

Effect of Educational Guidelines on Self-Efficacy and Meeting Health Needs of Women Undergoing Modified Radical Mastectomy

Thesis

*Submitted for Partial Fulfillment of the Requirement
of the Doctorate Degree in Nursing Science*

(Medical-Surgical Nursing)

By

Nora Salah - Eldin Saad Elsabagh

Assist. Lecturer of Medical Surgical Nursing Department

Faculty of Nursing / Helwan University

Faculty of Nursing

Ain Shams University

2016

Effect of Educational Guidelines on Self-Efficacy and Meeting Health Needs of Women Undergoing Modified Radical Mastectomy

Thesis

*Submitted for Partial Fulfillment of the Requirement
of the Doctorate Degree in Nursing Science*

(Medical-Surgical Nursing)

Under Supervision of

Dr. Mamdoh Mahmoud Mahdy

Professor of Internal Medicine

Dean of Faculty of Medicine / Helwan University

Dr. Soad Mahmoud Hegazy

Professor of Medical-Surgical Nursing /

Faculty of Nursing / Ain Shams University

Dr. Yosreah Mohammed Mohammed

Lecturer of Medical Surgical Nursing

Faculty of Nursing / Ain Shams University

**Faculty of Nursing
Ain Shams University**

2016

Acknowledgement

First and foremost I'm grateful to ALLAH, the most kind and merciful for helping me to achieve this work,

The success of any work depends largely on the encouragement and guidelines of many others. I take this opportunity to express my gratitude to the people who have been instrumental in the successful completion of this work,

*I would like to express my very great appreciation to. **Dr. Mandoh Mahmoud Mahdy**, Professor of Internal Medicine and Dean of Faculty of Medicine / Helwan University For his valuable and constructive suggestions during the planning and development of this work. His willingness to give his time so generously has been very much appreciated.*

*I would like to express my deep and sincere gratitude to my supervisor. **Dr. Soad Mahmoud Hegazy**, Prof. of Medical Surgical Nursing, Faculty of Nursing, Ain Shams University. I can't say thank you enough for her tremendous support and help, her wide knowledge and logical way of thinking have been of great value for me. Her understanding, encouraging and personal guidance have provided a good basis for the present thesis.*

*I am deeply grateful to my supervisor, **Dr. Yosreah Mohammed Mohammed**, Lecturer. of Medical Surgical Nursing Faculty of Nursing, Ain Shams University for her detailed and constructive comments, professional guidance and for her valuable support throughout this work,*

Words are inadequate in offering my thanks to all women and all staff members at El demerdash surgical Hospital and oncology center for their cooperation in carrying out this work,

Finally, yet importantly, I would like to express my heartfelt thanks to my beloved parents for their blessings, my husband for his help and wishes for the successful completion of this work,

ABSTRACT

Assessment of the health needs for breast cancer women is a critical step in providing high quality of care and meeting their needs satisfaction. **Aim:** This study aims to evaluate the effect of educational guidelines on self-efficacy and meeting health needs of women undergoing modified radical mastectomy. **Methods:** A quasi experimental research design was utilized for the conduction of this study. This study was conducted in the Surgical Departments and Out Patients' Clinics at El - Demerdash Surgical Hospital& Radiotherapy and Nuclear Medicine Department, affiliated to Ain Shams University. **Sample:** A purposive sample of 60 women from the above mentioned settings. **Tools:** 1) A structure interview questionnaire sheet for the studied women to assess their needs (Pre /Post and follow up tests), 2) An observation checklist to evaluate practices of the studied women (pre/post and follow up tests). 3) Psychometric assessment (numerical pain scale) to determine their pain level (pre/post assessment) and 4) The General Self-Efficacy Scale. **Results:** This study revealed a statistically significant improvement post educational guidelines regarding women's needs (physical, psychological, social, spiritual & educational), self efficacy and practices levels. **Conclusion:** It can be concluded that, the educational guidelines had a positive effect on meeting health needs and improving self efficacy level added to practices level. **Recommendations:** Further research studies are needed to focus on measuring QOL for the studied women longitudinally.

