

**NEAR EAST UNIVERSITY**  
**GRADUATE SCHOOL OF SOCIAL SCIENCES**  
**APPLIED (CLINICAL) PSYCHOLOGY MASTER PROGRAM**

**MASTER THESIS**

**COMPARSION OF SELF ESTEEM, BODY IMAGE, SEXUAL SATISFACTION  
AND SEXUAL EXPERIENCES BETWEEN WOMEN WHO HAD  
MASTECTOMY OR BREAST CONSERVING SURGERY FOR BREAST  
CARCINOMA**

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**NEAR EAST UNIVERSITY**

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Comparison Self Esteem, Body Image, Sexual Satisfaction and Sexual  
Experiences between women who had mastectomy or breast  
conserving surgery for breast carcinoma

Prepared by: Tuğçe Denizgil

We certify that the thesis is satisfactory for her award of the Degree of Master of Sciences  
in Applied (Clinical) Psychology

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**ÖZET**

**Meme Karsinoma Nedeni ile Meme Koruyucu Cerrahi Geçirmiş Kadınlarla  
Mastektomi Operasyonu Geçirmiş Kadınlar Arasında Benlik Saygısı, Vücut Algısı,  
Cinsel Doyum ve Cinsel Yaşantıların Karşılaştırılması**

Hazırlayan: **TUĞÇE DENİZGİL**

**Haziran, 2013**

Meme Kanseri, kadınlarda en sık rastlanan malign tümör olup, tanı ve tedavisi kadınların yaşamını fiziksel, psikolojik ve sosyal boyutlarda etkileyen bir kriz durumudur. Bu çalışmada meme kanseri tanısı alan kadınlara uygulanan cerrahi operasyon tipinin, vücut algısı, benlik saygısı, cinsel doyum ve yaşantıları üzerindeki etkisinin incelenmesi amaçlanmıştır.

Yakın Doğu Üniversitesi Hastanesi'nin arşiv taraması sonucu elde edilen 50 meme kanseri tanısı konmuş hasta araştırma kapsamına alınmıştır. Hastalara 'Demografik Bilgi Formu', 'Rosenberg Benlik Saygısı Ölçeği', (RBSÖ), Golombok Rust Cinsel Doyum Ölçeği', (GRCDÖ), 'Arizona Cinsel Yaşantılar Ölçeği', (ACYÖ) ve 'Vücut Algısı Ölçeği', (VAÖ) uygulanmıştır.

Mastektomi operasyonu ve Meme Koruyucu Cerrahi operasyonu olan kadınlarda, Vücut Algısı (0.015), Cinsel Yaşantılar ( $p=0.017$ ) ve Benlik Saygısı (0.030) düzeyleri karşılaştırıldığı zaman Mastektomi operasyonu geçirenlerde istatistiksel olarak anlamlı bir fark bulunmuştur. Kadınların yaşları ile uygulanan ölçekler incelendiği zaman GRCDÖ ölçeği ile yaş arasında ( $r= -0.31$ ,  $p= 0.01$ ) anlamlı ters yönde bir ilişki olduğu saptanmıştır. Yaş ile VAÖ ölçeği arasında ( $r= 0.37$ ,  $p= 0.01$ ) anlamlı, pozitif yönde bir

ilişki tespit edilmiştir. Yaş ilerledikçe cinsel doyum azalmakta ve beden algısı gelişmektedir.

Çalışmamızda Meme Karsinoma nedeni ile meme koruyucu cerrahi geçirmiş kadınlarla mastektomi operasyonu geçirmiş kadınlar arasında benlik saygısı, vücut algısı, cinsel doyum ve cinsel yaşantıları bakımından karşılaştırıldığında anlamlı bir farklılık olduğu saptanmıştır. Kadının ruh sağlığı açısından büyük önem taşıyan memenin kaybının yol açacağı psikolojik sorunlara neden olmamak açısından meme koruyucu cerrahi geçirmeleri önemlidir.

**Anahtar Kelimeler: Meme Kanseri, Mastektomi, Meme Koruyucu Cerrahi, Beden Algısı, Benlik Saygısı, Cinsel Doyum, Cinsel Yaşantılar**

**ABSTRACT****Comparison Of Self Esteem, Body Image, Sexual Satisfaction and Sexual Experiences  
between Modified Radical Mastectomy Operation and Breast Conserving Surgery In  
Women With Breast Carcinoma**

Prepared by **Tuğçe Denizgil**

**June, 2013**

Women with breast cancer is the most common malignant tumor, diagnosis and treatment of breast carcinoma is a crisis situation that affects women's life in physical, social and psychological dimensions. The aim of the present study is to investigate the relationship with self esteem, body image, sexual satisfaction and sexual experiences between surgery types.

The 50 women with breast carcinoma patients who were occur the sample from Near East University Hospital's archive scanning. 'Demographic Information Form', 'Rosenberg's Self Esteem Scale' (RSES), 'Golombok Rust Sexual Satisfaction Scale' (GRISS), 'Arizona Sexual Experiences' (ASEX) and Body Cathexis Scale (BIS) were administrated.

Women with mastectomy operation and breast conserving surgery Body Cathexis ( $p=0.015$ ), Sexual Experiences ( $p = 0.017$ ), and Self-Esteem ( $p=0.030$ ) levels when compared to patients undergoing mastectomy operation was a statistically significant differences. Among women the relation between scales and ages there were a significant negative relation with GRISS and ages scores. ( $r=-0.31$ ,  $p=0.01$ ). There were a significant positive relation with BIS and ages scores. ( $r=0.37$ ,  $p=0.01$ ). Sexual satisfaction decreased and body images were improved when the age increased.

In our study, women who have had breast conserving surgery because of breast carcinoma among women who have undergone mastectomy self-esteem, body image, sexual satisfaction and sexual experiences were compared in terms of a significant difference. A woman of great importance in terms of mental health will lead to the loss of the breast does not cause psychological problems in terms of breast-conserving surgery is important to spend.

**Key Words: Breast Carcinoma, Mastectomy, Breast Conserving Surgery, Body Image, Self Esteem, Sexual Satisfaction, Sexual Experiences**

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## **ABBREVIATIONS**

BCT : Breast Conserving Surgery

MRM : Modified Radical Mastectomy

RS : Rosenberg's Self Esteem Scale

BIS : Body Image Scale

SE : Self-Esteem

BI : Body Image

GRISS : Golombok Rust Inventory of Sexual Satisfaction

ASEX : Arizona Sexual Experience Scale

CHEMO : Chemotherapy

RT : Radiotherapy

HRT : Hormonotherapy

## 1. INTRODUCTION

### 1.1. Definition of Cancer

Cancer is a disease that is as old as human history. In the contemporary era, the observations and studies on cancer overwhelms the observations and studies on the majority of other fatal diseases. In this respect, in every society, cancer continues to remain as an important health problem (Pinar, 2010). Cancer is the growth and the spread of abnormal cells. The disease threatens the biological, social and economic aspects of the human life (Yeter, 2006).

According to the World Health Organization, each year, 6 million additional people are diagnosed to have cancer. Moreover, about 5 million people lose their lives due to cancer (Parkin, 2006). Cancer is a complex genetic disease that is caused primarily by environmental factors. The cancer causing agents (carcinogens) can be present in food and water, in the air, and in the chemicals and sunlight that people are exposed to (Alison, 2001).

According to the Cambridge Dictionary, the definition of the cancer is a serious disease that is caused when cells in the body grow in a way that is uncontrolled and not normal, killing normal cells and often causing death (Cambridge Advanced Learner Dictionary, 2011). Cancer, more than frighten the risk involved, a chronic and fatal diseases, as well as being emotional, mental and behavioural reactions that can lead to is an important health problem (Avcı , Kumcağız, 2011).

The burden of cancer in developing countries is growing and is likely to be associated with heavy morbidity, mortality and economic costs in the next few years (Ngoma, 2006). The number of global cancer deaths is estimated to increase by 45% from 2007 to 2030, from 7.9 million to 11.5 million deaths, which is partially influenced by the increasing number of ageing adults worldwide (Boyle, 2008). According to the World Health Organization more than 6 million people get cancer each year and about 5 million people die from cancer (Kılıç et al, 2006).

### 1.1.1. Cancer in the Medical History

The cancer has been with us throughout millennia, and in the contemporary age, it poses even greater risks to humanity, when compared to the past. Throughout the history of medicine, it would not be wrong to say the efforts and costs regarding the investigations of the cancer have overshadowed all the other diseases (Atıcı, 2007).

At the beginning, Egyptian papyruses, the Babylonian cuneiform tablets and ancient Indian writings had referred to tumours. The Egyptian papyruses (15<sup>th</sup> century BC) had referred to a treatment toll identified as the “fire drill”, which was inadequate in healing the tumours. Galen, an ancient Greek, indicated the existence of many cancer studies, however, the Galen also reflected the insufficiency of Medicine to diagnose the tumours. Hippocrates used the term “karkinos”, which means “crayfish” in Greek, in order to describe cancer (460-377 BC). Since the surface of the body grows and often becomes ulcerated, red and swollen, Hippocrates used the term “karkinos” in order to identify the deformation caused by the cancer. Galen (2<sup>nd</sup> century AD) used the term “cancer” which meant “crayfish” in Latin as well (Atıcı, 2007).

In the Turkish medical history, the cancer was identified as “seretan”. Hayri Osman Efendi from Tarsus, in his book “Kenzüsıhhatül Ebdaniye” (1298), defined the seretan as small and painful lumps. Ishaq bin Murad, in his book “Havasüledviye” (1390), recommends diaries to be used, for the treatment of the disease. On the other hand, Şerafeddin Sabuncuoğlu, in his book “Cerrahi İlahiye” (1465), recommends to remove the tumour (Atıcı, 2007).

The improvement of Medicine during the European Renaissance was reflected also on the developments regarding the observations on cancer. This is a great surgeon Ambroise Paré period (1510-1590), malignant tumours, “consisting of the elements of places where the flesh than in the growth of the” more is described as cancer and in women, breast cancer spread through the auxiliary ganglia was doing, he said. In 19<sup>th</sup> Century, there had been important developments regarding the researches on cancer, its diagnosis and its treatment. In 1802, in England, there had been medical debates about the causes and the treatment of cancer (Atıcı, 2007).

Muller demonstrated that cancer is made up of cells but not with lymph in 1838. His student, Virchow (1821–1902) determined that all cells including cancer cells were derived from other cells. Till 18th century, scientists believed that cancer was contagious and spreads through parasite.

During the last decades of the 20th century, surgeons developed new methods for cancer treatment by combining surgery with chemotherapy and/or radiation. Roentgen discovered X rays after 50 years of anaesthesia was discovered. Later doctors identified that nitrogen mustard can kill rapidly proliferating lymphoma cancer cells. Over the years, use of many chemotherapy NIH PA Author Manuscript drugs has resulted in the successful treatment of many types of cancers. Now new approaches are being studied to reduce the side effects of chemotherapy including use of, (a) new combinations of drugs, (b) liposomal and monoclonal antibody therapy to target specifically cancer cells, (c) chemo protective agents to reduce chemotherapy side effects, (d) hematopoietic stem cell transplantation and (e) agents that overcome multidrug resistance (Sudhakar, 2009).

## **1.2. Breast Carcinoma**

Breast carcinoma is the most common cause of cancer death among women worldwide, and breast carcinoma is by far the most frequent cancer among women, with an estimated 1.38 million new cancer cases diagnosed in 2008 (23% of all cancers), and ranks overall second overall (10.9% of all cancers). It is now the most common cancer both in developed and developing regions with approximately 690,000 new cases estimated for each region (Kitapcioğlu, 2013).

For any complex disease, it is essential to adequately define the phenotype, the inheritance of which will be traced in families. Real linkages can be missed and spurious linkages suggested either by defining the phenotype too broadly (so that persons without inherited susceptibility to disease are mistakenly categorized as affected) or simply by making errors in diagnosis. To minimize errors in diagnosis, we viewed existing pathology records of all family members on who breast surgery had been performed. For deceased persons reported by their relatives to have had breast cancer, but for whom no pathology records were available, we obtained hospital records or death certificates. For living subjects who had not undergone



breast surgery, we relied on self-report of no breast cancer; for deceased persons with no history of breast surgery, we relied on death certificates and reports of relatives. The affected phenotype was defined as all histological types of invasive breast cancer. No other cancer sites were included. The most prevalent type of cancer among women worldwide is breast cancer, which is 24% of all cancer types in women (Özmen, 2008). Breast carcinoma is one of the most common maligning tumours all over the world, and it accounts for about 30% of all cancer in women. There are about 1.38 million new cases and 458 000 deaths from breast cancer each year. (Globocan, 2008) 180,000 per year in Europe, 184.000 per year in USA new cases were detected. Breast cancer incidence varies from country to country in the world. (Aslan and Gürkan, 2007). According to the available data in Turkey, breast carcinoma is in the first place among all cancer cases in women with the ratio of 24.1%. Risk of breast carcinoma increases with age. Breast carcinoma is a sex-specific disease which its incidence in women is 29% and men less than 1% (Dayanir, Özdemir, 2000). The incidence of breast carcinoma in pre-puberty was almost never, rarely seen under the age of 20, the incidence increases rapidly after the age of 20 and after the age 54 it becomes in an obvious increase (Hutson, 2003).

