6
	2. Muslim	34	14.5
	3. Protestant	28	12.0
	4. Catholic	2	0.9
4	Marital status		
	1. Never married	20	8.5
	2. Married	140	59.8
	3. Widowed	34	14.5
	4. Divorced	40	17.1
5	Educational level		
	1. No formal education	90	38.5
	2. 6^{th} grade and below	23	9.8
	3. 7-9 grade	15	6.4

	4. 10-12 grade	59	25.2
	5. 12 grade and above	47	20.1
6	Occupation		
	1. House wife	152	65.0
	2. Governmental employee	56	23.9
	3. Merchant	14	6.0
	4. Daily labor	12	5.1
7	Average monthly income (in Birr)		
	1. No income	109	46.6
	2. <320	17	7.3
	3. 320-500	29	12.4
	4. 501-700	25	10.7
	5. >701	54	23.1
8	First diagnosis of cancer		
	1. <1year	73	31.2
	2. 1-3 years	103	44.0
	3. 3-5years	37	15.8
	4. >5years	21	9.0
9	The type of treatment received		
	1. Chemotherapy	17	7.3
	2. Radiotherapy	2	0.9
	3. Surgery	2	0.9
	4. Others (Combination or hormonal therapy)	213	91.0
10	Presence of any support group (social support)		
	1. Yes	171	73.1
	2. No	63	26.9

As it shows in the figure 2, majorities of breast cancer patients were found between age ranges 40-54 years.

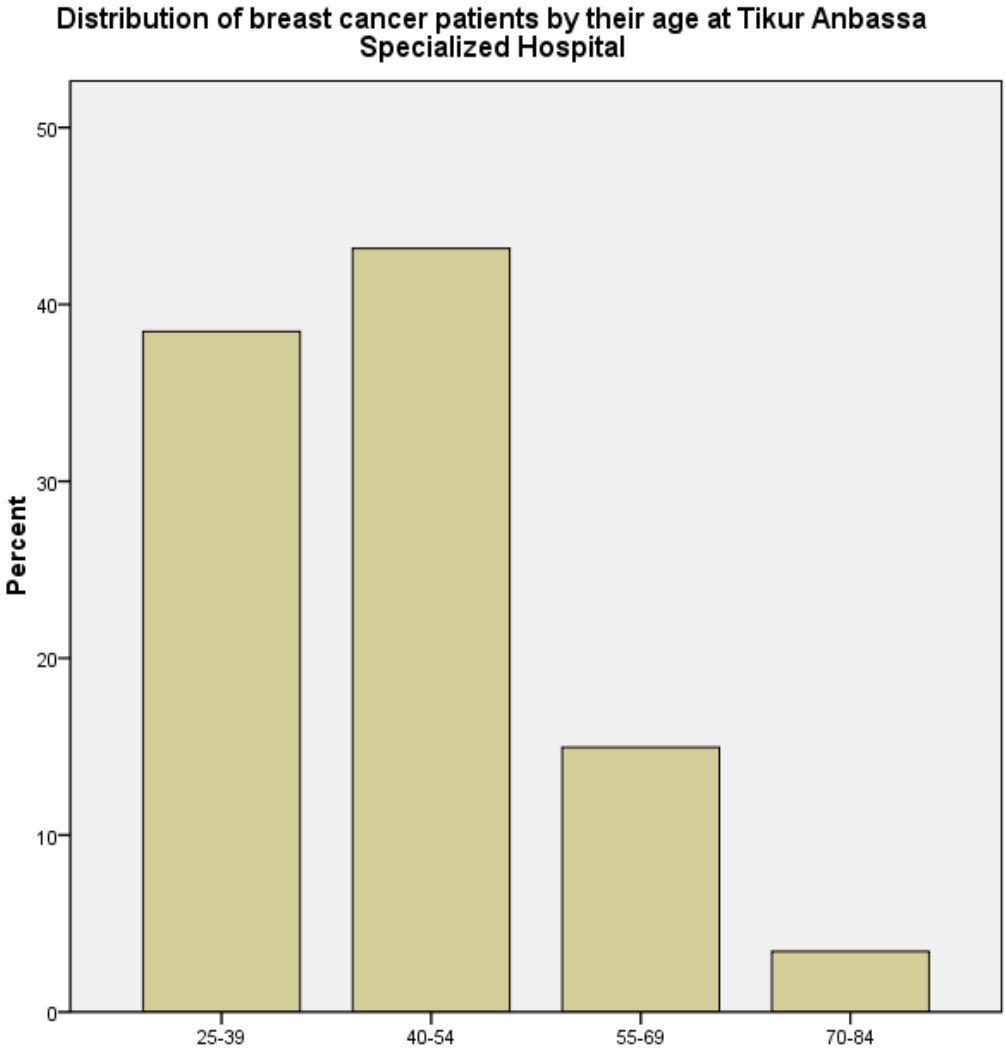
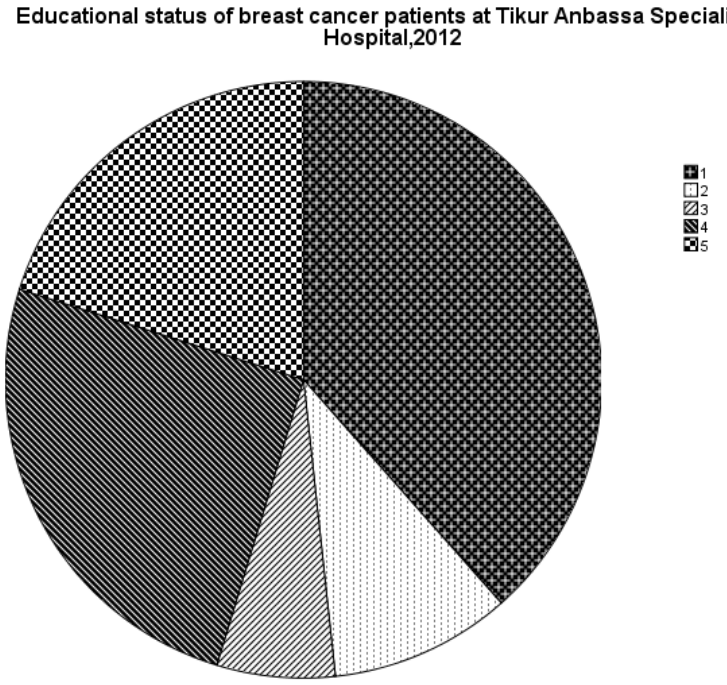


Fig 2: Distribution of breast cancer patients by their age in years at Tikur Anbassa Specialized hospital, Addis Ababa, 2012.

As it shows in the fig 3, majorities of the respondents 90 (38.5%) had no formal education.



Key

1- No formal education
2- 6th grade and below
3- Grade 7-9
4- Grade 10-12
5- 12th grade and above

Fig 3: Educational status of breast cancer patients at Tikur Anbassa Specialized Hospital, Addis Ababa, 2012.

5.2 WAYS OF COPING RESULTS

5.2.1 CONFRONTIVE COPING ACTIVITIES RESULTS

From a total of 3 confrontive coping activities measurements, out of 234 study subjects only 50 (21.4%) respondents felt that they did something which they didn't think would work, but at least they were doing something. Two hundred and fourteen (91.5%) respondents mentioned that they let their feeling out somehow and also only 59(25.2%) respondents stated that they Stood their ground and fought for what they wanted. Therefore, this result shows that the majority of the respondents did not use the two components of confrontive coping activities. This can be a sign for negative coping activities of the respondents.

Table 2: Distribution of breast cancer patients by their confrontive coping activities at Tikur Anbassa Specialized Hospital, Addis Ababa, 2012.

	Confrontive coping activities	Response		
		Used	Not Used	Total
1	I did something which I didn't think would work, but at least I was doing something.	50(21.4%)	184(78.6%)	234(100%)
2	I let my feelings out somehow.	214(91.5%)	20(8.5%)	234(100%)
3	Stood my ground and fought for what I wanted.	59(25.2%)	175(74.8%)	234(100%)

5.2.2 DISTANCING COPING ACTIVITIES RESULTS

From the total of 234 respondents 117(50%) mentioned that they turned to work or substitute activity to take their mind off things. Eighty four (35.9%) respondents had reported that they went along with fate; sometimes they felt that they just have bad luck. Moreover, 145 (62.0%) respondents said that they just went on as if nothing had happened. And only 51(21.8%) of the respondents answered that they refused to think too much about it. Therefore, the majority of clients are not using many components of distancing coping activities.

Table 3: Distribution of breast cancer patients by their distancing coping activities at Tikur Anbassa Specialized Hospital, Addis Ababa, 2012.

	Distancing coping activities	Response		
		Used	Not Used	Total
1	Turned to work or substitute activity to take my mind off things.	117(50.0%)	117(50.0%)	234(100%)
2	Went along with fate; sometimes I just have bad luck.	84(35.9%)	150(64.1%)	234(100%)
3	Went on as if nothing had happened.	145(62.0%)	89(38.0%)	234(100%)
4	Looked for the silver lining, so to speak; tried to look on the bright side of things.	101(43.2%)	133(56.8%)	234(100%)
5	Didn't let it get to me; refused to think too much about it.	51(21.8%)	183(78.2%)	234(100%)
6	Made light of the situation; refused to get too serious about it.	39(16.7%)	195(83.3%)	234(100%)

5.2.3 SELF CONTROLLING COPING ACTIVITIES RESULTS

Among 234 respondents only 40(17.1%) mentioned that they tried not to burn their bridges, but leave things open somewhat and only 55(23.5%) of the respondents said that they tried to keep their feelings to their self. Moreover, 60 (25.5%) of the respondents clarified that they tried to keep their feelings from interfering with other things too much. Therefore, this result shows that the majority of the respondents were not using self controlling coping activities which can be considered as negative coping.