Key words: Modified radical mastectomy, educational guidelines, self efficacy, women needs

List of Contents

Title	Page No.
List of Tables	i
List of Figures	ii
List of Appendices	iii
List of Abbreviations	iv
Introduction	1
Aim of the Study	5
Review of literature	6
Anatomy and Physiology of the Breast	6
Health Needs:.....	28
Patient Education:	35
Nursing Role:.....	39
Subjects and Methods	51
Results	64
Discussion	89
Conclusion.....	106
Recommendations	107
Summary	108
References	117
Appendices	138
Arabic Summary	

List of Tables

Table No.	Title	Page No.
1	Percentage distribution of socio-demographic characteristics of the study subjects	65
2	Percentage distribution of medical history among the study subjects	68
3	Percentage distribution of family history among the study subjects	69
4	Distribution of women's physical needs as regards pain characteristics post educational guidelines	70
5	Distribution of women 's physical needs as regards ADLs pre / post educational guidelines	72
6	Distribution of women's psychological needs pre / post educational guidelines	73
7	Distribution of women's social needs pre / post educational guidelines	74
8	Distribution of women's spiritual needs pre / post educational guidelines	75
9	Distribution of women's educational needs pre / post educational guidelines	76
10	Distribution of women's total needs pre / post educational guidelines	77
11	Percentage distribution of self efficacy of the women pre / post educational guidelines	79
12	Percentage distribution of practice level among study women pre / post educational guidelines	80
13	Relation between women's age as regards their needs	82
14	Relation between women's marital status as regards their needs	83
15	Relation between women's educational levels as regards their needs	84
16	Relation between women's characteristics as regards their levels of self-efficacy	85
17	Relation between women's needs as regards their levels of self-efficacy	86
18	Relation between practice levels among the studied women's as regards their demographic characteristics	87
19	Relation between practice levels among the studied women as regards their needs	88

List of Figures

Fig. No.	Title	Page No.
Figures of Review		
Fig. (1)	Warning signs of breast cancer	10
Fig. (2)	Stages of breast cancer	11
Fig. (3)	McLeod, S. A (2007). Maslow's Hierarchy of Needs.	29
Figures of result		
Fig. (1)	Percentage distribution of study subjects age.	66
Fig. (2)	Percentage distribution of study subjects working status.	66
Fig. (3)	Percentage distribution of study subjects residence.	67
Fig. (4)	Distribution of pain severity among the studied women on post / follow up period of educational guidelines.	71
Fig. (5)	Total mean score of women's ne	78
Fig. (6)	Presentation of total practice level among Study women pre / post educational guidelines	81

List of Appendices

No.	Title
I.	Patient structured interview questionnaire,
II.	Observational checklist
III.	pain numerical scale
IV.	self efficacy scale
V.	Testing reliability and validity of the study tools
VI.	Program session

List of Abbreviations

Abb.	Full term
ACS.....	American cancer society
AIs	Aromatase Inhibitors
AJCC.....	American Joint Committee on Cancer
BC	Breast cancer
BMI.....	Body mass index
BP	Blood pressure
BSE.....	Breast self-examination
CBE.....	Clinical breast exam
ER	Estrogen receptors
FDG	Fluorodeoxyglucose
HER2	Human epidermal growth factor receptor 2
HRT	Hormone replacement therapy
IV	Intra venous
MRI	Magnetic resonance imaging
PARP	Poly ADP ribose polymerase
PCA	Patient-controlled analgesia
PET	Positron emission tomography
PR	Progesterone receptors
ROM.....	Range of motion
SE.....	Self efficacy
SERDs	Selective estrogen receptor down regulators
SERMs.....	Selective estrogen receptor modulators
SLT	Social Learning Theory

INTRODUCTION

Breast cancer is the most commonly diagnosed cancer in women across the world. It is estimated that 1 out of every 8 women will develop breast cancer at some point in their lives and the second leading cause of death among women with lung cancer. Nearly 1.7 million new breast cancer case were diagnosed in 2012. The incidence and mortality rates between females vary among countries but are steadily rising worldwide. The median age at diagnosis is one decade younger than in countries of Europe and North America, added to most patients are premenopausal (*Ferlay, Soerjomataram and Ervik, 2014*).

In Egypt, breast cancer is estimated to be the most common cancer among females accounting for 37.7% of their total with 12, 621 new cases in 2008. It is also the leading cause of cancer-related mortality accounting for 29.1% of their total with 6546 deaths. The incidence to mortality ratio is poor (1.9:1). According to statistical department at El – Demerdash surgical Hospital in Cairo (2015), the number of breast cancer cases were approximately 150 through this year (*Zeen Eldin, Ramadan, Gaber & Taha, 2013 & Matthews et al., 2016*).

The modified radical mastectomy is a practice in which the entire breast is removed, including the skin, areola, nipple, and most axillary lymph nodes; the pectoralis major muscle is spared (*Kuwajerwala, 2015*). Breast cancer result in

considerable distress, it propels women into a time of uncertainty that brings fear and affecting the physical, psychological, social and spiritual health. On the other hand, time elapsed since diagnosis is a significant predictor of unmet needs. Therefore, evaluating women's needs is important to offer timely and effective interventions (*Park & Hwang, 2012*).

A need can be defined as an internal directional force that determines how people seek out or respond to situations in the environment. It is a lack of something that is necessary for well-being and motivates behavior. Needs assessment differs from other assessment constructs in that it directly identifies patients with higher levels of need and suggests specific interventions for them. It provides direct index of what patients perceive they need help with and also measures the perceived efficacy of a health services by its users (*Büchi, Halfens, Üller and Dassen, 2013*).