Breast Carcinoma is the most frequently detected malign tumour in women (Bulak, 1999). It is a situation of a crisis, affecting variety of aspects of women's life including physical, psychological, social and spiritual dimension. In the process women usually experiences variety of issues such as the probability of cancer's spreading, suffering, damaging of body image, decreasing of self respect and fear of losing feminine features (Okanlı, 2004).

Breast carcinoma, is one of the major diseases that threatening women's health. Painful body creates variability. Breast carcinoma which is very common in women, leads to important issues when loss of breast sometimes damages the identity of women, because breast is an important factor in women's identity (Okanlı, 2004).

Breast carcinoma is a disease that threats not only the life but also sexuality and womanhood of the individual. Surgical operation effects detrimentally the patient's body image, self esteem, psychological status, sexual life and interrelationship with the environment. The determining factors in the response to the operation are the subjective meaning of breast lost, the personal experience and perception of the breast in the person's ego and womanhood concept. Even the thought and probability

of the loss of the breast effect the person severely in a society that equals or attribute the breast a symbol of womanhood and sexuality (Özkan, Alçalar, 2007).

### **1.2.1. Breast Carcinoma in the medical history**

Breast is one of the easiest organs that can be examined with eyes and hands. Pathological changes occurring in these organs are visible. Doctors have attracted the attention of people since ancient times, and thus have made important observations (Aşık, 2008).

The story of breast cancer is told in the acts and arti-facts of the human struggle against disease. It is an epic tale that follows the concepts of illness from the work of evil spirits or of offended gods to the results of identifiable physical causes, and the healing arts from mysticism to the tools of modern science. The following is a brief history of breast cancer in the Western world. In ancient Babylon (2100–689 BC) it was common practice to place the ailing in public places for the recommendations of passersby, but professional healers were also recognized. “The Code of Hammurabi” inscribed on a pillar in Babylon, indicated that healers were paid fees for their services and were penalized for surgical deaths with amputation of their hands. Before the third millennium BC, physicians had learned the futility of treating certain tumours of the breast. Among the eight extant Egyptian medical papyri, The Edwin Smith Surgical Papyrus is believed to contain the first reference to breast cancer. This surgical text, penned in hieratic script, is the incomplete and fragmented copy of an original document that probably dates back to the pyramid age of Egypt (3000–2500 BC) and was possibly written by Imhotep, the physician-architect who practiced medicine and designed the step pyramid in Egypt in the 30th century BC. It provides the earliest references to suturing of wounds and to cauterization with fire drills. More pertinently, it includes the diagnosis and treatment of eight cases of ailments of the “breast,” meaning of the bones and soft tissues of the anterior thorax, all in men and most due to injuries. The first written records were found of breast diseases in the old Egypt. These papyruses were read by Edwin Smith. Including 45 cases of these papyruses there are information about abscess, trauma, infected wounds, and the tumour. 5 of these cases suggest that the tumours (Aşık, 2008).

One of the five cases relating to soft tissues (Case 45) describes “bulging tumours” in the breast. Hippocrates described cases of breast cancer in detail. One of his case histories was of a woman of Abdera who had a carcinoma of the breast with bloody discharge from her nipple. Attaching a beneficial effect to the bleeding, he noted that when the discharge stopped, she died. Similarly, Hippocrates associated cessation of menstrual bleeding with breast cancer and sought to restore menstruation in young sufferers. His detailed description of the inexorable course of advancing breast cancer rings true today. Around 30 AD, the Roman physician Aulus Cornelius Celsus (42 BC–37AD) noted that the breasts of women were frequent sites of cancer. Celsus described breast cancer in his manuscript, “De Medicina”, and defined four stages. Leonides, a surgeon of the Alexandrian school, described surgical removal of breast cancers during this time. Leonides said that with the patient supine he cut into the sound part of the breast and used a technique of alternately cutting and cauterizing with hot irons to control bleeding. The resection was carried through normal tissues wide of the tumours and customized to the extent of involvement. His teachings of the Greek physician, Galen of Pergamum (129–200 BC), on the subject of breast cancer reached far beyond his time. In Galen’s view, breast cancer was a systemic disease caused by an excess of black bile in the blood (i.e., melancholia). The French Academie de Chirurgie, established in 1731, produced the first journal for surgeons, *Memoires*, which in 1757 published Henri LeDran’s thesis that breast cancer had a local origin, providing an impetus for surgical cure. In Paris, Jean Louis Petit (1674–1750) removed both the breast and diseased nodes in his operations, and in 1774, Bernhard Perilhe reported removing the pectorals major muscle as well. A healed wound was the customary end point for declaring a surgeon’s success; few bothered with further follow-up. In a report by Richard Wiseman (1622–1676), surgeon to Charles II, among twelve mastectomies, two patients (17%) died from the operation, eight died shortly afterwards from progressive cancer, and two of the 12 were declared “cured” for undisclosed lengths of time. The events in Germany influenced William S. Halsted (1852–1922), Professor of Surgery at Johns Hopkins Hospital in Baltimore, to devise what became known as the radical mastectomy. He reported the operation in 1894 almost simultaneously with a similar report by Willy Meyer in New York. In 1960s mammography was developed for identification of breast cancer. The greatest impact of these trials was on management of the breast itself. As confidence grew in irradiation for controlling occult regional metastases,

the question was whether irradiation could do the same for occult tumour in the breast. Selected cases so treated by F. Baclesse in France, Ruth Guttman in the United States, Sakan Mustakallio in Finland, and others had suggested this was the case as early as 1965. After an initial but unsatisfactory beginning at Guy's Hospital in London, controlled trials of breast conservation started in Milan, Italy, in 1973 by Umberto Veronesi and by the NSABP in 1976. These trials established that excision of the primary tumour, "lumpectomy," followed by whole breast irradiation was as effective as total mastectomy for both local and ultimate disease control of most early-stage cases and was an obvious cosmetic improvement. Based on these outcomes, in 1990 the NCI sanctioned breast-conserving surgery as the preferred treatment of stage I and II breast cancers (Donegan, 2002).

### **1.2.2. Epidemiology and Etiology of Breast Carcinoma**

Given the worldwide prevalence of breast cancer incidence in the U.S.A, Britain and the Scandinavian countries, the numbers are closed. But in Eastern countries such as Japan and in Africa the prevalence of the disease is decreasing. The frequency in the breast carcinoma did not reflect the increase in the same proportions. Detection of disease-related mortality rate of all the patients and these patients may be effective in reducing risk factors, preventive methods of implementing screening programs in recent years, With the implementation of countries' health policies, the provision of early diagnosis and treatment (especially hormonal) significantly increased the efficiency effect. A result of the implementation of early diagnosis and effective treatment of cancer, breast cancer after prolonged life expectancy of people. According this; directed attention after treatment maintaining the quality of life of women with breast carcinoma development, and pursued (Güllüoğlu, 2005).

Breast cancer risk factor in the development of many that differ from individual to individual (genetic, environmental, hormonal, biological and socio-psychological factors, etc.), although it is considered to be effective American Cancer Association's research, 75% of women with breast cancer in high-risk groups and that they in fact determined that the risk of breast cancer for all women (Güllüoğlu, 2008).

Leading to the formation or accelerate the formation of breast cancer is suggested that many factors. Some of these factors significantly while showing the relationship

between some of the cancer causing controversy are still ongoing. Advanced age, the presence of first-degree family members with a history of breast cancer, breast biopsy confirmed the presence of atypical hyperplasia, breast cancer susceptibility gene identified mutations in the genes of BRCA1 and BRCA2 (Breast Cancer Susceptibility Gene) to be known as the chest wall have been taken previously ionizing radiation increases the risk of breast cancer (Kaymakçı, 2001).

Early menarche, late menopause, nulliparity, first birth over the age of 35, making cancer history was the presence of another (endometrium, colon and over), and in conditions such as hormone replacement therapy is suggested as a factor in breast cancer (Eroğlu, 2007).

The exact cause of breast cancer is not known but post menopausal than normal weight gain, excess fat diet, alcohol consumption, ovaries and other endocrine glands dysfunction, non-malignant breast disease, and environmental factors that increase the incidence of breast cancer has been reported that among the reason in the literature (Rodney, John, 2003).

### **1.2.3. Treatment**

The vast majority of cancers can be treated with the implementation of early diagnosis and treatment or the patient's life expectancy can be extended. Treatment options are; chemotherapy, radiotherapy and immunotherapy. Cancer patients with the diagnosis of disease according to the individual features and one or more of these methods are used in therapy. The goal of treatment of cancer, to treat the disease, prolongs life and improves the quality of life (Yeter, Savcı, Sayiner, 2009).

The role of surgery in the treatment of breast cancer is very important. 30 years ago according to Fisher's opinion; which was breast cancer is a systemic disease, started thinking about come to an end about breast surgery, radiotherapy, hormonal therapy and chemotherapy. But surgery still has an important role in the diagnosis and treatment of breast carcinoma (Cantürk, Güllüoğlu, 2011).

Many articles appear in the lay press about the results of clinical trials of different treatments for breast carcinoma. The excellent method for detection by mammography of small lesions, well before they have spread or even sometimes before they are palpable, have allowed the use of much more limited surgery to

remove the cancer in some instances removal of just the lump or lumpectomy, and the more conservative use of radiation therapy with or without chemotherapy or hormone therapy (McAllister, 1993).

### **1.3. Surgical Procedures for Breast**

#### **1.3.1. Breast Conserving Surgery (BCT):**

Breast cancer is the most common cancer among women and the second leading cause of the cancer deaths. Mortality rates of breast cancer are slightly decreasing due to early diagnosis and improvements in treatment. The treatment of breast cancer with BCT depends on past times (Topuz, 2003).

An operation to remove the breast cancer but not the breast itself. Types of breast-conserving surgery include:

- i- Lumpectomy: Removal of the lump,
- ii- Quadrantectomy: Removal of one quarter, or quadrant, of the breast.
- iii- Segmental mastectomy: Removal of the cancer as well as some of the breast tissue around the tumour and the lining over the chest muscles below the tumour. Also called breast-sparing surgery (Bulak, 1999).

The objective of local therapy for breast cancer is to excise the tumour with adequate margins, minimizing the chance of local recurrence while achieving a cosmetically acceptable outcome (Bernstam, 2005). Women's body image sexual satisfaction sexual functions the future anxiety physical status social status and well being sense; in other words quality of life after BCT is better than modified radical mastectomy operations. Because of the increasing life time expectancy and less extensive surgical procedures, quality of life concept gained importance and popularity. Despite clear evidence that local control and survival are equal with both breast conserving (BCS) and modified radical mastectomy operations for breast cancer, and that those women who have BCS have superior psychosocial outcomes, there continues to be substantial variance in BCS rates in several countries (Zanapalıoğlu, 2009).

#### **1.3.2. Modified Radical Mastectomy (MRM):**

A surgical procedure that removes the breast, surrounding tissue and nearby lymph nodes that are affected by cancer. The purpose for MRM is the removal of breast cancer (abnormal cells in the breast that grow rapidly and replace normal healthy tissue) modified radical mastectomy is the most widely used surgical procedure to treat operable breast cancer (Noble, 2001, Townsend, 2001).

Mastectomy that has been a standard and traditional treatment method employed for years in breast cancer is treatment technique involving cutting and disembodiment of the breast with cancer tumour in surgical operation (Avcı, Kumcağız, 2011).

A modified radical mastectomy is a type of mastectomy that combines the removal of all breast tissue from the affected breast with lymph node removal from the armpit on the affected side of the body. This surgery typically includes the removal of both the nipple and areola, but the surgery can be performed using skin and nipple sparing techniques. Like a simple mastectomy, the procedure is performed using an elliptical incision 6 to 8 inches in length that begins on the inside of the breast, near the breast bone, and extends upward and outward toward the armpit. The incision can also be altered to remove scar tissue from previous procedures, which can improve the cosmetic outcome if reconstruction is desired. Once the breast tissue is removed, the incision is closed with either absorbable sutures or staples that are removed during an office visit 10 to 14 days after surgery. There may also be drains in place to decrease the amount of swelling in the area. These drains are covered with bandages to protect the incision site and the drain placement. The drains are typically removed after discharge from the hospital by the surgeon during a routine office visit after surgery (Isern 2007, Bulak 1999).

In general ; mastectomy has a potential that occurs anxiety related symbolic meaning of breast with womanhood and sexuality and narcissistic scar related surgical intervention and anxiety related below illness, mastectomy is effect women's psychological situation relationships environment, perceiving of her body, self esteem, body image, person's functions with as a real lost experiences (Özkan,2007). Also indicate as; experience mastectomy operation as a young woman had more problems about their body image (Uçar, Uzun, 2008).

