Evaluation of the Effeciency of a Home Care Program Developed for Mastectomy Patients

Mastektomi Uygulanan Hastalar için Geliştirilen Evde Bakım Programının Etkinliğinin Değerlendirilmesi

(Araştırma)

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ABSTRACT

The basic goal of nursing care in breast cancer patients who have had surgery is to return the patient to normal life in the shortest period of time with the fewest problems. For this reason, from the moment the diagnosis, patient care should be continued in the home environment with a prepared plan of care that establishes needs and cooperation of the team.

The study was established experimentally, to evaluate the effect of home care program developed for mastectomy patients on the healing process. The sample of the study consisted 50 mastectomy patients in three hospitals and patients were divided into experimental (n= 25) and control (n=25) groups. Data were collected by using home care plan for the patients having mastectomy, patient information form, home visit following form, and the form for evaluation of knowledge of the patients after mastectomy. Three home visits were made up for experimental group and the patients in this group, received care according to the home care plan, and they were provided written information on self-care. Two home visits for control group were performed and these patients received just the services provided in the hospitals.

Data were analyzed using Mann-Whitney U, Chi square, Kolmogorov-Smirnov, Cochran Q and McNemar tests. The results of the analysis showed that, the patients in experimental group patients had lower rates for pain at the operation site, edema in the arm at the site of operation, problems with sexual life than the control group patients. In addition, it was determined that arm-raising level at the site of the operation of the experimental group was better than the control group patients. Furthermore, it was found that, the mean self-care knowledge score of experimental group patients was obviously higher than control group patients.

Based on the results of this study, recommendations were made related to establishment of planned discharge education on self-care for the post mastectomy patients and improvement of home care services.

Key Words: *Breast cancer treatments, mastectomy, home care, nursing*

ÖZET

Meme kanseri cerrahisi, hastalığın lokal olarak kontrol altına alınması ve yayılımının önlenmesi için uygulanır. Meme kanseri ameliyatı geçiren hastalarda hemşirelik bakımının temel amacı hastanın normal yaşamına en kısa zamanda, en az problem ile dönmesidir. Bu nedenle hastanın bakımı; gereksinimlerine yönelik ve ekip işbirliği ile gerçekleştirilen bir plan ile tanı konulduğu andan başlayarak ev ortamında sürdürülmelidir.

Araştırma, mastektomi sonrası hastaların hemşire tarafından evde izlenmelerinin iyileşme sürecine etkisini değerlendirmek amacıyla deneysel olarak gerçekleştirilmiştir. Araştırmanının örneklemini üç hastanede mastektomi ameliyatı olan 50 hasta oluşturmuştur. Deney ve kontrol grubuna 25'er hasta alınmıştır. Araştırmada veriler mastektomi sonrası hastalar için evde bakım planı, hasta bilgi formu, ev ziyareti izlem formu, mastektomi sonrası hastaların bilgilerini değerlendirme formu kullanılarak toplanmıştır. Deney grubundaki hastalara taburculuk sonrası üç ev ziyareti gerçekleştirilmiş ve bu hastalar evde bakım planı doğrultusunda bakım ve yazılı bilgi almışlardır. Kontrol grubundaki hastalara iki ev ziyareti yapılmıştır ve bu hastalar sadece hastanelerde var olan bakım hizmetini almışlardır.

Araştırmadan elde edilen veriler, Mann-Whitney U, Ki-Kare, Kolmogorov-Smirnov, Cochran Q and McNemar testleri kullanılarak değerlendirilmiştir. Verilerin değerlendirilmesi sonucunda; deney grubundaki hastalarda ameliyat sonrası ameliyat olan tarafta ağrı, ameliyat olan taraftaki kolda ödem ve cinsel yaşama ilişkin sorun görülme oranının kontrol grubuna göre daha düşük olduğu belirlenmiştir. Bunun yanı sıra, deney grubundaki hastaların ameliyat olan taraftaki kolu kaldırma düzeyinin kontrol grubunda yer alan hastalardan daha iyi olduğu saptanmıştır. Ayrıca, deney grubundaki hastaların mastektomi sonrası kendi bakımlarına ilişkin bilgi puan ortalamalarının kontrol grubundaki hastalardan oldukça yüksek olduğu belirlenmiştir.

Araştırmadan elde edilen sonuçlar doğrultusunda mastektomi sonrası hastaların evde bakımlarına yönelik planlı taburculuk eğitiminin verilmesi ve evde bakım hizmetlerinin geliştirilmesine yönelik önerilerde bulunulmuştur.