Table 4: Distribution of breast cancer patients by their Self controlling coping activities at Tikur Anbassa Specialized Hospital, Addis Ababa, 2012.

	Self controlling coping activities	Response		
		Used	Not used	Total
1	Tried not to burn my bridges, but leave things open somewhat.	40(17.1%)	194(82.9%)	234(100%)
2	I tried to keep my feelings to myself.	55(23.5%)	179(76.5%)	234(100%)
3	I tried not to act too hastily or follow my first hunch.	40(17.1%)	194(82.9%)	234(100%)
4	I tried to keep my feelings from interfering with other things too much.	60(25.5%)	174(74.4%)	234(100%)

5.2.4 SEEKING SOCIAL SUPPORT COPING ACTIVITIES RESULTS

Among 234 respondents 171(73.1%) described that they did not talked to someone to find out more about the situation (breast cancer). However, 213(91.0%) described that they accepted sympathy and understanding from someone. More than a half or 154(65.8%) of the respondents mentioned that they got professional help. However, only 63(26.9%) of the respondents mentioned that they talked to someone who could do something concrete about the problem. And only 63(26.9%) of the respondents described that they talked to someone about how they were

feeling. Therefore, this result shows that the majority of clients were not using many components of seeking social support coping activities and this can be considered as negative coping.

Table 5: Distribution of breast cancer patients by their Seeking social support coping activities at Tikur Anbassa Specialized Hospital, Addis Ababa, 2012.

	Seeking social support coping activities	Response		
		Used	Not Used	Total
1	Talked to someone to find out more about the situation.	63(26.9%)	171(73.1%)	234(100%)
2	Accepted sympathy and understanding from someone.	213(91.0%)	21(9.0%)	234(100%)
3	I got professional help.	154(65.8%)	80(34.2%)	234(100%)
4	Talked to someone who could do something concrete about the problem.	63(26.9%)	171(73.1%)	234(100%)
5	I asked a relative or friend I respected for advice.	18(7.7%)	216(92.3%)	234(100%)
6	Talked to someone about how I was feeling.	63(26.9%)	171(73.1%)	234(100%)

As it shows in figure 4, the majorities of breast cancer patients (59.13%) were not using seeking social support coping activities.

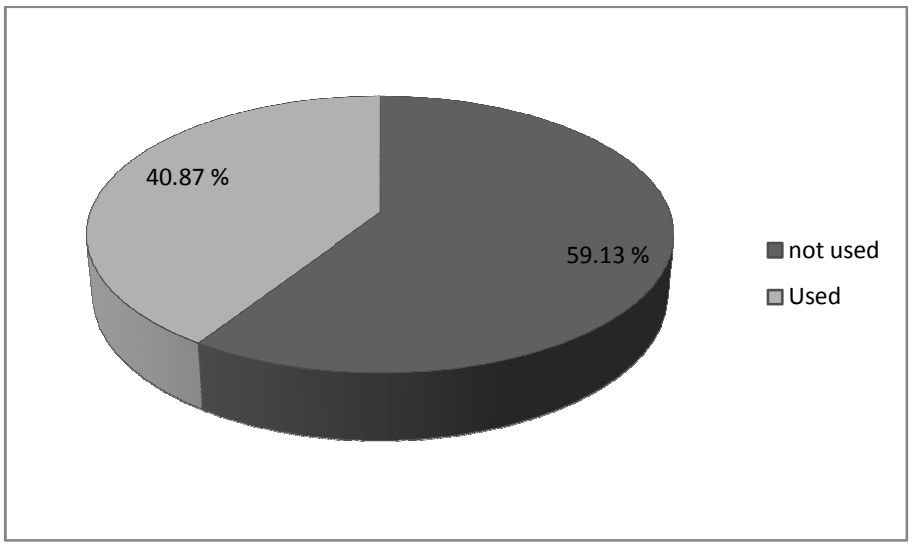


Fig 4: Distribution of breast cancer patients by their seeking social support coping activities at Tikur Anbassa Specialized hospital, Addis Ababa, 2012.

5.2.5 ACCEPTING RESPONSIBILITY COPING ACTIVITIES RESULTS

Among 234 interviewed breast cancer patients 167 (71.4%) reported that they do not Criticize or lecture themselves and also half 117 (50%) of the respondents mentioned that they told them self things that helped them to feel better. However, only 31(13.2%) reported that they made a promise to themselves that things would be different next time. Hence, this result clearly shows that the majority of the respondents were not using many components of accepting responsibility. This can be a sign for poor coping of the respondents.

Table 6: Distribution of breast cancer patients by their Accepting responsibility coping activities at Tikur Anbassa Specialized Hospital, Addis Ababa, 2012.

	Accepting responsibility coping activities	Response		
		Used	Not Used	Total
1	Criticized or lectured myself.	67(28.6%)	167(71.4%)	234(100%)
2	I told myself things that helped me to feel better.	117(50.00%)	117(50.00%)	234(100%)
3	I made a promise to myself that things would be different next time.	31(13.2%)	203(86.8%)	234(100%)

5.2.6 ESCAPE AVOIDANCE COPING ACTIVITIES RESULTS

From a total of 234 respondents 220(94.00%) reported that they did not hope a miracle would happen and only 1(0.4%) mentioned that they slept more than usual. No participant mentioned that they tried to make their self feel better by eating, drinking, smoking, using drugs or medication. 113(48.3%) of the respondents mentioned that they avoided being with people in general and 217(92.7%) of the respondents reported that they took it out on other people. Moreover, 105(44.9%) of the respondents described that they refused to believe that it had happened. And also 220(94.0%) of the respondents reported that they accepted it, since nothing

could be done. Therefore, this study indicates that the majority of participants were using escape avoidance coping which can be considered as a good sign for negative coping.

Table 7: Distribution of breast cancer patients by their Escape avoidance coping activities at Tikur Anbassa Specialized Hospital, Addis Ababa, 2012.

Escape avoidance coping activities		Response		
		Used	Not Used	Total
1	Hoped a miracle would happen.	14(6.0%)	220(94.00%)	234(100%)
2	Slept more than usual.	1(0.4%)	233(99.6%)	234(100%)
3	Got away from it for a while; tried to rest or take a vacation.	55(23.5%)	179(76.5%)	234(100%)
4	Tried to make myself feel better by eating, drinking, smoking, using drugs or medication, etc.	0	234(100.00%)	234(100%)
5	Avoided being with people in general.	113(48.3%)	121(51.7%)	234(100%)
6	Took it out on other people.	217(92.7%)	17(7.3%)	234(100%)
7	Refused to believe that it had happened.	105(44.9%)	129(55.1%)	234(100%)
8	Accepted it, since nothing could be done.	220(94.0%)	14(6.0%)	234(100%)
9	Wished that the situation would go away or somehow be over with.	143(61.1%)	91(38.9%)	234(100%)

5.2.7 PLANFUL PROBLEM SOLVING COPING ACTIVITIES RESULTS

Out of 234 study subjects 116(49.6%) reported that they just concentrated on what they had to do next – the next step and only 86(26.5%) respondents answered that they tried to analyze the problem in order to understand it better. Likewise, only 82(35.0%) respondents mentioned that they felt that time would make a difference – the only thing to do was to wait and also only 49(20.9%) respondents answered that they changed something so things would turn out all right.

Only 68(29.1%) respondents reported that they came up with a couple of different solutions to the problem. In addition, 104(44.4%) respondents stated that they prepared their self for the worst and 227(97.0%) respondents reported that they did not jog or exercise. Therefore, this result indicates that the majority of respondents were not using planful problem solving which can be considered as negative coping.

Table 8: Distribution of breast cancer patients by their Planful problem-solving coping activities at Tikur Anbassa Specialized Hospital, Addis Ababa, 2012.

Planful problem-solving coping activities		Response		
		Used	Not Used	Total
1	Just concentrated on what I had to do next – the next step.	116(49.6%)	118(50.4%)	234(100%)
2	I tried to analyze the problem in order to understand it better.	86(26.5%)	172(73.5%)	234(100%)
3	I felt that time would make a difference – the only thing to do was to wait.	82(35.0%)	152(65.0%)	234(100%)
4	Bargained or compromised to get something positive from the situation.	76(32.5%)	158(67.5%)	234(100%)
5	Changed something so things would turn out all right.	49(20.9%)	185(79.1%)	234(100%)
6	I knew what had to be done, so I doubled my efforts to make things work.	63(26.9%)	171(73.1%)	234(100%)
7	Came up with a couple of different solutions to the problem.	68(29.1%)	166(70.9%)	234(100%)
8	I prepared myself for the worst.	104(44.4%)	130(55.6%)	234(100%)
9	I went over in my mind what I would say or do.	145(62.0%)	89(38.0%)	234(100%)
10	I jogged or exercised.	7(3.0%)	227(97.0%)	234(100%)

As it shows in figure 5 the majorities of breast cancer patients (67.01%) were not using Planful problem-solving coping activities.