#### **1.4. Psychological Effect of Breast Carcinoma**

Diagnosis and treatment of breast cancer is a crisis situation that affects women's life in physical, social and spiritual dimension. In this crisis, woman's reactions become intense in two fields. The first reactions are mostly about the probability of cancer's spreading, uncertainty about future, suffering problems related to life and extraction like death; the other reactions are about damaging of physical image, decreasing of self-respect, physical changes that losing organ causes such as fear of losing feminine features. In addition to these problems, intensive and long-termed cancer treatment causes psychosocial problems that affect women's daily life functions (Çam, 2006).

The diagnosis of breast cancer is a crisis that disrupts all dimensions of one's life including physical, psychological, emotional, and social well-being. This has been verified by extensive research conducted over a number of years. However, although the impact of breast cancer on social well-being has been widely discussed, the specific dynamics by which it affects relationships are not well understood. The purpose of this study was to obtain qualitative data specifically regarding the impact of the illness and its treatment on relationship. Women were specific regarding the ways that physical changes affected their self perception, and the ways that these changes subsequently affected social relationships. The changes that evidently occurred in patterns of conflict management between partners are of particular concern and require more extensive research, because these changes have important implications for both the quality of the relationship and the mental health of the individuals and specific responses of extended family members that induced feelings of guilt and conveyed their lack of confidence in the couple's ability to adequately parent their children (Holmberg, 2001).

Certain issues are universal for all women with breast cancer, irrespective of age, ethnic group, or stage of disease. Women with breast cancer must adjust to curing therapies, resulting psychosocial sequel, and the reality of having had cancer. More specifically, women with breast cancer must assimilate into their lives physical scars, toxic effects of adjuvant therapy, emotional distress, and disruption in performing various family, work, and social roles. Although women with breast cancer share common concerns, experiences, and anxieties, each woman encounters a unique set of problems. Ultimately, each woman's adaptation and choices is influenced strongly by her personal history, her psychosocial stage, and her life-cycle concerns. In past



generations, certain predictable points in life were benchmarked by major life events such as graduation, first job, marriage, first child, empty nest, retirement, widowhood, and death. Over the years, chronological age has stood as the criterion for normalizing the roles and responsibilities assumed by individuals throughout their lives (Sammarco, 2001).

### **1.5. Definition of Body Image (BI)**

BI disturbance is defined as a distortion of perception, behavior, or cognition related to weight or shape, and it is becoming a common clinical disorder. Aesthetic standards typical of Western cultures, based on the stereotype of a lean body for women and a muscular body for men, are considered possible determinants of body image disturbance. While most women wish to lose weight even when their anthropometric parameters were normal, a significant number of men have shown muscle dissatisfaction. Some reports in the scientific literature have found an association between body image disturbance and a number of mental health outcomes including depression, anorexia, bulimia, and body dysmorphia (Pimenta, 2009).

Wood (1975) comments: “BI has been conceptualized as a mental picture of one’s own body – the way in which the body appears to the self.” Chilton (1984) suggested: body image also plays an important part in self-understanding. How a person feels about himself is basically related to how he feels about his body. The body is a most visible and material part of one’s self and occupies and the central part in a person’s perceptions. BI is the sum of the conscious and unconscious attitudes that the individual has towards his body. Present and past perceptions and feelings about size, function, appearance and potential are included. A person with high level of self-esteem will tend to have a much clearer understanding of him (Slater, 1988).

Kaiser defined BI as an aspect of self concept: BI is an aspect of self-concept. Self-concept is the global perception of who one’s. Kalish (1975) defined self-concept as the total image one has about oneself; it contains one’s actual experiences and the interpretations about those experiences. Within that total image, self-concept is multidimensional and encompasses several facets of the self (Kaiser, 1997).

BI and self-esteem are considered the most important aspects of self-concept. Self-esteem is the way we feel toward the self we perceive, an appraisal resulting from self-concept and refers to the way one evaluates one's self. BI refers to "the mental picture one has of his or her body at any given moment in time (Kalkan, Şahin, Toraman, 2010).

Schilder defined body image as "the picture of our own body which we form in our mind, that is to say, the way in which the body appears to ourselves". One's body image includes his/her perceptions of the cultural standards, his/her perceptions of the extent to which he/she matches the standard, and the perception of the relative importance that members of society place on that match. A person's perceived body image may or may not accurately reflect a person's actual body size. In other words, a person may see herself as smaller as or larger than she actually is. In addition, a person's body image may or may not be consistent with others' perceptions of her body. A negative BI can undermine a person's general self-concept, especially of women, just as a positive body image can enhance self-concept (Kalkan, Şahin, Toraman, 2010).

#### **1.5.1. Breast Carcinoma and Body Image**

Body image is a psychological period that begins at infancy and developed through the life. It is a basic unit of personality development and general self worth. It is not only psychological period with body appearance and developing, it is also stiffening by cognitive functions, message taken from environment and perception of body stimulation (Özkan, 2007).

For many women reproductive organs and breasts are closely related to their self and their self confidence and identity and body image (Pelusi, 2006).

The bodily changes that occur following breast carcinoma diagnosis and treatment can result in patients. Losing positive image in their own body. This negative image of body includes dissatisfaction with appearance, reluctance to see her naked body and feeling of diminished sexual attractiveness (Landmark, Wahl, 2002; Bailey et al., 2009).

Externally visible and internal changes resulting from cancer treatment. Radiotherapy can cause skin discoloration. Chemotherapy can lead to dermatitis, hair loss and weight gain. Body image, as a component of self concept, is including

feeling feminine and attractive enjoying one's body as a symbol of social expression (Gümüş, 2006).

Surgeries can make alter sensation. 10 year survival analysis results show that favourable body image reduced risk of mortality (Speck et al., 2009).

Body image relate to one's feelings, perceptions and attitudes towards one's physical self, appearance, functionality. All of treatment had changed women's definition of self, making them feel less of women (Anagnostopoulos, Myrigianni, 2009; Sertöz et al., 2009).

Body image and sexual function may be influenced by medical factors. Certain surgical procedures such as a mastectomy may make a women feel unattractive and create negative body image concerns. A mastectomy can cause a complete loss of sensation in the chest area from a sexual function perspective (Abasher, 2009).

Breast cancer, which is very common in women, is very important for the identity of the breast in women losses. Woman had a mastectomy, can be perceived herself disabled, poor and lonely detect sexuality (Okanlı, 2004).

Breast has a make sense as a lots of factors of settled, emotional and cultural facts. Gyllenskold state as a breasts importance from the point of women that breasts are the organs presents women's womanhood and their attraction and they are symbols for a reproductive and nutritive and maternity. The level of psychological reaction to mastectomy has a close relation with women's own perception of breast. There are both psychological and symbolical meaning of body organ and tissue. Body image changes after physical appearance changes set as a psychological cognitive social factors effects of environment and also set as a physical changes person's subjective meanings of their characters and personality structure (Kütmeç, 2009).

## **1.6. Definition of Sexuality**

Sexuality includes person's emotional, mental and physical masculinity or femininity experiences and also ability to exhibiting, having sexual functioning, and sensation level of sexuality and expression way. With the other expression sexuality can be defined as an in company with armonically by two people; as a special experience set

as a with social rules, value judgments and taboos and also with biological, psychological and social aspects (Arıkan, 2000).

Sexuality begins before birth and continues throughout life which people's values beliefs, feelings, personalities, likes and dislikes, attitudes, behaviours, physical appearance, and shaped by the communities they live in a concept. Not only the sexual organs, all includes body and mind. According to the World Health Organization (WHO); sexuality, consists of a combination physical, emotional, intellectual, and social aspects of the personality, communication and the effects of enriching the love. As a sexual being sexuality is a state of healthiness which is not only bodily, is also emotional, intellectual and social cohesion that personality development, communication and enriches and enhances sharing of positive way of love. Sexuality affected the interaction of psychological, social, economic, political, cultural, legal, historical, religious, biological and psychological factors (Bozdemir, Özcan, 2011).

#### **1.6.1. Perspectives on Sexuality**

Sexuality is a complex whole which is biological, psychological, social, cultural, traditional, moral, religious, anthropological, political, and economic aspects (Bozdemir, Özcan 2011).

- i- **Biological Perspective:** Sexuality is a basic instinct. Sexual functioning, especially central nervous system, the five senses and the entire body, including the genital organs more than 30 participants and produced by our body hormone and substance complex a process carried out by the interaction. Therefore, particularly diseases, drugs and chemicals were used with factors that affect our bodies with each pregnancy, menopause, like puberty all periodic status affect sexuality (Bozdemir, Özcan 2011).
- ii- **Psychological Perspective:** Healthy functioning of the body sexuality in a healthy way to live provides the necessary infrastructure. However, it is how sexuality to live, to live with whom, when, where and how it would be, how excited and how saturation will be achieved and determine if human psychology.

Sexual functioning, a substantially central and managed by the peripheral nervous system, the basic human psychology, attitudes, personality characteristics, emotions, cognitive functions, the past experiences, trauma, learned patterns of behaviour and the approach to sexuality and our choices (Bozdemir, Özcan, 2011).

iii- **Socio Cultural Perspective:** People who grew up and lived in the family, neighbourhood, sub-culture and social structure, traditions and religious beliefs and moral attitudes, sexual attitudes and behaviour among makers. Often, only any socio-cultural causes of sexual dysfunction the main role in the emergence of disorders can play (Bozdemir, Özcan 2011).

### **1.6.2. Breast Carcinoma and Sexuality**

Surgical intervention in breast cancer is a frequently used treatment procedure and basic support especially for localized cases that have no distance metastasis. These interventions such as mastectomy and breast conservation which are applied for breast cancer cause some sexuality problems that influence on sexual life negatively due to deformation of woman body image. The results of researchers have shown that the mastectomy with the reconstruction of breast has a partly better; breast conservation operation has the best influence on sexual life of woman's compare to negative influence of mastectomy itself (Uçar, Uzun, 2008).

Generally sexuality is affected by cancer treatment during the first year of survivorship but as time pass, women are less anxious of their disease prognosis and hence their sexual life become normal again (Moyer, 1997).

Surgery, radiation, chemotherapy and hormonal therapy can affect a woman's sexual life. Chemotherapy has been associated with vaginal dryness, pain or depression may interfere with sexual function (Martinez, 2008).

Breast and genitals are erogenous zones for women sexuality that provide sexual arousal when touched. Hysterectomy and mastectomy operations deeply influence the perception of women's sexuality, body image and femininity. However, depression is often developed after oncology surgery, contributes to the deterioration of women's sexuality and spouse relation (Bayram, Şahin, 2008).

Breast conservative operation and reconstruction has less damage as a result of lost of organ which is a symbol of womanhood and sexuality and as a traumatic life experience that effect woman's attraction feelings and damage to sexual functions (Akyolcu, 2008).

### **1.7. Definition of Self Esteem**

SE is the degree of person likes himself/herself feelings and thought about his/her own body and appearance. The important issues about self-esteem can e summarized as one should be satisfied from himself/herself have feelings of valuing himself/herself, be positive, diligent and worthy. Also love him/her without any feeling of inferiority or superiority from reality. Who has high self esteem has a good physical health and regular social relation. Independency is very important for this people and these are successful at the work (Hosogi et al, 2012).

SE has long been considered an essential component of good mental health. It is a widely used concept both in popular language and in psychology. It refers to an individual's sense of his or her value or worth, or the extent to which a person values, approves of, appreciates, prizes, or likes him or herself. SE is a set of attitudes and beliefs that a person brings with him or herself when facing the world. It includes beliefs as to whether he or she can expect success or failure, how much effort should be put forth, whether failure at a task will "hurt," and whether he or she will become more capable as a result of difficult experiences. In basic terms, self-esteem is an internal belief system that an individual possesses about one's self. The concept of SE has been researched by several social scientists. One major area of research has been the relationship between self-esteem and academic achievement (Harris 2009).

Coopersmith, defined self-esteem as 'the evaluation which the individual makes and customarily maintains with regards to him/her self (Coopersmith, 1967). Cambell

and Lavallo define self esteem as ‘a self-reflexive attitude that is the product viewing the self as an object of evaluation’. In addition, Hales defines self-esteem as the evaluative function of the self-esteem concept. Self-esteem, thus, is the affective or emotional experience of the evaluations one makes in the time of one’s personal worth. On the other hand, a social psychology text defines self-esteem as an affective component of the self that is one evaluates him/herself how well he/she does something with respect to how others can do or by comparing his/her performance to others (Nozick, 1974).