Anahtar Kelimeler: *Meme kanseri tedavisi, mastektomi, evde bakım, hemşirelik*

Introduction

Breast cancer is an important problem because it is the most frequently seen type of cancer throughout the world in women. The frequency of breast cancer rose from 11.5% to 14.9% between the years 1980-1995 in Turkey. The incidence of breast cancer for all types of cancer in women was 34.73[1].

The widespread treatment for breast cancer is surgical removal of part or the entire breast. Breast cancer surgery is performed to provide local control and stage the disease. Current surgical treatment options for invasive and noninvasive breast cancer include modified radical mastectomy, breast conservation therapy, total mastectomy and axillary lymph node dissection versus sentinel lymph node dissection. However because of problems that can occur after surgery, patients who undergo a mastectomy need comprehensive nursing care. Factors that establish the importance of post mastectomy care are problems related to the size of the surgical wound, wound healing, pain and possibility of lymphedema of the arm on the surgical side[2-5].

Studies have shown that more than 55% of mastectomy patients experience pain after surgery[3-7]. Pain that occurs from the surgical incision and axillary dissection is the cause of patients' fear of moving the arm and limiting movement of the arm on the surgical side[4,6].

Lymphedema is one of the most important problems that occur after mastectomy[8,9]. Lymphedema may lead to disturbed sensations in the effected arm, pain from tightness, loss of strength and limited movement. Limited arm movements and the lymphedema negatively affect the patient's daily activities and decrease quality of life. In addition the poor appearance created by lymphedema increases the patient's difficulty in adapting to a body changed from the loss of a breast[10-12].

For women, the breast is a symbol of their feelings of womanhood, sexuality and motherhood. After a mastectomy the patient has to face not only the life threatening diagnosis of cancer but also feelings about the loss of a breast[13-16]. Research has shown that 6-50% of patients have symptoms of anxiety after mastectomy[17,18]. In Pasacreta's study[19] 9% of the patients had symptoms of depression and 24%, stress. Many women begin menopause because of the chemotherapy and women who haven't completed their childbearing years perceive a large loss when entering menopause[16,20]. Breast surgery, hair loss and early menopause are threats to a woman's body image[21]. Chemotherapy and hormone therapy may be a cause of decrease in libido, vaginal dryness and feeling tired during sexual relationships[22,23]. Besides this the side effects of treatment such as pain, tiredness, nutritional changes and limitations in movement may also cause a decrease in the patient's sexual activities[22-24].

Cancer therapy that affects the patient and family many ways generally lasts a long time. During this period, the patient may face to problems related to the illness and side effects of the therapies when she returned home. Care that is begun in the hospital and continues at home makes this period easier for the patient and family. With the current decrease in hospital length of stay, importance of the home care increased. Home care is comprehensive and continuous health care that is given to an individual and family in their home for the purpose of decreasing the effects of the disease, increasing the patient's independence as much as possible and ensuring health promotion[25]. Home care services ensures that the individuals participates in their own health care, shortens hospital length of stay, decreases cost and provides continuity of care. Patients who are diagnosed with cancer are one of the groups with the greatest needs for home care because of the physical complaints caused by the illness and emotional problems[26-28].

The basic goal of nursing care in breast cancer patients who have had surgery is to return the patient to normal life. Nurses play a key role in patients' lives by providing quality care, education, and psychosocial support throughout their hospital stay, and in their home care setting. For this reason, from the moment the diagnosis, patient care should be continued in the home environment with a prepared plan of care that established with the cooperation of the team[5,26,28]. The roles of the home care nurse include caregiver, consultant, teacher and mediator.

Our observations showed that patients live many problems related to illness after discharge. It was thought that use of the nurse's roles of teacher, consultant and mediator with the team would have a positive effect on and aids the patient's healing process. Studies are needed in Turkey to wide spreading of home care services.

Aim

The research was conducted to evaluate the effect of home care program on pain complaint, arm edema, arm raising level, sexual life and knowledge related to self care of mastectomy patients. Results of this study may be a good guide for home care of mastectomy patients.

Material and Methods

The research was designed as an experimental study for the purpose of evaluating the effect of home care on post mastectomy patients' healing process.

