Factors Affecting Breast Cancer Screening among Elderly Women in Ain Shams University Hospitals

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Radwa Magdy Abd Elkader

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List of Abbreviations

AC	Cyclophosphamide with doxorubicin
ADL	Activities of daily living scale
ATM	Ataxia telengiectasia mutated gene (serine/ threonine protein kinase)
BC	Breast cancer
BCS	Breast cancer screening
BMI	Body mass index
BRCA1	Breast cancer 1 gene
BRCA2	Breast cancer2 gene
BRIP1	BRCA1- interacting protein 1 gene
BSE	Breast self-exams
CAT	Cyclophosphamide, doxorubicin and Taxotere
CBE	Clinical breast examination
CGA	Comprehensive geriatric assessment
CHEK2	Checkpoint kinase 2 gene
CI	Confidence interval
CMF	Cyclophosphamide, methotrexate, and fluorouracil
3D	Three-dimensional

DCIS	Ductal carcinoma in situ
DNA	Deoxyribonucleic acid
ER	Estrogen receptor
FNA	Fine needle aspiration
HER2	Human epidermal growth factor receptor
IADL	Instrumental activities of daily living scale
MDTs	Multi-disciplinary teams
MRI	Magnetic Resonance Imaging
No.	Number
P53 GENE	Phosphoprotein p53
PALB2	Partner and localizer of BRCA2 gene
PHQ 9	Patient health questionnaire 9
PR	Progesterone receptor
PTEN	Phosphatase and tensin homolog protein
SPSS	Statistical Package for the Social Sciences
STK 11	Serine/therionine kinase 11 gene
TNM	Staging to the tumer according to tumer size, lymph nodes and metastasis
USPSTF	United States preventive services task force
WHO	World health organization

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ABSTRACT

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Introduction: Breast cancer is a major global public health problem and coming on top of all malignancies in Egypt. The Early detection of breast cancer through screening activities, and treatment has been found to decrease mortality rates by 25–30%. Low participation rates towards breast cancer screening activities have been noticed among Arab women so attention has been directed to barriers and facilitators related to breast cancer screening among Egyptian women. **Aim of The Work:** The study aimed to determine factors affecting breast cancer screening among elderly women. **Materials and Methods**: A cross sectional study was conducted over 240 cases from elderly women 60 years old or more were selected from Ain Shams University Hospital's outpatient clinics. Each participant was subjected to Interview questionnaire and All cases who agreed and do not have the exclusion criteria for mammography according to American cancer society were scheduled for mammography .**Results**: the participants had inadequate knowledge about breast cancer and its screening methods. the most encouraging facilitator for BC screening practice in the study sample was advice from TV/magazine (55%) and least facilitator was presence of family history (1.2%) & the most common barrier against BC screening methods in the study sample was lack of physician's recommendation (81.9%) followed by not visiting the doctor unless ill and the least barrier was difficulty to take time off from work (5.9%). **Conclusion:** The current study helped us to clarify the factors whether barriers or facilitators affecting breast screening among this group of Egyptian women. Identifying these factors in the local community will help to remove those obstacles and design more culturally relevant strategies to increase the utilization of breast screening service and to ensure adequate breast care of these women.

Key words: Breast cancer, breast cancer screening, barriers and facilitators of breast cancer

Introduction

Breast cancer is a major global public health problem ***(Bener et al., 2011).*** It is the most commonly diagnosed cancer and one of the leading causes of cancer deaths in women worldwide and in Arabic countries ***(Ceber et al., 2010; Miller, 2010)***. Among women in Egypt, breast cancer is a challenging health problem coming on top of all malignancies ***(The National Cancer Registry Program of Egypt, 2013)***.

Each year, more than 1.5 million women worldwide are diagnosed with breast cancer, and 502,000 die from it ***(World Health Organization, 2010)***. It is accounting for 22.9% and 37.7% of all female cancers worldwide and in Egypt, respectively ***(The National Cancer Registry Program of Egypt, 2013)***. Its incidence is projected to increase by 1-2% every year among Egyptian females ***(Boyle et al., 2008).***

The stage of diagnosis is an important prognostic factor and breast cancer detected at early stages will have a high chance of responding successfully to treatment ***(Bener et al., 2009)***. As Arabic women are often diagnosed at advanced stages of cancer ***(Dashti et al., 2010)***, they are at significant risk for high mortality rate from breast cancer ***(Al Saad et al., 2009)***. Breast cancer ranks second as a cause of cancer death in women after lung cancer ***(American Cancer Society, 2014)*** and its mortality rates increases also with age ***(Van de Water et al., 2012).***

Morbidity and mortality have been shown to be effectively reduced by early detection of breast cancer through screening activities ***(Azaiza, 2010).*** Breast cancer

screening for women at average risk includes clinical breast exam and mammography. Mammography can often detect breast cancer at an early stage, when treatment is more effective ***(American Cancer Society, 2014)***. Early detection of breast cancer through screening activities, and treatment has been found to decrease mortality rates by 25–30% ***(Mai et al., 2009)***.

