

**Evaluation of Knowledge, Attitude and  
Practice about  
breast self examination  
among women in a primary health care center  
in Cairo**

**Thesis**

Submitted for partial fulfillment of Master degree in family  
medicine

**By:**

**Marian Gamal Fahim**

M.B., B.ch.

*supervised by*

**Professor Dr. Mohamed Salah Gabal**

Professor of Community, Environmental and Occupational  
medicine

Faculty of Medicine-Ain Shams University

**Dr. Hasnaa Abdel-Al Abouseif**

Assistant professor of Community, Environmental and  
Occupational Medicine

Faculty of Medicine - Ain Shams University

**Dr. Mohamed Abdel-Mageid Tolba**

Lecturer of Community, Environmental and Occupational  
Medicine

Faculty of Medicine- Ain Shams University

**Faculty of Medicine**

**Ain Shams University**

**2014**

## *Acknowledgement*

First of all, all thanks and gratitude is due to “*Allah*” almighty for the blessing bestowed on me throughout my life.

I wish to thank the doctors in department of community, environmental and occupational medicine in Faculty of Medicine, Ain Shams University for their devotion to research, education and development in the branch of family medicine.

Thanks are especially to Professor **Dr. Mohamed Salah Gabal, Dr. Hasnaa Abdel-Al Abouseif and Dr. Mohamed Abdel-Mageid Tolba** for their intuitive direction throughout this research project. This project would not have been completed without their advice, knowledge and support.

Special thanks for **Dr. Nagwa Mohamed** the manager of my family center , nurses working in the center to help me in the compilation of the participants and prepare a place for the intervention also special thanks to women who agreed to participate in my issue.

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**Marian Gamal Fahim**

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## LIST OF ABBREVIATIONS

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<b>Abbreviations</b>	<b>Meaning</b>
<b>ACS</b>	American Cancer Society.
<b>BC</b>	Breast cancer
<b>BSE</b>	Breast Self Examination
<b>BMI</b>	Body Mass Index
<b>BRCA 1 and BRCA2 genes</b>	Breast Cancer type 1 and type 2
<b>CBE</b>	Clinical Breast Examination
<b>HEP</b>	Health Education Program
<b>HRT</b>	Hormonal Replacement Therapy
<b>IARC</b>	International Agency for Research and Cancer
<b>IR</b>	Incidence Rate
<b>KAP</b>	Knowledge, Attitude and Practice
<b>MOH</b>	Ministry Of Health
<b>MR</b>	Mortality Rate
<b>NCI</b>	National Cancer Institute
<b>PHC</b>	Primary Health Care
<b>RR</b>	Relative Risk
<b>SD</b>	Standard Deviation
<b>UAE</b>	United Arab Emirate
<b>WHO</b>	World Health Organization

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## ABSTRACT

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**Background:** Breast cancer (BC) is the most common cancer in women and the leading cause of cancer mortality worldwide. It has an enormous impact on the health of women and remains a major public health concern across the world. Prevention remains the cornerstone of the fight against BC worldwide. Recommended preventive techniques to reduce BC mortality and morbidity include breast self-examination (BSE), clinical breast examination (CBE), and mammography.

**Objectives:** This study aimed to measure knowledge, attitude, and practice regarding breast self examination among women attending a family center in Cairo and to evaluate the impact of the implemented health educational program among them.

**Subjects:** An intervention study was conducted during the period of July- December 2013. The sample participated in this study consisted of one hundred and twenty women aged 20-70 years old attending the center for their medical care.

**Method:** A structured Questionnaire sheet was modified by researcher to collect data through an interview of our sampled population before and after health education program done in the center.

**Results:** Around half of sample (56.7%) heard about BSE and media was represent the main source of their knowledge, participated knowledge regarding the definition, frequency, age and suitable time of BSE increased from 8.9% per intervention to be 93% after the intervention and towards knowledge of critical signs of BC increased from 17.5% to 98.6% after intervention also towards techniques of BSE it increased from 50.9% to 98.6%. Regarding monthly practice of BSE it increased to be 72.1% from 10.8% pre-intervention. And after month the knowledge towards BSE, critical signs of BC and techniques of BSE became respectively 88.3, 100.0 and 100.0 percent.