Other researcher defines SE as ‘appreciating my own worth and importance and having the character to be accountable for myself and to act responsibly towards others’. Osborne, defined self-esteem as a relatively permanent positive or negative feeling about self that may become more or less positives and negatives as individuals encounter and interpret success and failures in their daily lives. For James, SE couldn’t simply be reduced to the aggregate of perceived success. Rather, it derived from the ratio of successes to one’s pretensions. Thus, if the individual evaluates the self positively in domains where he/she aims to excel high self-esteem will result. That means perceived successes are equal to one’s pretensions or aspiration for success results in high self-esteem. Conversely, if the pretensions exceed successes that is, if an individual feels unsuccessful in domains believed in important, he/she would experience low SE. SE is an intrinsic and universal part of human experience and it is a key concept for explaining the ‘inherent secrets’ of human behavior as a cure for social and individual problems. Harter has defined SE as ‘the level of global regard that one has for the self as a person’. Erikson, identified SE as a function of identity development that result from successfully addressing the tasks associated with each of the developmental stages of life. Thus one’s sense of developing, growing, and confronting lives tasks leads to feeling of worth. Backman, SE is ‘convenient to think of advantage person’s attitudes toward himself as having three aspects, the cognitive, the affective and the behavioral. Maslow’s work in the field of SE was emphasized on the notion of self-actualization. He assumed that the biological side determined inner nature of human consists of basic needs, emotions and capacities that are either neutral or positively good. Human behavior is motivated primarily by the individual’s seeking to fulfill a series of needs. According to Maslow esteem needs are of two kinds one of them is

personal desires for adequacy; mastery, competence, achievement, confidence, independence and freedom. The other one is desires for respect from other people including attention, recognition, appreciation, status, prestige, fame, dominance, importance and dignity. Satisfaction of esteem needs results in feeling of personal worth, self-confidence, psychological strength, capability and a sense of being useful and necessary. But preventing from these needs produces feeling of inferiority weaknesses and helplessness. At the end, these feeling cause discouragement, compensation or neurosis. It may also help us in better understanding self-esteem to differentiate self-concept from SE. Self-concept is the totality of a complex, organized and dynamic system of learned beliefs, attitudes and opinions that each person holds to be true about his/her personal existence (Maslow,1954,1971)

### **1.7.1. Breast Carcinoma and Self Esteem**

Cancer surgery, resulting in a significant portion of the body to be due to the change in physical appearance of women and the degradation change in body image and self-esteem to change perceived as a threat. Lower self-esteem, especially young women with breast cancer they have tested, more about body image and sexuality anxiety and emotional distress they experienced, however, women in the higher age group less sexual than younger patients reported their problems (Uçar, Uzun, 2008).



## **2. METHODOLOGY**

### **2.1. The Importance of the Study**

Breast cancer is the most commonly occurring cancer in women, comprising almost one third of all malignancies in females. Breast cancer is a disease that threatens not only the life but also sexuality and womanhood of the person. Surgical operation effects detrimentally the patient's body image, self esteem, psychological status, sexual life and interrelationship with the environment.

Even the thought and probability of the loss of the breast effect the person severely in a society that equals or attribute the breast a symbol of womanhood and sexuality. This study is suggested to be useful for researchers and to be informed the area of woman's breast health, their psychological response and sexual experiences after surgical operation.

### **2.2. The Purpose and the Problem Statements of the Study**

The aim of the study is to examine the effect of mastectomy and breast conserving operation on body image, self esteem, sexual satisfaction and sexual experiences among women who had breast cancer.

Hypothesis: The women who had breast conserving surgery compared to women who had mastectomy operation had higher levels of sexual satisfaction, sexual experience, body image and self esteem.

### **2.3. Sample**

The participants in this study were current 50 women in archive of Near East University Hospital with breast cancer. The sample was composed of 25 (%50) women who experienced modified radical mastectomy operation, 25 (%50) women who experienced breast conserving surgery, totally 50 women. The sample of the research is composed of women at the age of 25-79 who were breast carcinoma. The criteria used to choose the patients were; mastectomy and breast conserving surgery experience, able to communicate, literate, with no psychiatric medical history and volunteering to participate women were included in the research. Patients initially reached by phone, than appointments taken, and were visited in their homes. Socio-

demographical variable list, Golombok Rust Inventory of Sexual Satisfaction scale, Rosenberg Self Esteem Scale, Body Cathexis Scales, Arizona Sexual Experiences was conducted to women.

**Table 1. Socio- demographic Characteristics of Participant**

	N	%
<b>Marital status</b>		

Married	40	80
Single	2	4
Widowed	8	16
<b>Number of children</b>		
No Children	8	16
1	9	18
2	20	40
3	12	24
4 and over	1	2
<b>Educational Level</b>		
Only reader/writer	3	6
Primary/secondary school	21	42
High school	21	42
University	5	10
<b>Occupation</b>		
Housewife	14	28
Civil servant	8	16
Teacher	4	8
Self employed	14	28
Retired	10	20
<b>Monthly income</b>		
Low	2	4
Moderate	47	94
High	1	2
<b>Working situation</b>		
Have working	18	36
Have not working	32	6

According to the participants answers; 40 women were married. (%80). 2 of them were single (%4). 8 women were widowed (%16). Women reported that 8 of them have no children. (%16). Women reported that 8 of them have no children (%16). 9 women have only 1 child. (%18). 20 women have 2 children (%40). 12 women have 3 children. (%24). And 1 women have 4 and over children. (%2). According to the participants answers; 3

women were only reader and writer. (%6). 21 women graduated from primary/ secondary school. ( %42). 21 women graduated from high school. (%42). And 5 women graduated from university. (%10). In this present study 14 women were housewife (%28). 8 women were civil servant (%16). 4 women were teacher (%8). 14 women were self employed (%28). And 10 women were retired. (%20). 2 women had low income (%4). 47 women had moderate income (%94). 1 women had high income (%2). 18 women were working (%36). 32 were not working (%64).

**Table 2. Socio- demographic Variables related with Breast Carcinoma**

<b>The age when diagnosed</b>		
25-35	4	8
36-46	22	44
47-57	17	34
58-68	5	10
69-79		

**Time since diagnosed**

1 year and lower	22	44
2-5	13	26
6-10	10	20
11-15	3	6
16-20	2	4

**Menstruation cycle**

Menopause	46	92
Menstrual period continues	4	8

**Types of surgical operations**

Mastectomy	25	50
Breast conserving operation	25	50

**Time since surgical operation**

1 year and lower	20	40
2-5	15	30
6-10	10	20
11-15	3	6
16-20	2	4

**Another medical treatment type**

Chemotherapy	15	30
Radiotherapy	5	10
Chemo/ radio	29	58
Chemo/radio/hormone	1	2

**Informed about breast carcinoma**

Yes	44	88
No	6	12

**Informed about sexual side effect**

Yes	16	32
No	34	68

**Pleasurable about operation**

Very pleasure	34	68
Pleasure	9	18
Undecided	6	12
Not pleasure	1	2

According to the participants answers, age when they diagnosed breast cancer, 4 (8%) were age range 25-35, 22 (44%) were 36-46, 17 (34%) were 47-57, 5 (10%) were 58-68, 2 (4%) were 69-79. Participants have reported that time since diagnosed 22 (44%) 1 year and lower, 13 (26%) were 2-5 year, 10 (20%) were 6-10 year, 3 (6%) 11-15 years, 2 (4%) were 16-20 years. 46 (92%) of the participants have menopause, 4 (8%) menstrual period continues. They reported that the types of surgical operation, 25 (50%) were mastectomy, 25 (50%) were breast conserving

operation. 20 (40%) of participants reported that time since after surgical operation, were 1 year and lower, 15 (30%) were 2-5 years, 10 (20%) were 6-10, 3 (6%) were 11-15 years, 2 (4%) were 16-20 years. According to participants answers, type of another medical treatment if applied, 15 (30%) have chemotherapy, 5 (10%) have radiotherapy, 29 (58%) have both of chemotherapy and radiotherapy, 1 (2%) have chemotherapy, radiotherapy and hormone therapy. 44 (88%) of the participants have informed about breast carcinoma, 6 (12%) have not informed about breast carcinoma. 16 (33%) of them have informed about sexual side effect during treatment, 34 (68%) have not informed about sexual side effect during treatment. 34 (68%) of the participants were very pleasant from their surgical operations, 9 (18%) were pleasant, 6 (12%) weren't decided, 1 (2%) were unpleasant of their surgical operations.

#### **2.4. Instruments**

In this study, Golombok Rust Inventory of Sexual Satisfaction (GRISS) was used for perceived sexual satisfaction, Rosenberg Self esteem Scale (RS) was used for self esteem, Body Cathexis Scale (BCS) was used for perceived body satisfaction and Arizona Sexual Experience Scale (ASEX) was used for perceived sexual experience of the breast carcinoma patients. In addition demographic information form was used to collect socio-demographical properties of the participants.

#### **2.4.1. Demographic Information Form**

A demographic information form was administrated to participants including questions about age, marital status, educational level, occupation, monthly income, working situation, the aged when diagnosed breast carcinoma, time since diagnosed, menstrual cycle, types of surgical operation, time since surgery, medical treatment after surgery, informed about breast carcinoma, informed about sexual effects during treatment and pleasurable about surgery.

#### **2.4.2. Rosenberg's Self Esteem Scale (RS)**

Rosenberg's Self Esteem Scale is a scale that occurs 63 multiple choice questions. In United States of America, after reliability and validity studies this scale has been used as the measurement tool in the lot of research. The scale is consists of 12 sub-categories. (Tezcan, 2009). These 12 sub-categories are; D-1 (self-esteem); D-2 (stability of self concept); D-3 (confidence in the people); D-4 (sensitivity of criticism); D-5 (depressive mood); D-6 (less sensitivity to criticism); D-7 (psychotic symptoms); D-8 (interpersonal relations will threaten the feeling); D-9 (the degree of participation in the discussion); D-10 (interest from parent's); D-11 (father relationship); D-12 (psychic isolation).

The self esteem scale (SES) originally was developed by Rosenberg (1965) for the purpose of measuring global self esteem. The RS is a one-dimensional scale designed to measure only perception of global self esteem. In other words, it taps the extent to which a person is generally satisfied with his/her, or, alternatively, feels useless, desires more respect. Therefore, it is important to differentiate Rosenberg's aspects from that of who consider general self esteem to represent a sum of self judgments. The SES consists of 10 items with a four point Likert type scale ranging from "Strongly Agree" to "Strongly Disagree". In the Turkish version, the scale was changed as "Totally Right" to "Totally Wrong" by the adaptation study of Çuhadaroglu (1989). RS is scored with Guttman scoring format (Çuhadaroglu, 1989).

Five of items are phrased positively, e.g., "On the whole, I am satisfied with myself" the other five are phrased negatively, e.g., "I certainly feel useless at times". "Positive" and "Negative" items were presented alternatively in order to reduce the

effect of respondent set. Based on Guttman scoring format Rosenberg Self Esteem Scale follows three steps of scoring.

In the first step:

For 1<sup>st</sup>, 2<sup>nd</sup>, 4<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> items:

If the answer is “Wrong” or “Totally Wrong”, “1” point is recoded.

If the answer is “Right” or “Totally right”, “0” is recoded.

For 3<sup>rd</sup>, 5<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, 10<sup>th</sup> items:

If the answer is “Right” or “Totally Right”, 1 point is recoded.

If the answer is “Wrong” or “Totally Wrong”, “0” is recoded.

In the second step:

If sum of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> items is at least 2 or more, “1” point is recoded.

If sum of the 4<sup>th</sup> and 5<sup>th</sup> items is 1 or 2, “1” point is recoded. If the sum is 0, then “0” point is recoded.

For 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> items, a total score is recoded which can be at most 3, at least 0.

If the sum of 9<sup>th</sup> and 10<sup>th</sup> items is at 1, then “1” is recoded.

In third step:

For each participant a total score of 10 items is computed. This score may change between 0 and 6.

The score between 0-2 is recoded as “1” which means high self esteem.

The score between 3 -6 is recoded as “2” which means low self esteem.

The score obtained from SES scale are between 0-6 and any score between 0-2 was accepted as indicative of having high self esteem, and any score between 3-6 was accepted as indicative of having low self esteem (Emil, 2003).

- In the subscale of “stability of self concept”, high score indicates that “low” stability;” 0-2 “score indicates low stability of self concept, if the “3-5” score indicates high stability of self concept.
- In the subscale of “confidence in the people”, high score indicates that” low” confidence;” 0-1” score indicates high confidence in the people, “2-3” score



indicates “moderate” confidence; “4-5” score indicates “low confidence in the people”.