Women treated for breast cancer are affected physiologically, psychologically and socially by the negative way, so it is important for such women to assess their needs for improving the quality and value of the care for them. These needs include: Physical (function limitations including pain, muscle weakness, fatigue, breast and axillary scar tightness, numbness and lymphedema). Psychological (Alteration in body image, pain, fear of recurrence body image disruption, sexual dysfunction and treatment-related anxiety) (*Timby & Smith, 2010*).

Social needs include (increase social activities, work adjustment, positive coping and social support). Spiritual (satisfaction, increase religious activities and motivation). Educational (information about breast cancer, treatment and prognosis, mastectomy surgery, wound care, breast self examination, arm exercises, chemoradiotherapy and it's side effects, activities of daily living, body image changes and follow up visits) (*Spittler, 2011 & Carver, 2013*).

Self-efficacy is the confidence to produce desired effects by one's own actions. In one study on breast cancer survivors, self-efficacy is defined as one's confidence in the ability to manage symptoms and emotions related to having breast cancer, including the ability to ask for help, knowing how and when to report symptoms and doing what is important after breast cancer treatments are completed. Providing education, encouragement and referrals to support groups can help increase self-efficacy which decrease fear and anxiety (*Ziner & Sledge, 2012*).

Women education is the nurse's responsibility to help them to identify the learning needs and resources that will restore and maintain an optimal level of functioning. It is extremely important today in a health care environment that demands cost-effective measures. In shorter hospital stays, patients are being discharged to the home or other health care settings in more critical condition than ever before, so patient education considered from a hallmark of quality nursing care (*DeLaune & Ladner, 2011*).

Nurses play a fundamental role in the psychosocial care of breast cancer women throughout their treatment journey. They see women at their worst and best from diagnosis, through treatment, cure or palliative and end of life care. There are two vital issues in the delivery of psychosocial care to those women: recognition of distress and the available mental health resources (*Faria, 2014 and Corry, Clarke, While, & Lalor, 2013*).

Significance of the study

Breast cancer now occupies position number one in all countries of the Arab world. Its incidence is increasing in the developing world due to increased life expectancy, urbanization and adoption of western lifestyles. It remains a major cause of morbidity and mortality for women worldwide. Diagnosis and treatment of breast cancer are stressful events that result in a wide range of physical, psychological, social and spiritual effects which influence the women's needs and self efficacy. Significant deteriorations in quality of life have been observed among those women (*Abd El-kader & El-Sebaee, 2013*).

Researchers have begun to pay attention to the needs of women with breast cancer during the treatment period considering the large number of them. Moreover, as a result of inadequate understanding of women needs, both healthcare costs and unnecessary suffering increase. Hence, needs assessment are required to guide care planning.

AIM OF THE STUDY

This study was aimed to evaluate the effect of educational guidelines on self efficacy and meeting health needs of women undergoing modified radical mastectomy. It was achieved through the following:

- Assessment of the self efficacy of women undergoing modified radical mastectomy.
- Assessment of the health needs of women undergoing modified radical mastectomy.
- Develop and implement educational guidelines for mastectomy women and evaluate its' effect on self efficacy and meeting their health needs.

Research Hypothesis:

- The current study hypothesized that, the educational guidelines will have a positive effect on improving the self efficacy, added to meeting the health needs of women undergoing modified radical mastectomy.

REVIEW OF LITERATURE

Anatomy and Physiology of the Breast

The breast lies between the second and the sixth ribs, it contain glandular and ductal tissue, all along with fibrous tissue which binds the lobes together and fatty tissue in and between the lobes. These paired mammary glands are situated between the second and sixth ribs over the pectoralis major muscle from the sternum to the midaxillary line. An area of breast tissue called the tail of spence extend into the axilla. Cooper's ligaments, which are fascial bands maintain the breast on the chest wall. Each breast consists of 12 to 20 cone-shaped lobes that are made up of lobules containing clusters of acini, small structures ending in a duct. All of the ducts in each lobule drain into an ampulla which then opens onto the nipple after narrowing. About 85% of the breast is fat (*Smeltzer & Bare, 2013*).

The main function of the breast is to produce, store and release milk to feed a baby. Milk is produced in lobules throughout the breast when they are stimulated by hormones in a woman's body after giving birth. The ducts carry the milk to the nipple. Milk passes from the nipple to the baby during breast-feeding (*Rosenberg, 2014 & Findik, 2015*).

Breast cancer is an uncontrolled growth of cells which begin in the breast tissue, it classified as noninvasive or invasive. Cancer in the ducts or lobules called noninvasive