**Conclusion:** The majority of the study sample had unsatisfactory knowledge about Breast Self Examination as well as not practicing it. After the developed educational and training program of BSE showed a significant remarkable increase in the participant's level of knowledge and noticeable improvement in their BSE practice.

**Recommendations:** Breast Self Examination training program should be one of the objectives of family center and be applied to all females attending the center, Family physicians and paramedical personal beside peer educators should stimulate “the role played” being good trainers in Breast Self Examination and Periodic follow up of the same study participant to identify the effect of time on the retention of the adopted knowledge, attitude and practice of trainee.

**Key words:** Breast self examination, Evaluation of knowledge, attitude, practice, intervention study

**Introduction:**

Breast cancer (BC) is a global health issue and a leading cause of death among women internationally (**Shibuya et al, 2002**). It has an enormous impact on the health of women and remains a major public health concern across the world. BC does not strike an individual alone but the whole family unit. Despite considerable social changes, women continue to be the focus of family life (**Mousavi et al 2009**).

BC is the second most common cancer in the world and, by far, the most frequent cancer among women with an estimated 1,67 million new cancer cases diagnosed in 2012 ( 25% of all cancers). It is the most common cancer in women both in more and less developed regions with slightly more cases in less developed (883,000 cases) than in more developed (794,000) regions. Incidence Rate varies nearly four-fold across the world regions, with rates ranging from 27 per 100,000 in Middle Africa and Eastern Asia to 96 in Western Europe (**Ferlay et al, 2001**).

BC ranks as the fifth cause of death from cancer overall (533,000 deaths) and while it is the most frequent cause of cancer death in women in less developed regions (324,000 deaths, 14.3% of total), it is now the second cause of cancer death in more developed regions (198,000 deaths, 15.4%) after lung cancer. The range in mortality rates between world regions is less than that for incidence because of the more favorable survival of BC in (high-incidence) developed regions, with rates ranging from 6 per 100,000 in Eastern Asia to 20 per 100,000 in Western Africa (**Ferlay et al, 2012**).

In Egypt, BC is the most common cancer among women, representing 18.9% of total cancer cases (35.1% in women) among the Egypt National Cancer Institute (NCI) series of 10 556 patients during the year 2001 (**Seif and Aziz, 2000**).

BC is distinguished from other types of cancer by the fact that it occurs in a visible organ and can be detected and treated at an early stage (**Jemal et al, 2010**). The 5-year survival rate reached to 85% with early detection whereas later detection decreased the survival rate to 56%. The low survival rates in less developed countries can be attributed to the lack of early detection as well as

inadequate diagnosis and treatment facilities. **(Seif and Aziz, 2000).**

Prevention remains the cornerstone of the fight against BC worldwide. Recommended preventive techniques to reduce BC mortality and morbidity include breast self-examination (BSE), clinical breast examination (CBE), and mammography. CBE and mammography require hospital visit and specialized equipment and expertise whereas BSE is an inexpensive tool that can be carried out by women themselves. **(Humphrey et al, 2002).** BSE benefits women in two ways: women become familiar with both the appearance and the feel of their breast and detect any changes in their breasts as early as possible, It is stated that 90% of the times BC is first noticed by the person herself **(McMichael et al, 2000)**

BSE is a process in which the woman can examine her breasts and their accessory structures to detect and consider the first early detection method of BC. **(Robert et al, 2003)**

Even though BSE is a simple, quick, and cost-free procedure, the practice of BSE is low and varies in different countries; like in England, a study by Philip et al at 1986 reported that only 54% of the study population practiced BSE. Furthermore, in Nigeria, the practice of BSE ranged from 19% to 43.2% **(Gwarzo et al, 2009)** and in India, it varied from 0 to 52% **(Gupta et al, 2009).** Several reasons like poor knowledge, lack of time, lack of self-confidence in their ability to perform the technique correctly, fear of possible discovery of a lump, and embarrassment associated with manipulation of the breast have been cited as reasons for not practicing BSE **(Yadav and Jaroli, 2010).**

Few KAP studies were done in Egypt about breast self examination to help reduce disparities in breast cancer screening use **(Abd El Aziz et al, 2009), (Seif and Aziz, 2000).**

This study aimed to implement and to assess the impact of a health education intervention program about BC and BSE on women in a semi-urban area in Cairo in a primary health care center