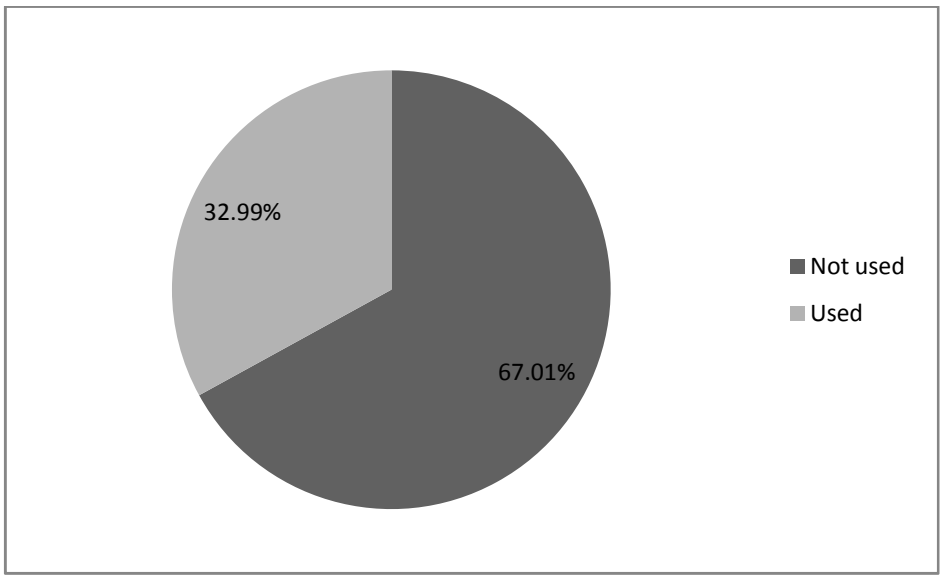


Fig 5: Distribution of breast cancer patients by their Planful problem-solving coping activities at Tikur Anbassa Specialized hospital, Addis Ababa, 2012.

5.2.8 POSITIVE REAPPRAISAL COPING ACTIVITIES RESULTS

From the total of 234 respondents only 53(22.6%) stated that they changed or grew as a person in a good way and only 23(9.8%) respondents mentioned that they came out of the experience better than when they went in. Likewise only 12(5.1%) found new faith and only 49(20.9%) respondents described that they rediscovered what is important in life. However, 234(100%) participants mentioned that they prayed. This result shows that the respondents were not using many of the positive reappraisal components except praying.

Table 9: Distribution of breast cancer patients by their positive reappraisal coping activities at Tikur Anbassa Specialized Hospital, Addis Ababa, 2012.

	positive reappraisal coping activities	Response		
		Used	Not Used	Total
1	Changed or grew as a person in a good way.	53(22.6%)	181(77.4%)	234(100%)
2	I came out of the experience better than when I went in.	23(9.8%)	211(90.2%)	234(100%)
3	Found new faith.	12(5.1%)	222(94.9%)	234(100%)
4	Rediscovered what is important in life.	49(20.9%)	185(79.1%)	234(100%)
5	I prayed.	234(100%)	0	234(100%)

As it shows in figure 6 the majorities of breast cancer patients (68.32%) were not using positive reappraisal coping activities except praying which is 100%.

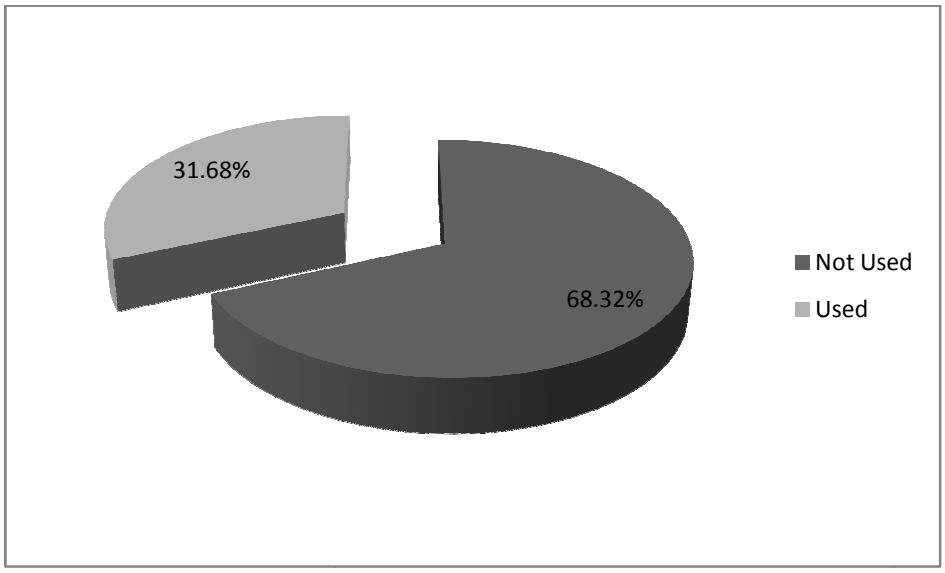


Fig 6: Distribution of breast cancer patients by their positive reappraisal coping activities at Tikur Anbassa Specialized hospital, Addis Ababa, 2012.

ASSOCIATION OF ISOLATION (AVOIDING BEING WITH PEOPLE IN GENERAL) WITH SOCIODEMORAPHIC CHARACTERISTICS

Out of 234 respondents 113(48.3%) respondents reported that they avoided being with people in general. Only 5(25%) never married respondents mentioned that they experienced isolation compared to 108(50.4%) married. The mean age (±SD) of those who experience isolation was 45.72(± 11.07).

During the bivariate analysis isolation was found to be significantly associated with many independent variables such as marital status, educational level, occupational status and average monthly income of participants. However, after controlling for possible confounding variables only educational level was found to be the main predictor, independently and negatively associated with isolation with (OR=0.199,95%CI(.102, .211) (See table 10).

Table 10: Association of isolation (avoided being with people in general) with sociodemoraphic characteristics in Tikur Anbassa Specialized Hospital, Addis Ababa, 2012.

	ISOLATION (AVOIDED BEING WITH PEOPLE IN GENERAL)			
Variables	Used	Not Used	COR with 95% CI	Adjusted OR with 95% CI
Age 25-39	37	53	1.00	
40-54	51	50	1.461(0.824,2.592)	
55-69	21	14	2.149(0.969,4.763)	
70-84	4	4	1.432(0.337,6.095)	
Marital status				
Never married	5	15	1.00	1.00
Married	108	106	0.36(1.073,8.708)**	2.372(0.759,7.419)
Education				
Illiterate	64	26	1.00	1.00
Literate	9	95	0.210(0.118,0.371)***	0.199(0.102,0.211)***
Occupation				
No occupation	82	70	1.00	
Some occupation	31	51	0.519(0.300,0.898)***	0.575(0.798,0.362)

Average income				
<320	12	5	1.960(0.646,6.944)**	2.823(0.753,10.588)
320-500	10	19	0.430(0.183,1.009)	1.096(0.380,3.160)
501-700	9	16	0.459(0.187,1.129)	1.541(0.499,4.763)
>700	22	32	0.561(0.290,1.088)	1.489(0.583,3.808)
No income	60	49	1.00	
First diagnosis of cancer			1.00	
<1year	3	6	1.672(0.400,6.990)	
1-3years	56	67		
3-5 years	32	30	2.133(0.489,9.303)	
>5years	22	18		
			2.444(0.535,11.171)	
Social support				
Yes	77	94	0.614(0.343,1.100)	
No	36	27	1.00	

N.B: **=Pvalue<0.05 and ***=Pvalue<0.005

ASSOCIATION OF DENIAL (REFUSED TO BELIEVE THAT IT HAD HAPPENED) WITH SOCIODEMOGRAPHIC CHARACTERISTICS

Among 234 respondents who were interviewed, 105(44.9%) refused to believe that it had happened. During the bivariate analysis Denial was found to be significantly associated with many independent variables such as marital status, educational level, occupational status and average monthly income of participants however after controlling for possible confounding variables not even one variable was associated (See table 11).