Sample and setting

The research was conducted on the General Surgery Services that perform mastectomy surgery at a government public, a university and a Social Insurance Institution hospital in Trabzon, Turkey. In these hospitals, an unstructured and very limited discharge teaching has been given and home care services have not been provided for mastectomy patients. For one-year post mastectomy patients at these three hospitals were followed and 50 patients who met the research criteria were taken into the study sample. The patients were put in groups by the date of surgery, one into the experimental group, then the next one into the control group. Both groups had 25 patients.

Data collection tools

The data collection tools for the research were prepared by the researcher based on the literature, a pilot study and observations. The data were collected using the following tools:

Home care form: This form is a home care plan for post mastectomy patients. The care plan contains nursing interventions to deal with the patient's current or possible problems including pain, disturbance in skin integrity, arm movement limitations on the operative side, sexual life, etc.

During the home visits, the patients' problems were established according to the home care form; nursing care interventions were planned and carried out. Evaluation was made during the next visit and the results of the evaluation were recorded on the home visit monitoring form. The home care form was only implemented on the experimental group and the implementation took a mean of 30 minutes.

Patient information form: This form was developed for the purpose of determining the patients' demographic characteristics (age, educational level, etc.) and some data related to the illnesses (side mastectomy done on, type of mastectomy, patient's history). The patient information form was used for both groups and took a mean of 10 minutes to complete.

Home visit monitoring form: This form was developed for the purpose of determining the patients' problems related to pain, wound healing, lymphedema, status of arm movement, body images and sexual life, etc. and this form was used to evaluate the care that was given to the patient. The home visit monitoring form took a mean of 15 minutes to complete.

Patients' post mastectomy self-care knowledge evaluation form: This form was used to evaluate the patients' post mastectomy self-care knowledge and it was used for both groups. The form was prepared to determine the patients' knowledge on exercises, prevention of infection and lymphedema in the arm on the surgical side, coping with negative feelings and breast self exam. The form took a mean of 10 minutes to complete.

Pilot Study

A research pilot study was conducted for the purpose of determining the frequency of visits and the clarity of the data collection tools with seven patients in the duration of three months. In this duration, home visits are performed and data collection forms are implemented by researcher. After the pilot study necessary changes were made in the tools and frequency of the visites are determined. These patients were not included in the research sample.

Implementation

This research carried out between 2000-2001 years. Home services were planned and performed by researchers. The data collection tools were also completed by the researchers.

The first interview with the patients was made at the hospital after surgery. In this interview the patient information form was completed for patients in the experimental and control groups. In addition the condition of the patients' use of their arms on the operative side was evaluated together with the physical therapist. At the end of this evaluation the exercise program that was agreed on with the physical therapist was begun. Patients in the experimental and control groups were followed in the manner described below after discharge.

Experimental Group: The first home visit was made within the first week after discharge (at the earliest three days and at the latest five days) to allow enough time for the patient's adjustment to the home environment and self-care. At the first home visit the home care form and home visit monitoring form were completed for the patients. The patients were telephoned and advised to take fluids before their first chemotherapy.

The second home visit was made within a week after the first chemotherapy and at the earliest 36 days and the latest 44 days after patient discharge. At the second visit the home care form and home visit monitoring form were completed for the patients. Patients were telephoned between the second and last home visit to obtain information about their medical condition.

Since three months of home monitoring is considered sufficient in the literature, last home visit was made three months after discharge. In addition during this time four chemotherapy treatments were given and the first stage of chemotherapy treatment would be completed. Thus at the last home visit it is thought that all of the patients problems would be clear within this time period. The last visit was made at the earliest 91 days and at the latest 104 days after the patient's hospital discharge. At the last visit the home care form, home visit monitoring form and the post mastectomy self-care knowledge evaluation form was completed. After the last visit the status of the patient's arm movements was again evaluated by the physical therapist at the hospital.

During the home visits information was given about wound healing, coping with pain, arm exercises, prevention of lymphedema, what needed to be done during chemotherapy and emotional support was provided.

A post mastectomy care guide was developed by the researcher based on the literature to give to patients in the experimental group. The care guide included information that was necessary for a post mastectomy patient (wound healing, preventing lymphedema and infection in the arm on the surgical side, arm exercises, breast self examination and coping with negative feelings).The guide was given to the patients.

Control Group: The patients in this group were visited at the hospital at the earliest two days and at the latest five days after surgery. The first home visit to the patients in this group was made within one week after discharge and last visit was made three months after discharge (for a total of 2 home visits). The first home visit was made at the earliest two days and at the latest five days after discharge from the hospital. The last home visit was made at the earliest 93 days and at the latest 102 days after discharge. At the visits problems of the patients were determined with the home visit monitoring form. Patients' post mastectomy self-care knowledge evaluation form was completed at the end of the last home visit.