- In the subscale of “sensitivity of criticism”, high score indicates that “over sensitivity; “0-1” score indicates that “less sensitivity to criticism”, “2-3” score indicates that “high sensitivity to criticism”.
- In the subscale of “depressive mood”, high score indicates that “high” depression level; “0” score indicates that “there is no depressive mood”, “1-2” score indicates that “low depressive mood”, “3-4” score indicates “moderate”, “5-6” score indicates “high” depressive mood.
- In the subscale of “visionary”, high score indicates that “over” visionary, “1” score is indicates that “low” visionary, “2-3” score indicates that “moderate” visionary and “4” score is indicates that; “top level” of visionary.
- In the subscale of “psychosomatic symptoms”, high score indicates that “excessive” symptoms, “0-2” score indicates that “low” symptoms, “3-4” score indicates that “moderate” symptoms and “5” score is indicates that “high” symptoms
- In the subscale of “interpersonal relations will threaten the feeling”, high score indicates that “easily threatened” feelings, “0” score is indicates that “imperceptible threat”, “1” score “low” perceptible, “2” score “moderate” and “3” score is indicates that “high level feel threatened”.
- In the subscale of “the degree of participation in the discussion”, high score indicates that “high degree of participation” “0” score is indicates that “low degree of participation”, “1” score is indicates that “moderate” and “2” score is indicates that “high degree of participation in the discussion”.
- In the subscale of “interest from parent’s” high score is indicates that “low of interest”, “0-2” score is indicates that “high level of interest from parents”, “3-4” score is indicates that “moderate level” and “5-7” score is indicates that “low level of interest from parents”.
- In the subscale of “relationship with father” high score is indicates that “high level of relationship with father”, “0-2” score is indicates that “low”, “3-4” score is indicates that “moderate” and “5-6” score is indicates that “high relationship with father”.
- In the subscale of “psychic isolation” high score is indicates that “over psychic **isolation**”, “1” score is indicates that “low” and “2” score is indicates that “high” psychic isolation (MEB, [16.06.2013]).

The adaptation of Rosenberg SES to Turkish adolescent, which included translation, reliability and validity studies, were conducted by Çuhadaroglu (1985). The correlation between psychiatric interviews and the self esteem scale was founded to be .71. The test retest reliability of the Turkish version of the scale was found to be .75. Additional validity evidence was obtained by Çankaya (1997). The significant correlation between Self Concept Inventory and Rosenberg SES was found .26 ( $p < .001$ ). In addition, Cornbach alpha reliability was computed for Rosenberg SES by Kartal (1996). Item total correlation ranged between .40 and .70. The Cronbach alpha reliability coefficient was found .85. Pearson product moment correlation of Rosenberg SES and Appearance esteem scores with academics performance, nature and the number of social relations, perceptions of own popularity, the frequency of dating and perceived physical fitness were calculated. Self esteem scores correlated with all of the variables (Emil, 2003).

#### **2.4.3. Body Image Scale**

The Body Cathexis Scale developed by Secord and Jourard was one of the first measures of this type and is still one of the most widely used. The scale assessed the degree of satisfaction or dissatisfaction with various parts and features of the body. Subjects evaluate body characteristics according to a five point Likert scale ranging from I, “strong negative,” to “strong positive.” The underlying hypothesis is that the most tangible and visible part of the self is the physical structure. Participants indicate satisfaction with a wide variety of body parts, and the scale is scored so that each participant receives a score indicating body satisfaction. The original Body Cathexis Scale was comprised of 46 items, although most contemporary studies have employed a modified 40 item version to assess body attitude. Studies have indicated that women are dissatisfied with all body parts, but especially with those parts associated with the lower part of the body such as the hips, thighs and buttocks. Based on the Body Cathexis Scale, the Body Areas Satisfaction Scale (part of the Multidimensional Body Self Relations Questionnaire ) developed by Cash assess satisfaction with face, hair, lower torso, mid torso, upper torso, muscle tone, weight, height and overall appearance – each rated dissatisfied to very satisfied (Robinson 2003).

Scale translated by Hovardaoğlu at 1989. Two half reliability was found .76. Item test correlation was found between  $r=.45$  and  $r=.89$ . Cornbach Alpha coefficient was found  $r=.91$ . (Uçar, Uzun, 2008). Without cut-off score of the total scale score ranges from 40 to 200. High scores indicate the degree of uplift and not being satisfied with the various body parts and functions. (Gündoğan, 2006).

#### **2.4.4. Golombok Rust Inventory of Sexual Satisfaction (GRISS)**

This scale was developed by Rust and Golombok (1986). It studies sexual dysfunction in heterosexual subjects. There are two forms of the separate for men and women. 28 items are located for each form and five-point Likert-type measurement is provided. (Aydemir, Köroğlu, 2012). In our study we used only women form. The assessment scale consist of “never”, “rarely”, “sometimes”, “mostly”, “always”. The growing point of each item takes 0-4. Certain items scored by reversed direction. These items are (from 4 to 0) 2,4,5,8,9,10,11,15,16,17,19,21,22,25,26,27,28). Both total and sub-dimensions of the scale scores obtained from the assessment is useable. The items of 3<sup>rd</sup> and 15<sup>th</sup> are indicates frequency, 2<sup>nd</sup> and 6<sup>th</sup> are indicates communication, for satisfaction 5<sup>th</sup>, 10<sup>th</sup>, 18<sup>th</sup> and 22<sup>nd</sup> items indicated. 7<sup>th</sup>, 13<sup>th</sup>, 20<sup>th</sup> and 23<sup>rd</sup> items are indicated avoiding sexual intercourse, the items of 9<sup>th</sup>,12<sup>th</sup>,19<sup>th</sup> and 25<sup>th</sup> are absence of sexuality, the items of 6<sup>th</sup>,11<sup>th</sup>,17<sup>th</sup> and 24<sup>th</sup> are indicates vaginismus and 8<sup>th</sup>, 14<sup>th</sup>,21<sup>th</sup> and 28<sup>th</sup> items are indicates that anorgasmia. High scores indicate deterioration in sexual functioning and the nature of the relationship.

The adaptation of GRISS to Turkish which included translation, reliability and validity studies, were conducted by Tugrul and friends. (Tiryaki, 2009). According to reliability studies the analysis of individual items, item-total correlation coefficients vary between 0.74 0.18 problematic and non-problematic women. The Cronbach alpha reliability coefficient was found 0.91. (Tiryaki, 2009)

#### **2.4.5. Arizona Sexual Experience Scale (ASEX):**

This scale was developed by McGahuey CA, Gelenberg AJ, Laukes CA, Moreno FA, Delgado PL, McKnight KM, Manber R. There is a six-point Likert-type assessment that allows to make comprised of 5 items, separate forms for men and women are available. To exclusion of sexual orientation and sexual functioning

relationship with partner review purposes. The form used in the study were female sex drive, psychological arousal, physiological arousal (vaginal lubrication) and the capacity to reach orgasm a sense of satisfaction from orgasm is questioned. These questions are; to current DSM IV and ICD-10 diagnostic criteria for sexual dysfunctions meet. Total score ranging from 1 to 6 from 5 to each question up to 30 changes. Low scores a story sexual response is an easy and satisfying mark, higher scores indicate the presence of sexual dysfunction. Higher score refers to rather sexual dysfunction. In our study female form was used. Total score of the scale is equal to the sum of the scores obtained from the scale items. Turkish version of the scale study in patients with end-stage renal failure as a cut-off score of 11 was obtained. The adaptation of ASEX to Turkish which included translation, reliability and validity studies, were conducted by Soykan (Soykan, 2004).

Cornbach the calculation of alpha internal consistency was found .89 and .90 and test re-test reliability was obtained as .88. correlation coefficient were found to be .53 ROC analysis were cut-off score of 11 is a good level and criterion validity have been found to provide a distinctive feature (Aydemir , K  ro  lu, 2012).

## **2.5. Data Analysis**

Data of the research was investigated by using Chi-Square, One way ANOVA, Student's t-test analysis method and regression analysis were applied for results. Findings provided were evaluated as meaningful at  $p \leq 0.05$  level. All obtained data in this research process evaluated by using 16<sup>th</sup> version of the Statistically for Social Sciences (SPSS).



### 3. RESULTS OF THE STUDY

There were 50 women in breast cancer. 25 (50%) were mastectomy, 25 (50%) were breast conserving operation. The mean age of the sample was  $51.18 \pm 9.93$ ; the age range was between 27-79. 20 (40%) of participants reported that time since after surgical operation, were 1 year and lower, 15 (30%) were 2-5 years, 10 (20%) were 6-10, 3 (6%) were 11-15 years, 2 (4%) were 16-20 years. 40 (80%) participants were married, 2 (4%) were single, 8 (16%) were widowed. According to participants answers, type of another medical treatment if applied, 15 (30%) have chemotherapy, 5 (10%) have radiotherapy, 29 (58%) have both of chemotherapy and radiotherapy, 1 (2%) have chemotherapy, radiotherapy and hormone therapy. 46 (92%) of the participants have menopause, 4 (8%) menstrual period continues. 34 (68%) of the participants were very pleasant from their surgical operations, 9 (18%) were pleasant, 6 (12%) weren't decided, 1 (2%) were unpleasant of their surgical operations. In addition, most of the women in our study were informed about breast carcinoma 34 (68%). Most of the women in our stud were not informed about sexual effects of treatment 34 (68%)

#### 3.1. TABLES

**Table 3. The comparison of Golombok, Arizona, Body Cathexis and Self esteem scales according to the type of Surgery**

		m±sd (n=50)	t	P
GRISS	Mastectomy	53,16±21,79 (n=25)	0.708	0.149
	Breast Conserving Surgery	61,96±20,66 (n=25)		
BIS	Mastectomy	94,24±27,71 (n=25)	0.514	0.015*
	Breast Conserving Surgery	74±29,21 (n=25)		
AXES	Mastectomy	20,08±8,73 (n=25)	0.013	0.017*
	Breast Conserving Surgery	14,76±6,24 (n=25)		
Rosenberg's SE	Mastectomy	1,06±0,74 (n=25)	0.415	0.231
	Breast Conserving Surgery	0,82±0,63 (n=25)		
SE Subscale	Mastectomy	1.32±0.48 (n=25)	0.180	0.030*
	Breast Conserving Surgery	1.08±0.28 (n=25)		

p≤0.05      p≤0.001

The comparison of GRIS, ASEX, BIS, Rosenberg's SE and SE Subscales according to the Surgery Type by using Student T-test revealed that BIS, SE and ASEX have statistically significant differences.

**Table 4. Correlation between mean scores of GRISS, ASEX, BIS, Rosenberg's SE and SE Subscale scores with ages**

AGE	R	P
GRISS	-0.31	0.01*
ASEX	-0.09	0.54
BIS	0.37	0.01*
Rosenberg's SE	0.03	0,85
SE Subscale	0.06	0.67

\*p≤0.05      \*\*p<0.001

The correlations between age of the participants and the GRISS; ASEX; BIS; Rosenberg's SE and SE subscales are given in table 1. According to the Pearson's correlation coefficient there was a negative moderate significant relationship between age and GRISS (r:-0.31 p: 0.01), positive moderate significant relationship between age and BIS (r: 0.37 p: 0.01). There was no significant relationship between other scales.

**Table 5. The comparison of mean score of GRISS, ASEX, BIS, Rosenberg's SE and SE Subscale according to the marital status**

m±sd (n=50)	f	P
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GRISS	Married	62,37±17,13 (n=40)	0.238	0.010*
	Single	56,5±3,53 (n=2)		
	Widowed	33,75±28,49 (n=8)		
BISS	Married	80,57±29,69 (n=40)	0.002	0.290
	Single	1,04±58,68 (n=2)		
	Widowed	96,75±29,98 (n=8)		
ASEX	Married	16,85±6,99 (n=40)	0.609	0.610
	Single	20±9,89 (n=2)		
	Widowed	19,62±12,22 (n=8)		
Rosenberg's SE	Married	0,91±0,67 (n=40)	0.351	0.350
	Single	0,46±0,05 (n=2)		
	Widowed	1,19±0,84 (n=8)		
SE Subscale	Married	0,91±0,67 (n=40)	0.300	0.740
	Single	0,46±0,05 (n=2)		
	Widowed	1,19±0,84 (n=8)		

$p \leq 0.05$  (\*  $p \leq 0.01$ )

When mean score of GRISS, ASEX, BIS, Rosenberg SE and SE Subscales were compared according to the marital status with ONE-WAY ANOVA, significant difference is found only for mean score of GRISS were found between single and widowed women with advanced statistical analyzes with TUKEY.