Table 11: Association of denial (refused to believe that it had happened) with sociodemographic characteristics

	DENIAL (REFUSED TO BELIEVE THAT IT HAD HAPPENED)			
Variables	Used	Not Used	COR with 95% CI	Adjusted OR with 95% CI
Age 25-39	86	4	1.00	
40-54	94	7	0.844(0.477,1.493)	
55-69	29	6	0.920(0.421,2.014)	
70-84	8	0	0.364(0.70,1.903)	
Education				
Illiterate	86	4	1.00	1.00
Literate	131	13	0.21(0.312,0.908)**	0.580(0.293,1.148)
Occupation				
No occupation	140	12	1.00	1.00
Some occupation	77	5	0.641(0.37,1.108)**	0.782(0.358,1.711)
Average income				
<320	16	1	0.713(0.253,2.010)	0.887(0.279,2.817)
320-500	29	0	0.388(0.158,0.951)	0.611(0.215,1.732)
501-700	21	4	0.322(0.119,0.867)**	0.572(0.176,1.857)
>700	49	5	1.273(0.661,2.451)	1.990(0.804,4.924)
No income	102	7	1.00	1.00

First diagnosis of cancer			1.00
<1year	8	1	0.813(0.208,3.173)
1-3years	113	10	0.541(0.132,2.212)
3-5 years	57	5	0.385(0.88,1.678)
>5years	39	1	
Social support			
Yes	161	10	1.118(0.624,2.003)
No	56	7	1.00

N.B:=Pvalue<0.05**

CHAPTER SIX

6. DISCUSSION

The purpose of this study was to understand how breast cancer patients` who visit the study hospital cope with breast cancer disease. As we can see from the result of this study most of the participants cope to breast cancer negatively and also there was poor communication of the disease process with health care professionals and with significant others. Therefore, most of the clients experienced negative coping especially in areas of Planful problem-solving, self controlling, accepting responsibility and positive reappraisal coping strategies. However the majority of clients scored high in escape avoidance and distancing which could be a major indicator of negative coping. These issues are addressed in this chapter.

On this study among the sociodemographic characteristics, educational level and occupation of participants had a great influence on the positive coping strategies of the respondents. Those who were literates cope positively as compared to those who were illiterates. And also those who had some occupation cope in a good way when compared to those had no occupation. This result is consistent with the study conducted by U.-S. Lehto and M. Ojanen, which states that among the sociodemographic and socioeconomic variables, mainly educational and occupational status had influence on coping: being in working life was associated with better coping mechanism [20]. In this study during the bivariate analysis isolation was found to be significantly associated with many independent variables such as marital status, educational level, occupational status and average monthly income of participants. However, after controlling for possible confounding variables only educational level was found to be the main predictor, independently and negatively associated with isolation with (OR=0.199,95%CI(.102, .211). This can be justified as

those clients who are educated have some information to understand the situation about breast cancer which can protect them from isolating themselves. The findings of Hasida Ben-Zur also indicate that a high level of education among patients contributed to low emotion-focused coping, which suggests that patients with a low educational level may be particularly vulnerable to distress. A high level of education is considered a resource that may enhance coping through the ability to understand the situation and use information more efficiently [12].

Type of treatment is one of the factors which affect the clients coping. In this study 17 (7.3%), 2 (0.9%), 2 (0.9%), 213 (91.0%) participants received Chemotherapy, Radiotherapy, Surgery and others (combination or hormonal therapy) respectively. Among all 234 participants none received breast reconstructive therapy after mastectomy which may have an effect in poor body image or negative coping and as a result isolation. This result is consistent with other studies which suggested that surgery in combination with reconstruction has a positive effect on HRQL (Health Related Quality Of Life) and good adjustment [35].

Among coping strategies escape avoidance is the major predictor of negative coping. In this study 217(92.7%) respondents experienced took it out on other people, which is one component of escape avoidance coping activities and 220(94.0%) respondents also experienced accepted it, since nothing could be done which is also the main component of this escape avoidance coping activities. This result is consistent with the study conducted by U.-S. Lehto and M. Ojanen. The more the clients feel helpless or hopeless, the more they are vulnerable to negative coping. In this study clients experienced the major escape avoidance coping behaviors which negatively affect the patients' positive coping. Therefore, behavioral escape-avoidance coping strongly predicted worse psychological well-being [20]. When only those factors concerning cancer-specific stress processes were investigated, the most influential factor was behavioral escape-avoidance coping,

which strongly predicted poorer QOL [20]. It is commonly believed that a person's mental attitude in response to a diagnosis of cancer affects his or her chances of survival, and the psychological coping factors that are most well known in this respect are fighting spirit and helplessness/hopelessness [12]. It has been suggested that clinicians need to detect coping styles such as helplessness or hopelessness and treat them vigorously [36].

Seeking social support is also the major component of coping strategies which can measure the clients coping mechanism. In this study among this measure only 63(26.9%), 154(65.8%), 63(26.9%), 18(7.7%), 63(26.9%) respondents talked to someone to find out more about the situation, got professional help, talked to someone who could do something concrete about the problem, asked a relative or friend they respected for advice, talked to someone about how they were feeling respectively. Therefore, this result clearly shows that many respondents had limited communication and social interaction even with health care professionals or the person who could have the ability to do something concrete about the problem, which leads to poor coping. This result is consistent with the findings of Duncan H. which clearly states that perceived social support not only directly increases emotional well-being, but also may indirectly influence emotional well-being by affecting the choice of specific coping strategies [27]. Seeking social support coping was associated with more psychological symptoms. The beneficial factors included also social support received from family, relatives, acquaintances and other patients. In general, social support appeared to be a health-enhancing factor, as previously demonstrated [20, 27]. Social support has generally been reported to be the means to changing psychological stress processes, especially coping, and their outcomes [20]. Thus, breast cancer patients' perception on how much social support they receive from others may influence their choice of specific coping strategies between active (i.e. positive reframing) and passive (i.e. self-blame) coping, which in

turn may influence their emotional well-being. Active participation of significant others can influence breast cancer patients' efforts to manage their physical as well as emotional conditions. As a result, social support can help bolster self-esteem of individuals as well as the sense of control over their situations. A strong sense of control and confidence would strengthen breast cancer patients' own coping efforts by leading them to rely on active coping strategies (e.g. positive reframing) rather than passive/avoidance coping strategies (e.g. self-blame) [37,27].

In this study 171(73.1%) respondents reported that they did not talk to someone who could do something concrete about the problem. This indicated that these respondents were not willing to talk about the situation not only with their friends or relatives but also with those who could have knowledge about the problem. Therefore unwillingness to talk about the situation may be considered as one reason for poor coping. This result is consistent with the one conducted by Junghyun K and jeong yeob H. in Japan. The more that patients avoided communication, the less they were getting emotional support from others, which was in turn associated with negative coping [36, 35]. If emotional support mediates patient avoidance and psychological distress, then perhaps women with breast cancer are avoiding communication with their partners. Alternatively, patients may avoid talking with their partners, while not turning to anyone else for comfort, either [28]. Either or both of the aforementioned patterns could be detrimental to patients, given that receiving effective emotional support can be very helpful for women with cancer, especially when that support comes from their partners. Patients who reported avoiding communication tended to blame themselves for the cancer, and self-blame was related to higher depression and anxiety. Given that talking about a trauma gives people an opportunity to seek reassurance and avoid rumination [28, 36], women with breast cancer who avoid communication about the cancer may find themselves overwhelmed by intrusive thoughts of responsibility and

guilt. When patients avoid talking about cancer with their partners, it is possible they do not have conversations that could lead them to accept the reality of the cancer and make a commitment to get on with life [28].

Planful problem solving is one of the measures of positive coping activities which have many components on it. The major ones are answered by the respondents as follows: only 116(49.6%), 86(26.5%), 63(26.9%), 68(29.1%) respondents mentioned that they just concentrated on what they had to do next – the next step, tried to analyze the problem in order to understand it better, knew what had to be done, so they doubled their efforts to make things work, Came up with a couple of different solutions to the problem respectively. This result indicates that the majority of respondents did not use planful problem solving which could be predictive of negative coping. This result is consistent with the study conducted by Hasida Ben-Zur. The more the patients use planful problem solving, the more they cope positively and the reverse is true. An examination of specific coping strategies shows that positive reinterpretation, humor, and planning on the part of the patient seem to be particularly related to good adjustment [12]. In this study only 86(26.5%) participants tried to analyze the problem which could be due to knowledge deficit, lack of significant others who had knowledge about the disease process or inability of the clients to discuss about the disease process with health care professionals. Consequently, it could lead to negative coping.

Exercise is also the major component of planful problem solving coping activities. Among 234 respondents who were interviewed, 227(97.0%) respondents stated that they did not jog or exercise. This can be considered as a sign for poor patient adjustment. This result is consistent with the study conducted by Mark P and Ruth B.2009. Combining innovative physical activity interventions with innovative dietary interventions may be a suitable approach to develop

sustainability of healthy behaviors in this population [37, 35]. If breast cancer survivors understand the importance of exercising and can exercise with other survivors in a place where they feel safe and secure, the more likely they are to engage in this behavior. Thus, provision of resources to facilitate survivors' ability to follow recommendations and improve their health and well-being would be prudent [37]. The fact that any physical activity has a positive influence on QOL is encouraging and suggests the importance of encouraging physical activity rather than rest to persons receiving treatment for breast cancer [35].

Positive reappraisal is one of the measures of positive coping activities which have many components on it. Among these components only 53(22.6%), 23(9.8%), 12(5.1%), 49(20.9%) respondents mentioned that they changed or grew as a person in a good way, came out of the experience better than when they went in, found new faith and rediscovered what is important in life respectively. As we can see from these results most of the respondents did not use positive reappraisal which is the measure of positive coping. Therefore, the more the respondents do not use positive reappraisal, the more they cope negatively. This result is also consistent with the study conducted by Mark P. and Ruth B.2009.

Religious coping is also the major component of positive reappraisal which has a great influence on patients' adjustment. In this study among 234 breast cancer patients who are interviewed, almost all 234(100%) mentioned that they prayed. Praying could be considered as one way of positive coping. Praying is the major component of positive religious coping. Positive religious coping can help clients for good psychological adjustment. Negative religious coping predicts worse psychological adjustment [30].