Ethical consideration

The appropriate officials approved the study protocol. The research goal, home visits that would be made and what would be done during these visits was explained to the patients and their consent was obtained.

Data Analysis

Data were analyzed using the SPSS statistical program. Mann-Whitney U, Chi square, Kolmagorov-Smirnov, Cochran Q and McNemar tests of significance were used in analysis of data. On the patients' post mastectomy self-care knowledge evaluation form, knows=2, knows in part=1, doesn't know=0 points were given for a total of 30 points.

Results

An examination of the descriptive characteristics of patients included in the research sample showed that the mean age was 46.32 for the experimental group and 50.38 for the control group. In both groups the majority of the patients had an educational level of reading/writing and primary school. Almost all of the patients in the experimental group and all of the patients in the control group were housewives. The majority of patients in both groups were married and primary school graduates. 68.0% of the patients in the experimental group and 56.0% of the control group patients had a modified radical mastectomy and the rest had radical mastectomy procedures. In both groups all of the patients had received chemotherapy. A family history of breast cancer was found present in 8% of the experimental group patients and 20% of the control group patients. The first sign related to the illness that was noticed in the majority of patients in both groups was a breast mass (experimental group: 76.0%, control group: 68%). 92.0% of the patients in the experimental group and 88.0% in the control group stated that they had not been informed about breast cancer prior to the diagnosis. At discharge 64.0% of the experimental group patients had been informed about post mastectomy arm exercises and 48.0% had been informed about how to protect their arms on the side of the surgery after mastectomy. The percentage of those informed about exercises and protecting surgical side arm was 56.0% in the control group. It was observed that at discharge that information about both arm exercises and protecting their arms was limited and there was no structured education for patients.

The distribution of pain complaints of the experimental and control group patients according to visit is shown in Table 1. In both groups at the first visit 76.0% of the patients experienced pain. The presence of pain complaint decreased in both groups in future visits. At the last visit 41.7% of the experimental group patients and 60.0% of the control group patients had pain. In statistical analysis the presence of pain in the experimental group was statistically significantly different between visits ($p<0.05$). The difference between visits in the control group however was not statistically significant ($p>0.05$). At the last visit there was no statistically significant difference between the groups in the presence of pain ($p>0.05$).

The distribution of arm edema complaints of the experimental and control group patients according to visit is shown in Table 2. At the first visit for the experimental and control groups there was minimal edema below the elbow in the majority of patients (experimental group: 60.0%, control group: 60.0%) and there was severe edema for the majority of patients above the elbow (experimental group: 60%, control

Table 1. Pain Complaints of the Experimental and Control Group Patients by Visits

Presence of pain complaint	EXPERIMENTAL GROUP n=25							CONTROL GROUP n=25				
	First Visit		2nd Visit		Last Visit			First Visit		Last Visit		
	n	%	n	%	n	%	Cochran's Q* p Sd	n	%	n	%	McNemar** p
Pain present	19	76.0	14	56.0	10	41,7	9.600 <0.05 2	19	76.0	15	60.0	0.344 >0.05
Pain absent	6	24.0	11	44.0	14	58,3		6	24.0	10	40.0	
Statistical Analysis	Chi -square***=0.995 df=1 p>0.05											

*Statistical analysis done between experimental group's three visits
**Statistical analysis done between the control group's two visits
***Statistical analysis done between experimental and control group's last visits

group: 72.0%). There was an increase in the experimental group patients' absence of edema either below or above the elbow with future visits but there was only minimal increase in those without edema in the control group. The difference in presence of edema either below or above the elbow in the experimental group between visits was statistically significant ($p<0.05$); however no difference was found between visits for the control group ($p>0.05$). These statistical results show that the percentage of patients without arm edema in the experimental group increased more obviously than the control group. Although there was no statistically significant difference found between the experimental and control group patients' presence of arm edema either below or above the elbow at the first visit ($p>0.05$), there was a statistically significance between the two groups at the last visit ($p<0.05$).

It was investigated arm raising level of the patients according to home visits. At the first visit the majority of patients in the experimental (92.0%) and in the control group (84.0%) were able to raise their arms on the surgical side slightly. The arm raising level increased in both groups with future visits, but the increase in the experimental group was more obvious. At the last visit 70.8% of the patients in the experimental group but only 16% of the control group was able to completely raise their arms.