**Table 6. The comparison of GRISS, ASEX, BIS, Rosenberg's SE and SE Subscales mean scores according to the Educational Level of women**

		m±sd (n=50)	f	P
GRISS	Only Literate	61.33±7.63 (n=3)	0.472	0.938
	Primary/Secondary school	52.9±24.99 (n=21)		

	High School	58.9±20.81 (n=21)		
	University	69±5.95 (n=5)		
BIS	Only Literate	66±21.18 (n=3)		
	Primary/Secondary school	88.04±28.76 (n=21)	0.170	0.170
	High School	88.42±31.09 (n=21)		
	University	60.4±23.33 (n=5)		
Arizona	Only Literate	18.66±7.02 (n=3)		
	Primary/Secondary school	16.71±8.52 (n=21)	0.953	0.950
	High School	18±8.27 (n=21)		
	University	17.2±6.64 (n=5)		
Rosenberg's SE	Only Literate	1.36±0.42 (n=3)		
	Primary/Secondary school	0.91±0.58 (n=21)	0.579	0.140
	High School	0.96±0.86 (n=21)		
	University	0.65±0.33 (n=5)		
SE Subscale	Only Literate	1±0.0 (n=3)		
	Primary/Secondary school	1.28±0.46 (n=21)	0.415	0.970
	High School	1.19±0.4 (n=21)		
	University	1±0.0 (n=5)		

\* p≤0.05

\*\* p≤0.001

The statistically no significant differences was found GRIS, ASEX, BIS, Rosenberg's SE and SE Subscales according to the Educational Level with advanced statistical analyzes with ANOVA.

**Table 7. The comparison of GRISS, ASEX, BIS, Rosenberg's SE and SE Subscales mean scores according to Monthly Income**

	m±sd	f	P
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		(n=50)		
GRISS	Low	67.5±6.36 (n=2)	0.490	0.610
	Moderate	58.8±21.92 (n=47)		
	High	73±0.23 (n=1)		
BIS	Low	73.5±31.81 (n=2)	1.270	0.290
	Moderate	85.51±29.77 (n=47)		
	High	40±0.0 (n=1)		
AXES	Low	14±5.65 (n=2)	0.240	0.790
	Moderate	17.61±8.14 (n=47)		
	High	15±0.0 (n=1)		
Rosenberg's SE	Low	1.29±0.76 (n=2)	0.450	0.640
	Moderate	0.93±0.69 (n=47)		
	High	0.5±0.0 (n=1)		
SE Subscale	Low	1±0.0 (n=2)	0.380	0.680
	Moderate	1.21±0.41 (n=47)		
	High	1±0.0 (n=1)		

p≤0.05

The comparison of GRIS, ASEX, BIS, Rosenberg's SE and SE Subscales according to the Monthly Income by using ANOVA test revealed no statistically significant difference.

**Table 8. The comparison of GRISS, ASEX, BIS, Rosenberg's SE and SE Subscales mean scores according to the working status**

		m±sd (n=50)	t	P
GRISS	Working	64,33±17,62 (n=18)	0.351	0.121
	Not working	55,48±20,86 (n=32)		
BIS	Working	77,66±29,35 (n=18)	0.913	0.307

	Not working	86,77±30,15 (n=32)		
AXES	Working	16±7,38 (n=18)	0.486	0.215
	Not working	18,80±7,72 (n=32)		
Rosenberg's SE	Working	0,93±0,74 (n=18)	0.741	0.954
	Not working	0,95±0,67 (n=32)		
SE Subscale	Working	1.23±0.46 (n=18)	0.970	0.340
	Not working	1.16±0.37 (n=32)		

p≤0.05

The comparison of GRIS, ASEX, BIS, Rosenberg's SE and SE Subscales according to the Working Status by using Student T-test revealed no statistically significant difference.

**Table 9. The comparison of GRISS, ASEX, BIS, Rosenberg's SE and SE Subscales mean scores according to the menstruation cycle**

		m±sd (n=50)	t	P
GRISS	Menopause	57,30±22,23 (n=46)	0.380	0.780
	Menstruation	60,50±10,40 (n=4)		
BIS	Menopause	83,21±30,34 (n=46)	0.240	0.470
	Menstruation	94,50±26,63 (n=4)		

AXES	Menopause	17,50±8,08 (n=46)	0.680	0.810
	Menstruation	16,50±7,54 (n=4)		
Rosenberg's SE	Menopause	0,91±0,67 (n=46)	0.180	0.460
	Menstruation	1,18±0,96 (n=4)		
SE Subscale	Menopause	1.17±0.38 (n=46)	0.480	0.120
	Menstruation	1.50±0.58 (n=4)		

$p \leq 0.05$

The comparison of GRIS, ASEX, BIS, Rosenberg's SE and SE Subscales according to the Menstruation Cycle by using Student T-test revealed no statistically significant difference.

**Table 10. The comparison of GRISS, ASEX, BIS, Rosenberg's SE and SE Subscales mean scores according to being informed by the physician about sexual side effect of treatment**

		m±sd (n=50)	t	P
GRISS	Yes	61,62±17,63 (n=16)	0.370	0.920
	No	55,64±23,06 (n=34)		
BIS	Yes	74,5±31,55 (n=16)	0.120	1.580
	No	88,64±28,56 (n=34)		

AXES	Yes	15,81±7,01 (n=16)	0.330	0.980
	No	18,17±8,38 (n=34)		
Rosenberg's SE	Yes	0,88±0,65 (n=16)	0.720	0.370
	No	0,96±0,72 (n=34)		
SE Subscale	Yes	1.13±0.34 (n=16)	-0.90	0.370
	No	1.24±0.43 (n=34)		

$p \leq 0.05$

The comparison of GRIS, ASEX, BIS, Rosenberg's SE and SE Subscales according to the Informed about sexual side effect of treatment by using Student T-test revealed no statistically significant difference

**Table 11. The comparison of GRISS, ASEX, BIS, Rosenberg's SE and SE Subscales mean scores according to being informed about breast carcinoma by the physician**

		m±sd (n=50)	T	P
GRISS	Yes	57,34±22,61 (n=44)	0.290	0.850
	No	59,16±10,94 (n=6)		
BIS	Yes	80,77±27,97 (n=44)	0.370	0.031*
	No	1,08±35,47 (n=6)		
AXES	Yes	16,52±7,94 (n=44)	0.190	0.003*

	No	24±4,69 (n=6)		
Rosenberg's SE	Yes	0,93±0,70 (n=44)	0.981	0.310
	No	0,93±0,66 (n=6)		
SE Subscale	Yes	1.20±0.06 (n=44)	0.210	0.830
	No	1.17±0.17 (n=6)		

$p \leq 0.05$

The statistically no significant differences were found between GRISS, Rosenberg's SE and SE Subscales according to the Informed about breast carcinoma. Only BIS and ASEX have statistically significant differences.

**Table 12. The Comparison of Marital Status in Participants according to the type of Surgery**

	All		MRM		BCS	
	n	%	N	%	n	%
Married	40	80.0	17	68.0	23	92.0
Single	2	4.0	1	4.0	1	4.0
Widowed	8	16.0	7	28.0	1	4.0

$X^2=5.4$        $p=0.07$

The comparison of marital status of participants according to the type of surgery by using chi-square method revealed no significant differences.

**Table 13. The Comparison of satisfaction of surgery of Participants according to the type of Surgery**

	All		MRM		BCS	
	n	%	N	%	n	%

Very Pleasure	34	68.0	14	56.0	20	80.0
Pleasure	9	18.0	6	24.0	3	18.0
Undecided	6	12.0	5	20.0	1	4.0
Not Pleasure	1	2.0	0	0.0	1	4.0

$$X^2=5.73 \quad p=0.13$$

The comparison of pleasure of surgery of participants according to the type of surgery by using chi-square method revealed no significant differences.

**Table 14. The Comparison of Age Groups of Participants according to the type of Surgery**

	All		MRM		BCS	
	n	%	N	%	n	%
25-35	4	8.0	2	8.0	2	8.0
36-46	9	18.0	4	16.0	5	2.0
47-57	26	52.0	12	48.0	14	56.0
58-68	10	20.0	6	24.0	4	16.0
69-79	1	2.0	1	4.0	0	0.0

$$X^2=1.67 \quad p=0.8$$

The comparison of age of participants according to the type of surgery by using chi-square method revealed no significant differences.

**Table 15. The Comparison of being Informed about sexual side effect of treatment of Participants according to the type of Surgery**

	All		MRM		BCS	
	n	%	N	%	n	%
Yes	16	32.0	7	28.0	9	36.0
No	34	68.0	18	72.0	16	64.0

$$X^2=0.37 \quad p=0.54$$

The comparison of sexual side effect of participants according to the type of surgery by using chi-square method revealed no significant differences.

**Table 16. The Comparison of Age Groups of Participants according to the another medical treatment type**

	All		Chemo		RT		Chemo+RT		Chemo+RT+H RT	
	n	%	N	%	n	%	n	%	n	%



25-35	4	8.0	1	6.7	0	0.0	3	10.3	0	0.0
36-46	9	18.0	3	20.0	0	0.0	6	20.7	0	0.0
47-57	26	52.0	9	60.0	3	60.0	14	48.3	1	100.0
58-68	10	20.0	2	13.3	1	20.0	6	20.7	0	0.0
69-79	1	2.0	0	0.0	1	20.0	0	0.0	1	100.0

$$X^2=15.33 \quad p=0.22$$

The comparison of Ages of participants according to another medical treatment type by using chi-square method revealed no significant differences.

**Table 17. The Comparison of Education Level of Participants according to the Being Informed about Illness by physician**

	All		Yes		No	
	n	%	N	%	n	%
Only Literate	3	6.0	3	6.0	0	0.0
Primary/Sec.	21	42.0	18	42.0	3	50.0
High School	21	42.0	18	42.0	3	50.0
University	5	10.0	5	10.0	0	0.0

$$X^2=1.3 \quad P=0.72$$

The comparison of education level of participants according to informed about illness by using chi-square method revealed no significant differences.

**Table 18. The Comparison of Informed about sexual side effect of treatment of Participants according to educational level**

	All		Yes		No	
	n	%	N	%	n	%
Only Literate	3	6.0	2	2.5	1	2.9
Primary/Sec.	21	42.0	7	43.8	14	41.2
High School	21	42.0	4	25.0	17	50.0
University	5	10.0	3	60.0	2	5.9

$$X^2=5.1 \quad p=0.17$$

The comparison of informed about sexual side effect of treatment of participants according to the educational level by using chi-square method revealed no significant differences.

**Table 19. The Comparison of time since surgical operation of participants according to GRISS, BIS, ASEX, Rosenberg's SE and SE subscales**

		m±sd (n=50)	F	P
GRISS	Under 1 year	60.05±21.30 (n=20)	0.630	0.910
	2-5 years	51.0±23.81 (n=15)		
	6-10 years	59.50±22.24 (n=10)		
	11-15 years	58.0±13.53 (n=3)		
	16-20 years	71.50±6.36 (n=2)		
BIS	Under 1 year	88.70±32.20 (n=20)	0.250	0.910
	2-5 years	82.33±35.23 (n=15)		
	6-10 years	80.10±22.37 (n=10)		
	11-15 years	84.33±22.14 (n=3)		
	16-20 years	71.50±23.33 (n=2)		
ASEX	Under 1 year	16.40±6.80 (n=20)	0.340	0.850
	2-5 years	17.53±9.63 (n=15)		
	6-10 years	17.40±8.77 (n=10)		
	11-15 years	21.33±6.35 (n=3)		
	16-20 years	21.00±8.49 (n=2)		
Rosenberg's SE	Under 1 year	1.02±0.75 (n=20)	1.010	0.410
	2-5 years	0.80±0.58 (n=15)		
	6-10 years	0.90±0.83 (n=10)		
	11-15 years	0.67±0.14 (n=3)		
	16-20 years	1.75±0.35 (n=2)		
SE Subscale	Under 1 year	1.20±0.41 (n=20)	0.440	0.780
	2-5 years	1.20±0.41 (n=15)		
	6-10 years	1.20±0.42 (n=10)		
	11-15 years	1.00±0.00		

	(n=3)
16-20 years	1.50±0.71
	(n=2)

$p \leq 0.05$

The comparison time since surgical operation of participants according to GRISS, BIS, ASEX, Rosenberg's SE and SE subscales by ANOVA method revealed no significant differences.

## DISCUSSION

In this study we aimed to search what differences did the sexual satisfaction, sexual experience, and self esteem and body image different types of operations on women who were diagnosed to have breast carcinoma create.

In this study, we aimed to search the differences, regarding the sexual satisfaction, sexual experience and body image amongst women who were diagnosed to have breast carcinoma, according to the different types of surgery. For women, the breast, in addition to its role as the organ supplying milk, important role in the sexual intercourse and is identified as a symbol of womanhood and sexual attractiveness (Özkan 2007).

Therefore, we observed what kinds of differences are created about the perception of body, sexual experiences, sexual satisfaction and self esteem, on women who had breast conserving operation or mastectomy. Amongst the gathered data, it was detected that, when the relationship between the ages of women participated in the study and the given scales is observed particularly on Pearson Correlation, the age had negative effects on the sexual satisfaction. The elder women participated in the study had been observed to have reduced sexual satisfaction. In women, with the increase of the age, the functional capacity of organs and tissues reduces. The genital organs and the pelvic floor muscles become dysfunctional. The processes of pregnancy and birth cause structural and hormonal changes. The frequency of chronic diseases increases. Furthermore, as her age increases, due to the social norms, the woman feels that her beauty and attractiveness is reduced. All those psychological and physiological factors are amongst the causes leading women to give less importance to sexuality at older ages (Kütmeç, 2009) .