Therefore, this study clearly supports spiritual experience as a social support and a key component of health belief. Clinicians rarely ask patients with serious illness about their

religious coping despite the fact that the majority want their physicians to be aware of their spiritual beliefs. Because negative rather than positive religious coping predicts important health outcomes, inquiring about negative religious coping may be most beneficial. Clinicians could therefore facilitate referrals to clergy for people in the midst of religious=spiritual struggle [30].

Self-image, sense of control, and supportive relations may affect the course of long-term adjustment. There appears to be a substantial relationship between well-being, mood disturbance, level of depressive symptoms, subjective quality of life and social disruption shortly after treatment [38]. Early and appropriate psychosocial support and physical rehabilitation could enhance the cancer patients' quality of life, facilitate their adjustment process and possibly prevent them from developing chronic psychiatric disease [38].

Through the analysis of this data, one can infer that breast cancer disease does affect the clients coping strategies in potent ways, and that coping acts as an intervening or mediating factor between stress and breast cancer disease. As we can see from the results of this study, the majorities of clients cope negatively and needs psychological support. Providing physical support cannot necessarily improve the patients' adjustment to the specific disease process. Therefore, health care professionals should be aware of psychological support and religious coping of clients' in order to facilitate positive coping of clients to the specific disease process. Therefore, coping behaviors can also reduce the negative effect of life strains brought on by this disease.

6.1 STRENGTH AND LIMITATIONS OF THE STUDY

LIMITATIONS OF THE STUDY

The researcher identify that the study had the following limitations:

1. The research was based on convenient sampling to select the study subjects and it was also conducted in one hospital which limits the researcher from generalizing the results to other groups or populations and it was also subjected to bias.
2. Some participants were tired due to their health status which leads to less detailed answers to some interview questions.
3. There was limitation on related literatures especially in developing countries to compare and discuss some of the findings.

STRENGTH OF THE STUDY

The following are strengths of the study.

1. Standardized questionnaire: The study used standardized questionnaire which makes the study valid.
2. Pretest: The questionnaire was pretested before the data collection time which makes the study reliable.
3. Training of data collectors: Data collectors were trained prior to data collection period to avoid interviewer bias.
4. Areas for further research: The study highlights also other issues related to coping and recommendation was done on areas which need further research.

CHAPTER SEVEN

7. CONCLUSION

The result of this study shows that the majority of patients had negative coping in many categories of the measures of patients coping especially in areas of Planful problem-solving, self controlling, accepting responsibility, seeking social support and positive reappraisal coping strategies. Moreover, the majority of clients scored high in escape avoidance and distancing which could be a major indicator of negative coping. This finding also showed that those patients who have less effort to deal with stressful events may have less coping abilities.

The sociodemographic characteristics of the study population showed that the majority of participants had no formal education, were housewives and had no income. This in general could have a big influence for experiencing negative coping to their situation. Those who are literates cope positively as compared to those who are illiterates [1].

Seeking social support is the most important measure of the clients' positive coping activities. In this study 171(73.1%) respondents reported that they did not talk to someone who could do something concrete about the problem. This indicated that these respondents were not willing to talk about the situation not only with their friends or relatives but also with those who could have knowledge about the problem. Therefore, the majority of clients had poor coping in this measure.

Escape avoidance is also the major indicator of the clients' negative coping activities. In this study clients experienced the major escape avoidance coping behaviors which negatively affects the patients positive coping, which strongly predicted poorer QoL(Quality of Life). Therefore, behavioral escape-avoidance coping strongly predicted worse psychological well-being [1].

The religious coping strategies used by patients were good; almost all of the respondents had positive religious coping. It is also the major component of positive reappraisal which has a great

influence on patients' adjustment. Praying could be considered as one way of positive coping. Praying is the major component of positive religious coping. Positive religious coping can help clients for good psychological adjustment and negative religious coping predicts worse psychological adjustment [5].

Perhaps the most significant conclusion is that breast cancer disease indeed affects quality of life and the clients` coping in a dominant ways. Therefore, we need to encourage positive coping activities and discourage negative coping activities. Moreover, we need to incorporate social and psychological support in addition to the physical care.

CHAPTER EIGHT

8. RECOMMENDATION

According to the result obtained, the following issues are recommended to be considered:

1. Provide information to the clients regarding the disease process, treatment options and treatment side effect, prognosis and disease outcome. Health information might be provided through public agencies, mass media, in the hospital environment, in churches and other places.
2. Incorporate social and Psychological support in addition to physical care to that specific disease.
3. Establishment of breast cancer patients association. Through this association patients can share their experience and able to solve their problems together.
4. Further research needs to be done to explore new and existing problems of breast cancer patients.

CHAPTER NINE

9. IMPLICATION FOR NURSING

There are three main areas of implication relative to the findings of this study and nursing service that can be addressed.

9.1 IMPLICATIONS FOR EDUCATION

There are several core issues that undergone patient education. A primary issue is the provision of sufficient knowledge to create an understanding and/or acceptance of a given situation. In this study the majority of subjects did not discuss about the disease process, prognosis and disease out come with health care professionals. This could be considered as the factor for negative coping.

Most of the respondents expressed that they had poor communication with their families and significant others about the disease process and about how they feel. This is also the main factor for negative coping. Therefore, family and social support were influential in determining levels of coping and its associated strategies.

Hence, patient education is an essential component that nurse educators must design a strategy and curricula to provide information inclusive to patients and caregivers. Educational services are needed to be addressed through public service announcements, on television and radio, as well as literatures are required to distribute at central locations.

9.2 IMPLICATIONS FOR NURSING PRACTICE

Given the results of this study, together with others [1, 2], demonstrating that active coping strategies and the coping strategy, acceptance, seeking social support, positive reappraisal were predictive for a better QOL and lower levels of depression and hopelessness in contrast to the

coping strategy, venting of emotions, and escape avoidant coping strategy and giving up. Therefore, health care practitioners should treat cancer patients in a manner consistent with this evidence. Moreover, Evidence-based psychosocial assessment and intervention strategies need to be developed and incorporated in clinical practice guidelines. If possible the service agencies (health care settings) establish breast cancer patients association and arrange the forum to share their experience about their problem and knowledge.

9.3 IMPLICATIONS FOR FUTURE RESEARCH

New knowledge arising out of scientific investigations often proves to be a stimulus for further research. The implication is that more research in a field will help to solve the existing problem. Thus, the result of this study can provide the information to develop new studies.

The following areas seem to be extremely relevant to future research:

1. Further research needs to be performed to show that cognitive-behavioral interventions are efficacious for improvement of QOL and a decrease in depression and hopelessness in cancer patients.
2. The researcher would like to suggest quantitative comparisons between patients and caregivers regarding their feelings about coping strategies and their satisfaction level in the coping process.
3. Implementation of a longitudinal study to examine the nature of social support and its impact on coping.
4. Drawing on qualitative and quantitative methods to examine spirituality and its impact as a coping strategy.

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Addis Ababa University, School of Medicine, College of heath Science,

Department of Nursing and Midwifery

ANNEX- I

PARTICIPATION INFORMATION SHEET

The objective of this study is to assess coping mechanisms used by breast cancer patients in Tikur Anbassa Specialized Hospital. Therefore, you are expected to know the advantage of the study and the following information before filling the questionnaire.

Purpose of the study: To assess coping mechanisms used by breast cancer patients in Tikur Anbassa Specialized Hospital

A. Duration: 40 Minutes
B. Procedure to be carried out: We will only interview you and there will not be any invasive procedure.
C. Risks associated with the study: Apart from the time you are going to spend filling the questionnaire, there will not be any risk acquired by participating in the study. However, if you experience minor emotional distress while participating in this study due to recall of past experiences, the researcher may stop the survey and refer you for appropriate treatment.
D. Benefits of the study: Taking part in the study helps;
    - To improve coping with breast cancer by helping them maintain some reasonable emotional state and well-being.
    - To provide basic information for health policy makers, administrators, researchers and for patients who are suffering from breast cancer.
E. Compensation- There will not be compensation
F. Confidentiality of the information- Personal information you are going to give during the data collection will be confidential. Your name will not be written in the questionnaire and once the data is entered into a computer, it will be coded and becomes unidentifiable. Information in the computer will be password protected. Hard copy (paper) documents such as consent and information forms will be kept in a secured locked cabinet at the name of university.

G. Termination of the study: You will be recruited based on your willingness and without obligation to participate in the study. You have the right to withdraw from participating in the study whenever you want to (before completing the study)

I would like to inform you that this study is approved by Institutional Review Board of FOM, AAU with the following address:

Addis Ababa University

Faculty of Medicine

P.O.Box: 8096

Tel: 011-553-87-34

Email: aauMFIRB@yahoo.com

If you have any question about the study you can ask the contact person by the following address.

MeronAmare

Addis Ababa University

Tel: 0912493454

Email: meri2024@yhoo.com

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Department of Nursing and Midwifery

ANNEX II

CONSENT FORM

Greeting! Good Morning / Good Afternoon?

My name is Sr/Ato---------- I am working as a staff nurse in Tikur Anbassa Specialized hospital.