Problems of the patients related to sexual life are shown in Table 3. Because the first visit was early it is thought that problems related to sexual life had not occurred yet. The most frequently encountered problems related to sexual life at all visits in the experimental group patients were not being willing to be naked, lack of desire to have sexual relations, and having a decrease in frequency of sexual relations. The most frequently experienced problems were discomfort with nakedness, lack of pleasure in sexual relations and decreasing the frequency of sexual relations in the control group

Table 2. Arm Edema Complaints of the Experimental and Control Group Patients By Visits

Condition of observed edema	EXPERIMENTAL GROUP							CONTROL GROUP				
	First Visit		2nd Visit		Last Visit			First Visit		Last Visit		
	n	%	n	%	n	%	Cochran's Q* p Sd n		%	n	%	McNemar** P
Edema below elbow												
No edema	5	20.0	18	72.0	21	87.5	21.294	1	4.0	9	36.0	
Minimal edema	15	60.0	7	28.0	3	12.5	<0.05	15	60.0	16	64.0	0.500
Moderate edema	5	20.0	0	0.0	0	0.0	2	9	36.0	0	0.0	>0.05
Statistical Analysis	Fisher's exact chi-square p>0.05***							Chi-square=11.6 df=1 p<0.05***				
Edema above elbow												
No edema	1	4.0	13	52.0	16	66.7	20.947	0	0.0	2	8.0	
Minimal edema	9	36.0	10	40.0	8	33.3	<0.05	7	28.0	19	76.0	0.008
Moderate edema	15	60.0	2	8.0	0	0.0	2	18	72.0	4	16.0	>0.05
Statistical Analysis	Fisher's exact chi-square p>0.05****							Chi-square=15.7 df=1 p<0.05****				

*Statistical analysis done between experimental group's three visits
**Statistical analysis done between the control group's two visits
***Statistical analysis done between experimental and control group's first visits and minimal and moderate level of edema groups were combined for statistical analysis.
****Statistical analysis done between experimental and control group's last visits and minimal and moderate level of edema groups were combined for statistical analysis.

Table 3. Sexual Life Problems of the Experimental and Control Group Patients by Visits

Problems Related to Sexual Life	EXPERIMENTAL GROUP				CONTROL GROUP	
	2nd Visit		Last Visit		Last Visit	
	n	%	n	%	n	%
Decrease in frequency of sexual relations	9	36.0	5	20.8	8	32.0
Lack in desire to have sexual relations	8	32.0	5	20.8	3	12.0
Lack of pleasure from sexual relations	5	20.0	3	12.5	8	32.0
Feeling too tired for sexual relations	4	16.0	0	0.0	6	24.0
Unwilling to be naked	12	48.0	5	20.8	11	44.0
Lack of importance given to sexual life	3	8.0	4	16.6	3	12.0
Feeling sex not necessary because of age	4	16.0	3	12,0	4	16.0
Total	45*	-	28*	-	43*	-
Statistical analysis			Kolmogorow- Smirnow Z=1.677 p<0.05			

*More than one answer was given.

patients at the last visit. The percentage of experimental group patients experiencing problems related to sexual life decreased with future visits and at the last visit the percentage of problems related to sexual life was less in the experimental group patients than in the control group. A statistically significant difference was found between the experimental and control group at the last visit regarding problems related to sexual life ($p<0.05$).

The distribution of knowledge scores of the experimental and control group patients related to post mastectomy self-care are shown in Table 4. The mean knowledge score of experimental group patients was 26.16 (lowest 3, highest 30), however this score was 4.28 (lowest 1, highest 9) for control group patients. Analysis of the mean information scores showed a statistically significant difference between the experimental and control groups ($p<0.05$).

Discussion

Post mastectomy patients face many problems after discharge. The findings from this study that was conducted for the purpose of evaluating the effect of home care program developed for mastectomy patients on the healing process showed that home care effectively decreased problems of the patients.

Table 4. Knowledge Scores of the Experimental and Control Group Patients Related to Post Mastectomy Self-care

Patient Groups	**Mean Knowledge Score***			
	Mean	Standard deviation	Lowest	Highest
Experimental Group	26.16	5.75	3	30
Control Group	4.28	2.18	1	9
Statistical Analysis	U=17.000 p<0.05			

*Total points=30

Pain is one of the frequently experienced problems in the post mastectomy period. It was found that both groups had high percentages of pain at the first visit. In the early postoperative period it is normal for the majority of patients to have pain because of damage at the surgical incision, surgical area and surrounding tissues. Ferrel et al[3]. found that 70% of post mastectomy patients experienced pain. Both groups had less pain at the last visit than the first visit. As time passes postoperatively the tissue heals, decrease in pain is an expected result. It is thought that experimental group patients had a lower percentage of pain at the last visit than the control group patients may be due to their being taught on subjects that can increase or decrease pain (exercises, arm position, things that shouldn't be done with the arm, etc.)