Women should undergo clinical breast examination annually after age of 40 years. This examination should take place during periodic health examinations. When clinical breast examination is performed, it is an opportunity for health care professionals to review and update the woman's family history, discuss the importance of early breast cancer detection, and answer any questions she may have about her own risk, new technologies, or other matters related to breast disease ***(Robert et al., 2010).***

The American cancer society recommends that average-risk women should begin annual mammography at the age of 40 years. There is no specific upper age at which mammography screening should be discontinued as long as a woman is in good health and does not have serious, chronic health problems ***(Robert et al., 2010).***

Low participation rates towards breast cancer screening activities have been noticed among Arab women ***(Azaiza et al., 2010)*** so attention has been paid to barriers and facilitators related to breast cancer screening among Arab women. There is lack of knowledge about factors affecting breast cancer screening (BCS) in elderly women in Egypt which needs to studied and analyzed for attaining a better quality of life among them.

Aim of The Work

To determine factors affecting breast cancer screening among elderly women.

Chapter 1:
Breast Cancer in Elderly

Breast cancer (BC) presents in ancient times and reference to this disease may be found going back to 3000 before century, in an Egyptian papyrus ***(Olson and Stuart, 2002)***.

BC can be described as a group of malignant cells that can attack surrounding tissues or metastasize to distant regions of the body. The disease happens almost totally in women; however men may get it, as well ***(American cancer society, 2014).*** It often presents for a long period as either a non-invasive disease or an invasive but non metastatic disease ***(Braunwald et al., 2001)***.

Incidence:

BC is the main cause of cancer related mortality among women throughout the world; it is representing 23% of the total new cancer cases and 14% of the cancer deaths ***(Jemal et al., 2011).***

The number of recently diagnosed cases of invasive breast cancer was 232,670 among women in the US in 2014 and around 2,360 new cases in men. After exclusion of skin cancers, BC is the most widely diagnosed cancer in women. The new cases of in situ breast cancer were 62,570 among women in 2014. Of these, around 83% was ductal carcinoma in situ (DCIS) and almost one-half of the recently diagnosed breast cancers occur in women aged more than 65 years ***(American cancer society, 2014).***

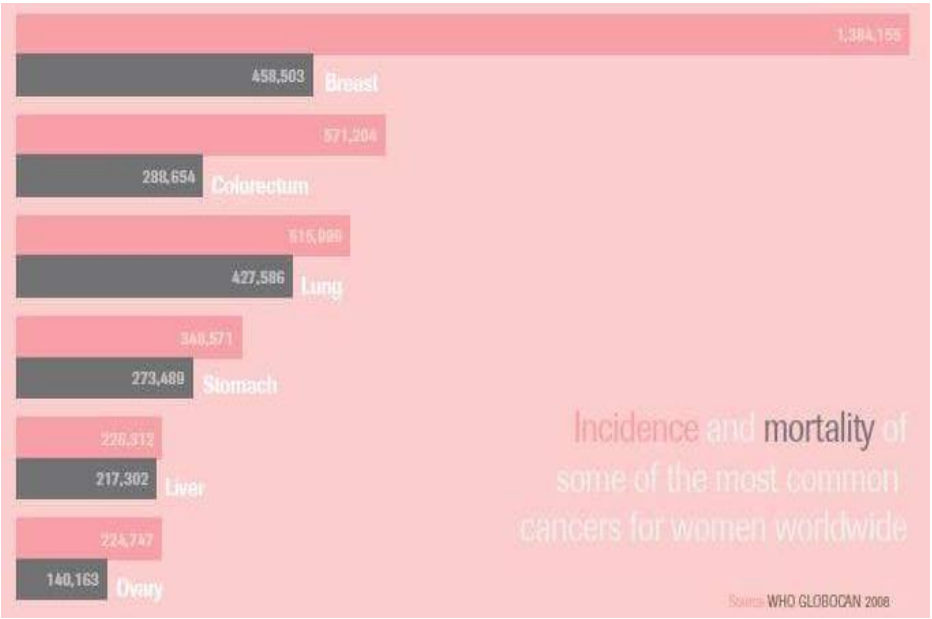

Figure 1: Incidence and mortality of some of the most common cancers worldwide ***(WHO, 2008)***

BC incidence rates in Arab ladies have increased during the previous 24 years, BC is the most frequently cancer among Arab women however women are being diagnosed with the disease at more advanced stages ***(Miller, 2010).***

The highest incidence rates of BC in Africa are referred to South African Republic and the least rates to Sudan and Ghana ***(Ferlay et al., 2008).*** In spite of the fact that incidence rates for BC are low in Africa, in some of African countries it still remains the most common malignancy with higher rates in premenopausal women ***(Parkin et al., 2010).***

In Egypt, BC is one of the most frequent cancers among ladies; it constitutes 19% of total cancer cases. Its incidence is expected to increase by 1-2% every year. The disease is mostly diagnosed at more advanced stages among