The objective of this study is to assess coping mechanisms used by breast cancer patients in Tikur Anbassa Specialized Hospital. The research will be done by the staff of Addis Ababa University, Faculty of medicine, School of Nursing. Therefore, you are kindly requested to participate in this study and provide information required from you. Then after, I am going to ask you very personal questions and I will not ask your name.

I assure you this information is confidential. I would greatly appreciate your response to us and like to thank you ahead for your time. The interview may take 40 minutes to complete.

Are you willing to participate in the study?

1. Yes 2. No

If the answer is yes, Thank you! We will continue the interview.

If the answer is No, Thank you! Do not force them to participate in the study.

Name of interviewer ---------- Signiture ----------

Date of interview ----------

Time of interview, Started at---------- Finished at----------

Name of supervisor----------

Signature----------

Date of checking----------

Remark: 1. Complete

2. Incomplete

If you have any question, for verification you may ask the contact person by the following address.

MeronAmare

Addis Ababa University, Tel. 0912493454

Addis Ababa University, School of Medicine, College of heath Science,

Department of Nursing and Midwifery

ANNEX III

QUESTIONNAIRE

This questionnaire is prepared to assess coping mechanisms used by breast cancer patients in Tikur Anbassa Specialized Hospital.

Instruction: -

Dear clients,

First I would like to thank you for your voluntary participation in this study. I politely requested that you respond to the interview accurately and I assure you that your response and identifying data will be kept confidential. The result of this survey will be useful for future planning of health service for breast cancer patients. Therefore; you are politely requested to give accurate information.

PART ONE-SOCIO DEMOGRAPHIC DATA

1. Age_____
2. Ethnicity
   A. Amhara
   B. Oromo
   C. Tigrea
   D. Gurage
   E. Others (specify)----------
3. Religion
   A. Orthodox
   B. Muslim
   C. Protestant
   D. Catholic
   E. Others (specify)----------
4. Marital status
   A. Never married
   B. Married
   C. Widowed

D. Divorced
E. Others (specify)----------

5. Educational level
   A. No formal education
   B. 6^{th} grade and below
   C. 7-9 grade
   D. 10-12 grade
   E. 12 grade and above

6. Occupational status
   A. House wife
   B. Government Employee
   C. Merchant
   D. Student
   E. Daily labor
   F. Others (specify) ----------
7. Average monthly income (in Birr)
   A. <320
   B. 320-500
   C. 501-700
   D. >701
8. When did you receive your first diagnosis of cancer? (Please specify years and months)
9. What type of treatment have you received?
   A. Chemotherapy
   B. Radiotherapy
   C. Surgery
   D. Others (specify)----------
10. Presence of any support group (social support)
    A. Yes
    B. No

PART TWO: WAYS OF COPING

Please read each item below and indicate, by using the following rating scale, to what extent you used it in coping with breast cancer diagnosis and treatment.

Not Used	**Used Somewhat**	**Used Quite A Bit**	**Used A great deal**
0	**1**	**2**	**3**

_____ 1. Just concentrated on what I had to do next – the next step.

_____ 2. I tried to analyze the problem in order to understand it better.

_____ 3. Turned to work or substitute activity to take my mind off things.

_____ 4. I felt that time would make a difference – the only thing to do was to wait.

_____ 5. Bargained or compromised to get something positive from the situation.

_____ 6. I did something which I didn't think would work, but at least I was doing something.

_____ 7. Talked to someone to find out more about the situation.

_____ 8. Criticized or lectured myself.

_____ 9. Tried not to burn my bridges, but leave things open somewhat.

_____ 10. Hoped a miracle would happen.

_____ 11. Went along with fate; sometimes I just have bad luck.

_____ 12. Went on as if nothing had happened.

_____ 13. I tried to keep my feelings to myself.

_____ 14. Looked for the silver lining, so to speak; tried to look on the bright side of things.

_____ 15. Slept more than usual.

_____ 16. Accepted sympathy and understanding from someone.

_____ 17. I told myself things that helped me to feel better.

_____ 18. Tried to forget the whole thing.

_____ 19. I got professional help.

_____ 20. Changed or grew as a person in a good way.

_____ 21. I let my feelings out somehow.

_____ 22. I came out of the experience better than when I went in.

_____ 23. Talked to someone who could do something concrete about the problem.

_____ 24. Got away from it for a while; tried to rest or take a vacation.

Not Used	Used Somewhat	Used Quite A Bit	Used A great deal
0	1	2	3

_____ 25. Tried to make myself feel better by eating, drinking, smoking, using drugs or medication, etc.

_____ 26. I tried not to act too hastily or follow my first hunch.

_____ 27. Found new faith.

_____ 28. Maintained my pride and kept a stiff upper lip.

_____ 29. Rediscovered what is important in life.

_____ 30. Changed something so things would turn out all right.

_____ 31. Avoided being with people in general.

_____ 32. Didn't let it get to me; refused to think too much about it.

_____ 33. I asked a relative or friend I respected for advice.

_____ 34. Made light of the situation; refused to get too serious about it.

_____ 35. Talked to someone about how I was feeling.

_____ 36. Stood my ground and fought for what I wanted.

_____ 37. Took it out on other people.

_____ 38. I knew what had to be done, so I doubled my efforts to make things work.

_____ 39. Refused to believe that it had happened.

_____ 40. I made a promise to myself that things would be different next time.

_____ 41. Came up with a couple of different solutions to the problem.

_____ 42. Accepted it, since nothing could be done.

_____ 43. I tried to keep my feelings from interfering with other things too much.

_____ 44. Wished that I could change what had happened or how I felt.

_____ 45. I daydreamed or imagined a better time or place than the one I was in.

_____ 46. Wished that the situation would go away or somehow be over with.

_____ 47. I prayed.

_____ 48. I prepared myself for the worst.

_____ 49. I went over in my mind what I would say or do.

_____ 50. I jogged or exercised.

አዲስ አበባ ዩኒቨርስቲ ህክምናና ጤና ሳይንስ ት/ቤት ኮርስና ሚድዋይፈሪ ክፍል

አባሪ 1፣ የተሳታፊዎች መረጃ ቅጽ

የዚህ ጥናት ዓላማ በጥቁር አንበሳ ሆስፒታል የጡት ካንሰር ላለባቸው ህመምተኞች ሲሆን፣ ይህም ጥናት የሚያተኩረው እነዚህ ህመምተኞች እንዴት ህመማቸውን ተቋቁመው እንደሚኖሩ ለማወቅ የተዘጋጀ ነው፡፡ ስለዚህም ለዚህ ጥናት ይረዳን ዘንድ መረጃ ከመሰብሰባችን በፊት ከዚህ በታች የተዘረዘሩትን መረጃዎች ማወቅ ይጠበቅብዎታል፡፡

1. የጥናቱ ዓላማ

   በጥቁር አንበሳ ሆስፒታል የሚታከሙ የጡት ካንሰር ያለባቸው ህመምተኞች እንዴት ህመማቸውን ተቋቁመው እንደሚኖሩ ለማወቅ የተዘጋጀ ነው፡፡

2. የሚፈጀው ጊዜ አርባ ደቂቃ ነው

3. አሁን የምናደርገው ቃለ ምልልስ ሲሆን በአካልዎት ላይ የሚደረግ ምንም ዓይነት ነገር አይኖርም፡፡

4. በዚህ ጥናት በመሳተፍዎ ጊዜዎትን ከመሻማት ውጪ ምንም ዓይነት ጉዳት አይደርስብዎትም፡፡

5. የጥናቱ ጠቀሜታ

   5.1 የጡት ካንሰር ላለባቸው ህሙማን ህመመን የመቋቋም ችሎታን በማሻሻል የህመምተኛውን ስሜትና የጤና ሁኔታ በጥሩ ሁኔታ እንዲገኝ ይረዳል፡፡

   5.2 የዚህን ጥናት ውጤትም ሌሎች ጤናን በተመለከተ መተዳደሪያ ደንብ ለሚያወጡ ግለሰቦች፣ አስተዳደሪዎች፣ ጥናትን ለሚያከናውኑ ግለሰቦችና በተለይም በጡት ካንሰር ለሚሰቃዩ ህሙማን መሠረታዊ የሆነ መረጃ ይሰጣል፡፡

6. ይህ ጥናት ምንም ዓይነት የተሳታፊነት ካሣ አይሰጥም፡፡

7. የመረጃው ምስጢር አጠባበቅ

   ይህ የሚሰጡን ግለሰባዊ መረጃ ምስጢራዊነቱ የተጠበቀ ሲሆን ይህም መረጃ በኮምፒዩተር በምስጢር ከተመዘገበ በኋላ በምንም ዓይነት መንገድ ሊታወቅ አይችልም፡፡

8. ከተሳታፊነት ስለመቋረጥ

   ይህን መረጃ የሚሰጡት በሙሉ ፈቃደኝነትዎ ሲሆን ጥናቱ ከተጀመረ በኋላ በማንኛውም ጊዜ ተሳትፎዎን የማቋረጥ ሙሉ መብት ይኖርዎታል፡፡ በተጨማሪም ይህ ጥናት የአዲስ አበባ ዩኒቨርስቲ የጥናትና ምርምር ቦርድ አምኖበት የሚሠራ ሲሆን አድራሻውም እንደሚከተለው ይሆናል፡፡