Nonetheless, it was also detected that, there was a positive relationship between the variable of age and the scale of perception of body. The elder women had increased levels body perception. As the age increases, the body perception is improved. Based on this fact, we are led to think that, when the age of a woman increases, her body perception is stabilized, and she does not concentrate her ideas on her body. A former study had indicated that the increase in the age does not appear to affect the

body perception negatively. As long as the woman is satisfied with her sexual attractiveness, weight concern, and physical condition, the increased age might not affect the body esteem (Stokes& Frederick-Recassino 2003).

When we observe the relationship between the scales and the education level of woman there had been found no statistical differences on sexuality and body image. Nevertheless, it was found out that the university graduate women had low levels of body perception. This leads us to think that, the body image is important for the working women. The university graduates are capable of achieving broader knowledge about their disease. The more the consciousness about the disease is increased; the expectations and the experiences about the body perception and sexuality differ. A former research found out that the university graduates suffering various types of cancer, regardless of gender, are more likely to attain knowledge about their disease and the process of treatment and they to utilize the information provided by the doctor more effectively, when compared to people having lower levels of education (Samur et. all. 2000).

When we compare the relationship between scales and marital status there had been founded no interaction between the self esteem and body image. However, there was an interaction between the GRISS and widowed women. We are led by the gathered data to think that, the single women had no sexual life due to the social taboos in Turkish Cypriot Community, and the widowed women tend maintain their sexuality after the divorce. In examining the sexual satisfaction of the participants, we utilized the GRISS scale, which measures the sexual satisfaction in heterosexual couples (or partners). The GRISS scale, with its well designed questionnaire, enables the research to focus on the sexual satisfaction of the male and the female separately (Rust & Golombok 1985). In our research, all of our participants were females. As Lobodzinska (1995) argues, in Eastern and Central Europe and in Mediterranean, due to the traditionalist male-dominated construction of social identity, concepts like sexual activeness and sexual rights of women and the sexual education in schools are, to a noticeable extent, suppressed by the social pressure. The society of our participants, Turkish Cypriots, does not constitute an exception at this point.

When we compare the relationship between scales and monthly income, although there had been founded no statistical differences, according to the scales GRISS and

Arizona, the women with high incomes were found out to have higher sexual satisfaction. Since the woman with high income is satisfied in a broad range of aspects of the social life, she obtains satisfaction in sexual life as well. On the other hand, the women with high income, according to scale BIS, were found out to have low levels of body perception. We cannot neglect the fact that, the relevant women do not refer to the normal population. They refer to people diagnosed to have Breast Carcinoma. As a former study indicated, women (and couples) who have lower income levels have a greater risk of facing with sexual dissatisfaction and serious sexual problems such as Vaginismus and infertility, when compared to women (and couples) having higher incomes (Güleç et. all. 2008).

When we compare the relationship between the menstruation cycle and the scales, the women who had menstruation were found out to have high levels of sexual satisfaction according to the scales GRISS and BIS. Although the breast had been removed, the reproduction is maintained and the womanhood is not affected. According to Aydın and Aslan's studies; sexual dysfunction in woman with breast carcinoma who had menstruation were found out to have significant differences (Aydın, Aslan , 2008).

When the relationship between the surgery and scale GRISS is compared, it was found out that the women who had breast conserving surgery had high levels of sexual satisfaction. The breast is identified as the symbol of womanhood, and since the breast is kept in its natural place, the women have high levels of satisfaction. Genital organs are has a significant determinate role to have shape of the sexuality to have identity "being women" (Kütmeç, 2009). And also when we compared ASEX SE and BIS scales, it was found that women with mastectomy surgery had statistically significant differences than women with breast conserving surgery. Breast cancer which is the most seen in cancer women causes lost of breast that has important meaning in woman life, in addition to worry of being cancer Pateints with breast cancer who undergo the mastectomy worry because of being cancer and having a surgical operation Mastectomy effects the woman's personality, sexual life. ( Arıkan, 2001).

When the relationship between being informed about the side effects of the treatment and the given scales, according to the scale GRISS, the sexual satisfaction was found to be at high levels. Nevertheless, the SE, BIS and ASEX scale values were found to be low. At this point a difference between the scales GRISS and Asex becomes significant. The scale GRISS searches for intimate emotions and tenderness from partner. However, the scale Arizona measures the non-intimate emotions. Accordingly, the women might have paid little attention to the scale GRISS, due to the deep questions it included. Their sexual satisfaction appear to be high, however, according to the Arizona Scale, the amount of their sexual activities is not high. In the literature, the ASEX is widely respected, particularly due to its appropriate basis enabling the research to observe the sexuality in people with health problems (McGahuey et. all. 2000; See also Soykan 2004). On the other hand, the GRISS is also widely respected; however it has no special compatibility with the sexual life of people with health problems (Rust & Golombok 1985). At this point, we are manipulated by the gathered data to conclude that, the ASEX was more beneficial for the research we conducted.

When the relationship between the scales and being informed about breast carcinoma is compared, according to ASEX and BIS, the sexual experiences were detected to be statistically significant differences. However, the body perception was found to be at low levels. A former study had focused on the information gained by the women having breast carcinoma. The relevant study asserted that, when they provide information to the patients about breast carcinoma and the side effects of the treatment, the health professionals might tend to refrain from talking about sexuality. Since they believe that the sexuality was a part of the privacy of the patient, the health professionals might tend to ignore the sexual lives of women having Breast Carcinoma (Hordern 2000).

In our study, when the relationship between the scales and the status of employment is compared, it was detected that, the working women had higher levels of sexual satisfaction GRISS and body image and self esteem. This is particularly caused by the capability of the women to be more active than the non-working women in other aspects of the social life. As a former research indicated, employed women are likely to have higher levels of sexual desire and sexual satisfaction when compared to housewives (Tashbulatova 2007).

When the relationship between the scales and the time passed after the surgery is compared, the women who had the surgery one year ago, or less than one year ago, the GRISS and BIS were at high levels. Since there is no anxiety of relapse, the BIS remains at high level. We are led to think that, the higher amounts of time passed after the surgery is thought to cause greater anxieties about the relapse. With regards to the women diagnosed to have breast carcinoma, it was founded out by a former survey indicates that, the fear of recurrence might lead the women to anxiety and depression. The relevant survey therefore, drew attention to the fact that, the fear about recurrence was an important aspect while analyzing the psychological well being of women having breast carcinoma. And also they investigated the relationship between the fear of recurrence and the time passed after the surgery (Burgess. et. all. 2004).

## **CONCLUSION**

In this study results shows that; women with mastectomy operations have LOW self esteem, sexual experiences and body cathexis according to women with breast conserving surgery. This study has concluded that the gathered data DOES support the validity of the generated hypothesis. However we have important reasons to think



that the limitations regarding the sampling, conclusions show that the hypothesis was validated. First of all the number of the participants were limited. The questionnaire was applied to 50 women, (N= 25%) were experienced mastectomy surgery, (N=25%) were experienced breast conserving surgery. In TRNC, *Kanser Hastalarına Yardım Derneği* is the association that can provide the greatest range of data about the people suffering due to cancer. However, unfortunately the association has permitted our access to its archives. Accordingly, we obtained permission from the Department of Radiotherapy of Near East University Hospital, and we utilized their archives for our research. Since the Near East University Hospital had been established quite recently (2011), there had not been a significant quantity of people who applied the hospital for treatment. Although Cyprus is a little community and we have reached the limited sample hypothesis was validated.

As a result; this study has pointed that breast conserving surgery is healthier way than mastectomy surgery.

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## APPENDIX

SOSYO DEMOGRAFİK BİLGİ FORMU

1. KAÇ YAŞINDASINIZ ?.....
2. MEDENİ DURUMUNUZ NEDİR? a) Evli b) Bekar c) Dul
3. ÇOCUK SAYISI NEDİR?.....
4. EĞİTİM DURUMUNUZ NEDİR? a) Sadece okur yazar  
b) İlk-ortaokul mezunu  
c) Lise mezunu  
d) Yüksek lisans mezunu
5. MESLEĞİNİZ NEDİR?.....
6. AYLIK ORTALAMA GELİRİNİZ NEDİR? a) Düşük  
b) Orta  
c) Yüksek
7. ÇALIŞMA DURUMUNUZ NEDİR? a) Çalışıyor  
b) Çalışmıyor
8. MEME KANSERİ ANISI ALDIĞINIZ YAŞ NEDİR? .....
9. TANIDAN BU YANA GEÇEN DÜRE NE KADARDIR? .....
10. MENSTÜRASON DURUMU NEDİR? a) Menapozda  
b) Menstürasyon halen sürüyor
- 11.CERRAHİ OPERASYON TİPİ NEDİR? a) Masektomi  
b) Meme koruyucu cerrahi

12. CERRAHİ GİRİŞİMDEN SONRA GEÇEN SÜRE NEDİR?.....

13. CERRAHİ GİRİŞİMİN DIŞINDA UYGULANAN TIBBİ TEDAVİ TÜRÜ?

- a) Kemoterapi
- b) Radyoterapi
- c) Kemoerapi + Radyoerapi
- d) Hormon Tedavisi

14. HASTALIK KONUSUNDA DOKTORUNUZ SİZİ BİLGİLENDİRDİ Mİ?

- a) Evet
- b) Hayır

15. TEDAVİNİN CİNSEL YAN ETKİSİ AÇISINDAN BİLGİLENDİRİLDİNİZ Mİ?

- a) Evet
- b) Hayır

16. YAPILAN AMELİYATTAN MEMNUN MUSUNUZ?

- a) Çok Memnunum
- b) Oldukça memnunum
- c) Kararsızım
- d) Pek memnun değilim
- d) Hiç memnun değilim

**ROSENBERG BENLİK SAYGISI ÖLÇEĞİ****D – 1****MADDE 1**

1. Kendimi en az diğer insanlar kadar değerli buluyorum.  
a. ÇOK DOĞRU b. DOĞRU c. YANLIŞ d. ÇOK YANLIŞ
2. Bazı olumlu özelliklerim olduğunu düşünüyorum.  
a. ÇOK DOĞRU b. DOĞRU c. YANLIŞ d. ÇOK YANLIŞ
3. Genelde kendimi başarısız bir kişi olarak görme eğilimindeyim.  
a. ÇOK DOĞRU b. DOĞRU c. YANLIŞ d. ÇOK YANLIŞ

**MADDE 2**

4. Ben de diğer insanların birçoğunun yapabildiği kadar birşeyler yapabilirim.  
a. ÇOK DOĞRU b. DOĞRU c. YANLIŞ d. ÇOK YANLIŞ
5. Kendimde gurur duyacak fazla birşey bulamıyorum.  
a. ÇOK DOĞRU b. DOĞRU c. YANLIŞ d. ÇOK YANLIŞ

**MADDE 3**

6. Kendime karşı olumlu bir tutum içindeyim.  
a. ÇOK DOĞRU b. DOĞRU c. YANLIŞ d. ÇOK YANLIŞ

**MADDE 4**

7. Genel olarak kendimden memnunum.  
a. ÇOK DOĞRU b. DOĞRU c. YANLIŞ d. ÇOK YANLIŞ

**MADDE 5**

8. Kendime karşı daha fazla saygı duyabilmeyi isterdim.  
a. ÇOK DOĞRU b. DOĞRU c. YANLIŞ d. ÇOK YANLIŞ

**MADDE 6**

9. Bazen kesinlikle kendimin bir işe yaramadığını düşünüyorum.  
a. ÇOK DOĞRU b. DOĞRU c. YANLIŞ d. ÇOK YANLIŞ
10. Bazen kendimin hiç de yeterli bir insan olmadığımı düşünüyorum.  
a. ÇOK DOĞRU b. DOĞRU c. YANLIŞ d. ÇOK YANLIŞ

**D – 2**

11. Kendiniz hakkındaki düşünceleriniz değişkenlik gösterir mi, yoksa her zaman aynı mıdır ?  
a. ÇOK DEĞİŞİR b. ZAMAN ZAMAN DEĞİŞİR c. ÇOK AZ DEĞİŞİR d. HİÇ DEĞİŞMEZ

12. Hiç kendiniz hakkında bir gün bir görüşe, başka bir gün farklı bir görüşe sahip olduğunuzu farkettiğiniz olur mu ?

a. Evet, sık sık olur b. Evet, bazen olur c. Evet, nadiren olur d. Hayır, hiç olmaz

13. Kendim hakkındaki görüşlerimin çok çabuk değiştiğini farkettim.

a. DOĞRU b. YANLIŞ

14. Kendim hakkında bazı günler olumlu bazı günlerse olumsuz düşüncelere sahip oluyorum.

a. DOĞRU b. YANLIŞ

15. Şu günlerde kendim hakkındaki görüşlerimi hiç birşeyin değiştiremeyeceğini düşünüyorum.

a. DOĞRU b. YANLIŞ

#### D – 3

16. Başınıza gerçekten bir şey geldiğinde kimse sizin durumunuzla pek ilgilenmeyecektir.

a. DOĞRU b. YANLIŞ

17. İnsan doğasında yardımlaşma gerçekten vardır.

a. DOĞRU b. YANLIŞ

18. Dikkatli davranmazsanız insanlar sizi kullanacaklardır.

a. DOĞRU b. YANLIŞ

19. Bazı kişiler, insanların büyük çoğunluğunun güvenilebilir olduğunu, bazıları ise insanlarla ilişkilerinde çok güvenilemeyeceğini söylerler. Siz bu konuda ne düşünüyorsunuz ?

a. İnsanların çoğuna güvenilebilir.

b. İnsanlarla ilişkilerde çok güvenilemez.