When the percentage of lymphedema, one of the most important post mastectomy problems was examined, in both groups majority of the patients had minimal edema below the elbow and serious edema above the elbow at the first visit. At the last visit, the large number of patients in the experimental group that did not have edema compared to the control group may be due to the patients in the experimental group's regular exercise. References on this subject emphasis that post mastectomy arm exercises improve blood and lymphatic circulation and prevent the formation of edema[8,29].

It was determined that patients in both groups were able to elevate their arms on the operative side slightly at the first visit. At the first visit the limitation in movement because of incision pain and because of the experimental group's exercises had newly begun, it is not unexpected to find no difference in the two groups regarding level of arm rising. The percentage of patients in the experimental group at the last visit who could completely raise their arms was quite high compared to the control group. Limited arm movement due to insufficiently using the shoulder joint is a commonly seen problem in post mastectomy period[29,30]. Postoperative exercises play an important role in preventing this problem. Preparation of the exercise program and providing the verbal and written information on this subject for patients in the experimental group and monitoring these patients' arm movements might be helpful to prevent limitations in arm movements. In the literature it is emphasized that regularly practiced post mastectomy arm exercises prevents frozen shoulder syndrome and

thus prevents the development of restricted arm movements[31,32]. It was also found in Ozen's study[33] that patients who begin exercises in the early period have fewer restrictions in their shoulder function.

When the problems that patients have with their sexual lives are examined the most frequently experienced problem for both groups was being uncomfortable with being naked at every visit. The obvious change that can be seen in their bodies and the loss of an organ that carries different meaning for women may be the reason why the patients were uncomfortable being naked. It can be assumed that patients who are uncomfortable being naked will avoid sexual union. As a matter of fact one of the most frequently faced problems seen was a decrease in frequency of sexual relationships. In Lugton's study[34] 25% of cancer patients experienced problems in their sexual lives. Rowland and Massie[35] found that 58% of patients one year post mastectomy had a decrease in frequency of sexual relationships, 54% did not consider themselves attractive and 44% were not interested in sex. These studies support the findings in our study.

The post mastectomy self-care knowledge mean score of the control group patients was much lower than the experimental group. This difference is thought to be a result of the home care the experimental group received where their information needs were met. The patients in the control group had a need for information about their self-care. Wang et al.[36] found that 73.5% of post mastectomy patients had a need for consultation about their self-care. In the study by Graydon et al.[37] the patients' need for information was found greater than their concerns. In similar studies patients have been found to have a need for information about their disease, prognosis, treatment, physical care and psychosocial care[38,39].

Limitations

Our study has some limitations. Firstly, patients with metastatic breast cancer, in the terminal stage, living outside the city and not having the ability to communicate appropriately were not included in the study population. Secondly, sample was small because of time constraints.

Conclusion and Recommendations

In this study pain, arm edema, and shoulder movement limitations were seen less frequently in the experimental group patients who received home care than in the control group. In addition the patients in the experimental group had fewer problems related to sexual life than the control group and these patients received quite high self-care knowledge scores. Home care is a health service that is provided to patients and their families to meet their needs in their own environment. Thus patients are not left alone to cope on their own problems that occur after leaving the hospital. Planned home care services, decreases the frequency or duration of the problems. The results obtained in this study support the effectiveness of home care of the post mastectomy patients. Following recommendations were made based on the research results:

- Because the problems that can develop in post mastectomy patients decreased with home care in this study, home care system should be formed and maintained for these patients.
- Because the post mastectomy patients were shown to have a need of knowledge about self-care after discharge, planned discharge education should be prepared and given to patients before discharge. This education includes all physiologic, psychological and social problems that can occur in patients and the patient's family is included in the education.
- Results of this study cannot be generalized to other populations of post mastectomy patients because of the limitations. A similar study can be conducted with a larger group.

The results obtained from the study were reported to relevant institutions. The post mastectomy care guide was put into a booklet format and it was recommended that it be given to patients after surgery.

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