   አዲስ አበባ ዩኒቨርስቲ የህክምና ፋካልቲ ኢንስቲትዩሽናል ሪቪው ቦርድ

   የፖ.ሣ.ቁጥር 9ዐ86

   የስልክ ቁጥር ዐ11-553-87-34

   ኢ..ሜይል aauMFIRB@yahoo.com

   በጥናቱ ላይ ማንኛውም መብራራት የሚገባው ጥያቄ ካለዎት በሚከተለው አድራሻ ግለሰቡን ማግኘት ይችላሉ፡፡

   ሜሮን አማረ

   አዲስ አበባ ዩኒቨርሲቲ

   የስልክ ቁጥር ዐ912493454 ኢ..ሜይል meri2024@yahoo.com

አዲስ አበባ ዩኒቨርስቲ ህክምናና ጤና ሳይንስ ት/ቤት ነርስና ሚድዋይፈሪ ክፍል

አባሪ 2፣ ፈቃደኝነትን የሚያረጋግጥ ቅጽ

የዚህ ጥናት ዓላማ በጥቁር አንበሳ ሆስፒታል የጡት ካንሰር ህመም ላለባቸው ህመምተኞች ሲሆን ጥናቱ የሚያተኩረው እነዚህ ህምመተኞች እንዴት ህመማቸውን ተቋቁመው እንደሚኖሩ ለማወቅ የተዘጋጀ ነው፡፡

እንደምን አደሩ / እንደምን አረፈዱ

ስሜ _____ይባላል፡፡ የምሰራው በዚህ በጥቁር አንበሳ ሆስፒታል ውስጥ በነርሲንግ አገልግሎት ስር ነው፡፡

የዚህ ጥናት ዓላማ የጡት ካንሰር ያለባቸው ህሙማን ህመማቸውን ለመቋቋም የሚጠቀሙበትን ስልትና ያጋጠማቸውን ችግር ለማወቅ የተዘጋጀ ነው፡፡ ይህም ጥናት የሚሰራው በአዲስ አበባ ዩኒቨርሲቲ ሜዲካል ፋካልቲ ነርስ ት/ቤት ጋር ነው፡፡ ስለዚህ እርስዎም በዚህ ጥናት ላይ ተሳታፊ እንዲሆኑና ትክክለኛ መረጃ እንዲሰጡን በትህትና እንጠይቃለን፡፡

በመቀጠልም የምጠይቅዎ ግለሰባዊ የሆኑ ጥያቄዎችን ሲሆን ስም አልጠይቅዎትም፡፡ በተጨማሪም የሚነግሩኝ መረጃ ምስጢሩ የተጠበቀ እንደሚሆን ቃል እገባልዎታለሁ፡፡ ለሚሰጡኝ መልስም ጊዜዎትን ስለሰጡኝ በጣም አመሰግናለሁ፡፡ ቃለ መጠይቁ የሚፈጀው ጊዜ አንድ ሰዓት ነው፡፡

በጥናቱ ላይ ለመሣተፍ ፈቃደኛ ነዎት

ፈቃደኛ ነኝ _____ ፈቃደኛ አይደለሁም _____

ፈቃደኛ ካልሆኑ፣ አመሰግናለሁ፡፡

ፈቃደኛ ከሆኑ፣ ስለፈቃደኝነትዎ አመሰግናለሁ፡፡ ቃለ መጠይቁን እንቀጥላላን፡፡

መረጃውራ የሚሰበስበው ስም _____

ፊርማ _____

መረጃው የተሰበሰበበት ቀን _____

መረጃው የተሰበሰበበት ሰዓት _____

ያለቀበት ሰዓት _____

የተቆጣጣሪው ስም _____

ፊርማ _____

ያለቀ _____

ያላለቀ _____

በጥናቱ ላይ ማንኛውም መብራራት የሚገባው ጥያቄ ካለዎት በሚከተለው አድራሻ ግለሰቡን ማግኘት ይችላሉ፡፡

ሜሮን አማረ

አዲስ አበባ ዩኒቨርሲቲ

ኢ.ሜይል meri2024@yahoo.com

የስልክ ቁጥር o912493454

አዲስ አበባ ዩኒቨርስቲ ህክምናና ጤና ሳይንስ ት/ቤት ነርስና ሚድዋይፈሪ ክፍል

አባሪ 3፣ የመጠይቅ ቅጽ

ይህ መጠይቅ የተዘጋጀው በጥቁር አንበሳ ሆስፒታል የጡት ካንሰር ላለባቸው ህመምተኞች ሲሆን ዓላማው እነዚህ ህመምተኞች ህመማቸውን እንዴት ተቋቁመው እንደሚኖሩ ለማወቅ የተዘጋጀ ነው፡፡

<u>መመሪያ</u>፣ የተከበራችሁ የጡት ካንሰር ያለባችሁ ህመምተኞች ለቃለ መጠይቁ ፈቃደኛ በመሆናችሁ በቅድሚያ አመሰግናለሁ፡፡ በመቀጠል ይህንን ቃለ መጠይቅ በትክክል እንድትመልሱልኝ ስጠይቅ የምትመልሱት መልስም ሆነ የእናንተ ማንነት በምንም ዓይነት ሁኔታ ለየትኛውም ወገን እንደማይገለጽ ቃል እገባላችኋለሁ፡፡ የዚህ ቃለ መጠይቅ ውጤት የጡት ካንሰር ላለባቸው ህመምተኞች እጅግ ጠቃሚ ስለሆነ ትክክለኛውን መልስ በመስጠት እንድትተባበሩን በትትና እጠይቃለሁ፡፡

ክፍል 1፣ ግለሰባዊ መረጃዎች

1. ዕድሜ _____
2. ብሔር
   ሀ. አማራ
   ለ. ኦሮሞ
   ሐ. ትግሬ
   መ. ጉራጌ
   ሠ/ ሌሎች……..
3. ሃይማኖት
   ሀ. ኦርቶዶክስ
   ለ. ሙስሊም
   ሐ. ፕሮቴስታንት
   መ. ካቶሊክ
   ሠ/ ሌሎች……..
4. የጋብቻ ሁኔታ
   ሀ/ ያላገባች
   ለ/ ያገባች
   ሐ/ በሞት የተለያየች
   መ/ በፍች የተለያየች
   ሠ/ ሌሎች……..
5. የትምህርት ደረጃ
   ሀ/ መደበኛ ትምህርት ያልገባች
   ለ/ 6ኛ ክፍልና ከዚያ በታች

ሐ/ ከ7ኛ-9ኛ ክፍል

መ/ 10-12 ክፍል

ሠ/ 12ኛ ክፍልና በላይ

6. የሥራ ሁኔታ

ሀ/ የቤት እመቤት ለ/ የመንግሥት ሠራተኛ ሐ/ ነጋዴ

መ/ ተማሪ ሠ/ የቀን ሠራተኛ ረ/ ሌላ _____

7. አማካይ የወር ገቢ

ሀ/ ከ320 በታች ሐ/ ከ501 - 700

ለ/ ከ320 - 500 መ/ ከ701 በላይ ሠ/ ምንም ገቢ የሌላቸው

8. ለመጀመሪያ ጊዜ የጡት ካንሰር እንዳለብዎ የተነገረዎ መቼ ነው? /እባክዎ በዓመትና በወር ይግለጹ/

9. ለጡት ካንሰርዎ ምን ዓይነት ህክምና እየወሰዱ ነው?

ሀ/ ኬሞ ቴራፒ

ለ/ የጨረር ህክምና

ሐ/ ቀዶ ጥገና

መ/ ሌሎች _____

10. የሚረዳዎት ሰው አለ /ማኅበራዊ ድጋፍ/?

ሀ/ አለ

ለ/ የለም

የመቋቋሚያ መንገዶች መጠይቅ

እባክዎ በሚቀጥለው ገጽ የተዘረዘሩትን ከውጥረት መላቀቂያ መንገዶች በደንብ ካነበቡ በኋላ ቀጥሎ በተዘረዘረው መመዘኛ በመጠቀም ጥናቱ በሚያተኩረው ውጥረት ፈጣሪ ሁኔታን ለመቋቋም ምን ያህል እንደተጠቀሙበት ይናገሩ፡፡