20. İnsanlar daha çok başkalarına yardım etmeye mi, yoksa kendi çıkarlarını düşünmeye mi eğilimlidirler ?

a. Başkalarına yardım etmeye

b. Kendi çıkarlarını düşünmeye

#### D – 4

21. Eleştiriye karşı ne kadar hassassınızdır ?

a. Çok fazla hassas b. Oldukça hassas c. Az hassas d. Hassas değil

22. Eleştiri ya da azarlama beni çok fazla incitir.

a. DOĞRU b. YANLIŞ

23. Yanlış yaptığınız bir şey için biri size güldüğünde veya suçladığında ne kadar rahatsız olursunuz ?

- a. Çok fazla                      b. Oldukça                      c. Rahatsız olmam

**D – 5**

24. Genelde ne kadar mutlusunuzdur ?

- a. Çok mutlu                      b. Mutlu                      c. Pek mutlu değil                      d. Çok mutsuz

25. Genelde oldukça mutlu bir kişi olduğumu düşünüyorum.

- a. DOĞRU                      b. YANLIŞ

26. Genel olarak kendinizi neşeli bir ruh hali içinde mi, yoksa neşesiz bir ruh hali içinde mi hissedersiniz ?

- a. Çok neşeli bir ruh hali içinde                      b. Oldukça neşeli bir ruh hali içinde  
c. Ne neşeli ne de neşesiz ruh halinde                      d. Oldukça neşesiz ruh halinde

27. Hayattan çok zevk alıyorum.

- a. DOĞRU                      b. YANLIŞ

28. Ben de mutlu gördüğüm diğer kişiler kadar mutlu olabilmeyi isterdim.

- a. DOĞRU                      b. YANLIŞ

29. Kendinizi kederli ve karamsar hissettiğiniz olur mu ?

- a. Çok sık                      b. Sık                      c. Ara sıra                      d. Nadiren                      e. Hiçbir zaman

**D – 6**

30. Çoğu zaman başka bir şey yapmaktansa oturup hayal kurmayı tercih ediyorum.

- a. DOĞRU                      b. YANLIŞ

31. Bana hayalperest denilebilir.

- a. DOĞRU                      b. YANLIŞ

32. Zamanımın büyük bir kısmını hayal kurmakla geçiririm.

- a. DOĞRU                      b. YANLIŞ

33. Gelecekte nasıl bir insan olacağınız konusunda hayal kurar mısınız ?

- a. Çok sık                      b. Bazen                      c. Nadiren                      d. Hiçbir zaman

**D – 7**

34. Hiç uykuya dalma ya da uykunun sürekliliği açısından sorunuz oldu mu ?

- a. Sık sık                      b. Bazen                      c. Nadiren                      d. Hiçbir zaman

35. Hiç ellerinizin sizi rahatsız edecek kadar titrediği olur mu ?

- a. Sık sık                      b. Bazen                      c. Nadiren                      d. Hiçbir zaman



36. Hiç sizi rahatsız edecek kadar sinirlendiğiniz olur mu ?

- a. Sık sık      b. Bazen      c. Nadiren      d. Hiçbir zaman

37. Hiç sizi rahatsız edecek kadar çarpıntı hissettiğiniz olur mu ?

- a. Sık sık      b. Bazen      c. Nadiren      d. Hiçbir zaman

38. Hiç sizi rahatsız edecek kadar başınızın içinde basınç hissettiğiniz olur mu ?

- a. Sık sık      b. Bazen      c. Nadiren      d. Hiçbir zaman

39. Şu sıralarda hiç tırnak yiyor musunuz ?

- a. Sık sık      b. Bazen      c. Nadiren      d. Hiçbir zaman

40. Egzersiz veya çalışma zamanları dışında hiç sizi rahatsız edecek kadar nefes darlığı hissettiğiniz olur mu ?

- a. Sık sık      b. Bazen      c. Nadiren      d. Hiçbir zaman

41. Hiç sizi rahatsız edecek kadar ellerinizde terleme olur mu ?

- a. Sık sık      b. Bazen      c. Nadiren      d. Hiçbir zaman

42. Hiç rahatsız edici baş ağrıları çeker misiniz ?

- a. Sık sık      b. Bazen      c. Nadiren      d. Hiçbir zaman

43. Hiç rahatsız edici kabuslar görür müsünüz ?

- a. Sık sık      b. Bazen      c. Nadiren      d. Hiçbir zaman

#### D – 8

44. Ulusal veya uluslar arası önemli bir konuda görüşünüzü belirttiğinizde birisi size gülerse ne hissedersiniz ?

- a. Çok incinirim ve rahatsız olurum.      b. Biraz incinirim ve rahatsız olurum.  
c. Beni pek fazla etkilemez.

45. Ulusal veya uluslar arası sorunlar tartışıldığında genellikle kötü izlenim bırakacak bir şey söylemektense hiçbir şey söylememeyi tercih ederim.

- a. DOĞRU      b. YANLIŞ

46. Toplumsal konularla ilgili tartışmalarda insanları kızdıracak bir şey söylemektense hiçbir şey söylememeyi tercih ederim.

- a. DOĞRU      b. YANLIŞ

#### D – 9

47. Uluslar arası konuları tartışır mısınız ?

- a. Pek çok      b. Oldukça      c. Çok az      d. Hiçbir zaman





59. Anne ve babanızın hangisi sizi daha çok över ?

- a. Babam çok daha fazla
- b. Babam biraz daha fazla
- c. Her ikisi eşit oranda
- d. Annem biraz daha fazla
- e. Annem çok daha fazla

60. Anne ve babanızın hangisi size daha çok şefkat gösterir ?

- a. Babam çok daha fazla
- b. Babam biraz daha fazla
- c. Her ikisi eşit oranda
- d. Annem biraz daha fazla
- e. Annem çok daha fazla

61. Anne ve babanız anlaşamadıkları zaman siz genellikle hangisinden yana olursunuz ?

- a. Çok daha fazla olarak babamdan yana
- b. Biraz fazla olarak babamdan yana
- c. Eşit oranda her ikisinden yana
- d. Biraz fazla olarak annemden yana
- e. Çok daha fazla olarak annemden yana

D – 12

62. Yalnız bir insan olmaya eğilimli misinizdir ?

- a. Evet
- b. Hayır

63. İnsanların çoğu sizin nasıl bir kişi olduğunuzu bilirler mi, yoksa çoğunun sizi gerçekten tanımadıklarını mı düşünürsünüz ?

- a. Çoğu benim nasıl biri olduğumu bilir.
- b. Çoğu gerçekten beni tanımaz.

Beden Algısı Ölçeği

Aşağıdaki sorularda bir vücut özelliği hakkındaki duygularınızı en iyi anlatan ifadenin altına X işareti koyunuz. Herhangi bir vücut özelliğinizi genel olarak beğenip beğenmediğinize göre duygularınızı değerlendiriniz.

	Çok Beğeniyorum	Oldukça Beğeniyorum	Kararsızım	Pek Beğenmiyorum	Beğenmiyorum
1. Saçlarım					
2. Yüzümün Rengi					
3. İştahım					
4. Ellerim					
5. Vücudumdaki Kıl Dağılımı					
6. Burnum					
7. Fiziksel Görünümüm					
8. İdrar Dışkı Düzenim					
9. Kas Kuvvetim					
10. Belim					
11. Enerji Düzeyim					
12. Sırtım					
13. Kulaklarım					
14. Başım					
15. Çenem					
16. Beden Yapım					
17. Profilim					
18. Boyum					
19. Duyularımın Keskinliği					
20. Ağrıya Dayanıklılığım					
21. Omuzlarımın Genişliği					
22. Kollarım					
23. Göğüslerim					
24. Gözlerimin Şekli					
25. Sindirim Şekli					
26. Kalçalarım					
27. Hastalığa Direncim					
28. Bacaklarım					
29. Dişlerimin Şekli					
30. Cinsel Gücüm					
31. Ayaklarım					
32. Uyku düzenim					
33. Sesim					
34. Sağlığım					
35. Cinsel Faaliyetlerim					
36. Dizlerim					
37. Vücudumun Duruş Şekli					
38. Yüzümün Şekli					
39. Kilom					
40. Cinsel Organım					

**GOLOMBOK-RUST CİNSEL DOYUM ÖLÇEĞİ KADIN FORMU**

	0	1	2	3	4
	Hiçbir Zaman	Nadiren	Bazen	Çoğu zaman	Her zaman
1.Cinsel yaşama karşı ilgisizlik duyar mısınız ?					
2.Eşinize cinsel ilişkinizle ilgili nelerden hoşlanıp, nelerden hoşlanmadığınızı sorar mısınız?					
3.Bir hafta boyunca cinsel ilişkide bulunmadığınız olur mu? (Adet günleri, hastalık gibi nedenler dışında)					
4.Cinsel yönden kolaylıkla uyarılır mısınız?					
5.Sizce, sizin ve eşinizin ön sevişmeye (öpme, okşama vb.) ayırdığınız zaman yeterli mi?					
6.Kendi cinsel organınızın eşinizin cinsel organının giremeyeceği kadar dar olduğunu düşünür müsünüz?					
7.Eşinizle sevişmekten kaçınır mısınız?					
8.Cinsel ilişki sırasında doyuma (orgazma) ulaşır mısınız?					
9.Eşinize sarılıp, vücudunu okşamaktan zevk alır mısınız?					
10.Eşinizle olan cinsel ilişkinizi tatminkar buluyor musunuz?					

	0	1	2	3	4
	Hiçbir Zaman	Nadiren	Bazen	Çoğu zaman	Her zaman
11. Gerekirse rahatsızlık ve acı duymaksızın, parmağınızı cinsel organınızın içine sokabilir misiniz?					
12. Eşinizin cinsel organına dokunup okşamaktan rahatsız olur musunuz?					
13. Eşiniz sizinle sevişmek istediğinde rahatsız olur musunuz?					
14. Sizin için doyuma (orgazm) ulaşmanın mümkün olmadığını düşünüyor musunuz?					
15. Haftada iki defadan fazla cinsel birleşimde bulunur musunuz?					
16. Eşinize cinsel ilişkinizle ilgili olarak nelerden hoşlanıp nelerden hoşlanmadığınızı söyleyebilir misiniz?					
17. Eşinizin cinsel organı, sizin cinsel organınıza rahatsızlık vermeden girebilir mi?					
18. Eşinizle olan cinsel ilişkinizde sevgi ve şefkatin eksik olduğunu hisseder misiniz?					
19. Eşinizin cinsel organınıza dokunup okşamasından zevk alır mısınız?					
20. Eşinizle sevişmeyi reddettiğiniz olur mu?					

## ARIZONA CİNSEL YAŞANTILAR ÖLÇEĞİ (KADIN FORMU)

Lütfen her maddede, bugün de dahil, geçen haftaki durumunuzu işaretleyin.

1. Cinsel açıdan ne derece isteklisiniz?					
1_	2_	3_	4_	5_	6_
Oldukça istekli	Çok istekli	Biraz istekli	Biraz isteksiz	Çok isteksiz	Tamamen isteksiz
2. Cinsel açıdan ne kadar kolay uyarılırsınız (tahrik olursunuz)?					
1_	2_	3_	4_	5_	6_
Oldukça kolay	Çok kolay	Biraz kolay	Biraz zor	Çok zor	Oldukça zor
3. Vajinanız/cinsel organınız ilişki sırasında ne kadar kolay ıslanır veya nemlenir?					
1_	2_	3_	4_	5_	6_
Oldukça kolay	Çok kolay	Biraz kolay	Biraz zor	Çok zor	Asla olmaz
4. Ne kadar kolay orgazm olursunuz?					
1_	2_	3_	4_	5_	6_
Oldukça kolay	Çok kolay	Biraz kolay	Biraz zor	Çok zor	Asla boşalamam
5. Orgazmınız tatmin edici midir?					
1_	2_	3_	4_	5_	6_
Oldukça tatmin edici	Çok tatmin edici	Biraz tatmin edici	Pek tatmin etmiyor	Çok tatmin etmiyor	Orgazma ulaşamam