ተጠቅሜው አላውቅም	በመጠኑ ተጠቅሜበታለሁ	ተጠቅሜበታለሁ	በጣም ተጠቅሜበታለሁ
0	1	2	3

ተ.ቁ	ዝርዝር	ተጠቅሜው አላውቅም	በመጠኑ ተጠቅሜበታለሁ	ተጠቅሜበታለሁ	በጣም ተጠቅሜበታለሁ
		0	1	2	3
1	ትኩረቴን ቀጥሎ መስራት ባለብኝ ነገር ላይ አደርጋለሁ				
2	ችግሩን በደንብ ለመረዳት እሞክራለሁ				
3	አእምሮዬን ካለብኝ ውጥረት ላይ ለማላቀቅ ቶሎ ወደ ሌሎች ሥራዎች እመለሳለሁ				
4	ጊዜ በመስጠት ሁኔታዎችን ይፈታሉ ብዬ በጥሞና እጠብቃለሁ				
5	ከሁኔታው ውስጥ መልካም ነገር ሊወጣ ይችላል ብዬ አመዛዝናለሁ				
6	ከችግሩ ሊያወጣኝ የማይችልን ነገር የሞከርኩ ይመስለኛል ነገር ግን ቢያንስ የሆነ ነገር ሞክሬአለሁ				
7	ነገሩን በደንብ ከሚያውቅ ሰው ጋር አወራለሁ				
8	ሁኔታውን በተመለከተ እራሴን አስረዳለሁ/እወቅሳለሁ/				
9	ሁሌም ነገሮች መውጫ እንዳላቸው አስባለሁ				
10	የሆነ ተአምር እንዲፈጠር ተስፋ አደርጋለሁ				
11	ዕጣ ፈንታዬ እና አንዳንዴ መጥፎ ዕድል አለኝ ብዬ እቀበለዋለሁ				
12	ምንም እንዳልተፈጠረ እቆጥራለሁ				
13	ስሜቶቼን ለራሴ ብቻ አምቄ ለመያዝ እሞክራለሁ				
14	መልካም የሆነውን ነገር ብቻ ለመውሰድ እሞክራለሁ				
15	ከሚፈለገው በላይ እተኛለሁ				
16	ሰዎች ሲያጽናኑኝ ወይም ሊረዱኝ ሲሞክሩ እቀበላቸዋለሁ				
17	ለራሴ ጥሩ ስሜት እንዲሰማኝ የሚያስችሉኝን ነገሮች እነግራለሁ				
18	ሁሉንም ነገር ለመርሳት እሞክራለሁ				

19	የባለሙያ ዕርዳታ ጠይቄያለሁ				
20	እራሴ በመልካም ሁኔታ ተቀይሬአለሁ				
21	በመጠኑ ስሜቴን በተለያየ ነገር ገልጨዋለሁ				
22	በተፈጠረው ሁኔታ የተሻለ ሰው ሆኜበታለሁ				
23	ችግሩን በደንብ ሊቀርፍልኝ ከሚችል ሰው ጋር በደንብ አውርቻለሁ				
24	ከነገሩ ለመሸሽ ሰፊ ዕረፍት ወስጃለሁ				
25	ከነገሩ ለመላቀቅ የተለያዩ ነገሮችን እንደመብላት፣ መጠጣት፣ ማጨስ የመሳሰሉትን ተጠቅሜያለሁ				
26	በጣም ፈጣን ውሳኔ ከማሳለፍ ወይም የራሴን ግምት ከመውሰድ ተቆጥቤአለሁ				
27	አዲስ እምነት አግኝቻለሁ				
28	የራሴን ምኞት ጠብቄ አልፈአለሁ				
29	ለህይወት ጠቃሚ የሆነውን ነገር ደርሼበታለሁ				
30	የሆነ ነገር ሲለወጥ የሆነ ጥሩ ነገር ይገኛል ብዬ አምናለሁ				
31	በአጠቃላይ ከሰዎች ጋር መሆንን አስወግጄ ነበር				
32	በነገሩ ላይ ብዙ ላለማሰብ እጥር ነበር				
33	የማከብራቸውን ጓደኞች /ዘመድ/ እንዲመክሩኝ ጠይቄአለሁ				
34	በነገሩ በጣም ከመጎዳት ራሴን አግልያለሁ /ነገሩን ቀለል አድርጌ ለማሰብ ሞክሬአለሁ				
35	በሁኔታው እንዴት እንደተሰማኝ ከሰዎች ጋር አውርቼበታለሁ				
36	ባለሁበት ላይ ሆኜ የምፈልገውን ለማግኘት ጥሬአለሁ				
37	በሌሎች ሰዎች ላይ ቁጣዬን ተወጥቻለሁ				
38	ምን መስራት እንደነበረብኝ አውቅ ስለነበር ያለ የሌለ ኃይሌን በመጠቀም ነገሩ እንዲስተካከል ጥሬአለሁ				
39	ነገሩ እንደተከሰተ ማመን አልፈለኩም ነበር				
40	በሚቀጥለው ጊዜ ነገሮች የተለዩ እንደሚሆኑ ለራሴ ቃል ገባሁ				
41	ለችግሩ የተለያየ መፍትሄ ሰጥቻለሁ				
42	ምንም ነገር ማድረግ ስለማልችል ሁኔታውን እንዳለ ተቀብየዋለሁ				
43	በተቻለኝ መጠን ችግሩ ያሳደረብኝ ስሜት በሌሎች ስራዎቼ ላይ ጣልቃ እንዳይገባ ለመከላከል ሞክሬአለሁ				
44	የተሰማኝን ነገር /የተፈጠረውን/ ነገር ለመቀየር ተመኝቼ ነበር				
45	ከነበርኩበት ሁኔታ የተሻለ ነገር እንዲገጥመኝ አልም ነበር				

46	ሁኔታው ከእኔ እንዲርቅ በጣም አጥብቄ እመኝ ነበር				
47	ዕፀልያለሁ				
48	ከዚህ የከፋ ነገር ቢገጥመኝስ ብዬ ራሴን አዘጋጀሁ				
49	በአእምሮዬ ምን ማድረግ እንዳለብኝ አስላሰልሁ				
50	አካላዊ እንቅስቃሴ አድርጌአለሁ				

BIBLIOGRAPHY

CURRICULUM VITAE OF ADVISOR

PERSONAL DATA

Name: Yemesirach Kalku Sex: Female

Date of Birth: March 5, 1952 Place of Birth: Addis Ababa, Ethiopia

Nationality: Ethiopian Marital status: Married and have four children

Address; Telephone Home 011-1-27-02-94, Office 011-2-76-34-12, Personal tel. 09-11-30-03-79 P.O.Box 870

EDUCATIONAL BACKGROUND

July 25, 2009 got my MSc degree on Maternity Nursing and Reproductive Health A thesis on "Assessment of occupational Hazard Among Nurses and Midwives Working in Maternity Unit of Governmental Health Institutions in Addis Ababa". August 13, 2006 in the Addis Ababa University got my BSc in Adult Nursing. Research done on "The influence of HIV/AIDS in giving Nursing Care in Addis Ababa Governmental Hospital". Technical update clinical standardization skill course on basic emergency obstetric and newborn care in 2006 in Ghana. Work as consultant in JHPIEGO as training of trainers (TOT) on obstetric emergency and new born care sine 2007 till 2012 as individual contract. Five to ten certificate in emergency obstetric, PMTCT, care of an HIV patient, pregnant women with HIV/AIDS, Integrated management of Newborn and Childhood Illness (IMNCI) by MOH & JHPIEGO/ ACCESSETHIOPIA 2002-2008 & Post abortion care concept by IPAS of 10 days seminar 2002. Certified on Training of Trainers on National Comprehensive HIV care or ART training by the ministry of health in January 24-Feb 9 2011. In 1998 got diploma in Midwifery after two years study. In 1998 new concept on Family Planning for health personnel training of 10 days work shop by MOH. In 1987 & in the USSR primary health care. In 1993 Pedagogical teaching methodology of Advanced Tutor's Diploma by MOH from 1972-1975 trained as registered bed side nursing in Diploma in one of the big nursing school of the country used to be called Duck of Harrar.

WORK EXPERIENCE THIRTY FOUR YEARS

Worked as Ethiopian Ministry of Health employee from 1975 to 1991, as staff nurse in rural Ethiopia hospital in Harrar, in one of the referral hospital in Addis Ababa called ST Paul's and as staff and a head nurse. From 1991 to 2012 working in the Addis Ababa University Medical faculty Centralized School of Nursing. Worked as Assistant lecturer for the last three years. Currently I am Lecturer in the above University. Speak and write English and Amharic.

Reference: Addis Ababa University Medical Faculty Registrar Department.

CURRICULUM VITAE OF INVESTIGATOR

1. PERSONAL DETAILS

1.1. Biographical data:

Full Name: Meron Amare Bekele

Sex: Female

Date and Place of birth: 3 Nov 1989, Bahir Dar, Ethiopia

Nationality: Ethiopian

Marital status: Single

Current Address:

Addis Ababa, Ethiopia

P.O.Box

Email: meri2024@yahoo.com

Tel.: 09-12-49-34-54

1.2. Language skills:

English - (Proficient in speaking, listening and writing)

Amharic- (Proficient in speaking, listening and writing)

1.3. Hobbies: Reading book, regular exercise and swimming.

2. EDUCATION

- BSc in Nursing

- Candidate for MScN in Adult Health Nursing

3. SUMMARY OF RELEVANT WORK EXPERIENCES

NO	PLACE OF WORK	WORKING YEAR	
		FROM	TO
1	Instructor in Hawassa University	September 2010	September 2011
2	Instructor in Millenium Health Science College	September 2010	September 2010
3	Instructor in Alef Health Science college	September 2010	September 2010

4. SKILLS AND EXPERTISE

- Certificate in effective teaching skill
- Certificate in Palliative care
- Computer literate, able to efficiently and independently use word processing and database e.g. Microsoft Word, Excel, Access and Power Point.

-Able and efficiently use email and internet systems

Reference: Addis Ababa University Medical Faculty Registrar Department.

June, 2012.

Declaration

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

Principal Investigator

Name_____ Signature_____ Date_____

Advisor

Name _____ Signature_____ Date_____