

**An-Najah National University
Faculty of Graduates Study**

Breast Cancer Screening Barriers among Women in Nablus Governorate

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Dedication

***To my mother who learns I to believe in myself, and
always encouraged me to go in every adventure, I done
this with your faith and support.***

***To my sisters, brothers, to my husband, to my son and
daughter.***

Acknowledgment

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الإقرار

أنا الموقعة أدناه مقدمة الرسالة التي تحت عنوان:

Breast Cancer Screening Barriers among Women in Nablus Governorate

المعيقات التي تحول دون ممارسة النساء لفحوصات
سرطان الثدي في محافظة نابلس

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Declaration

The work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

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List of abbreviations

BSE	Breast self exam
CBE	Clinical breast exam
Mammography	Breast X Ray
WHO	World Health Organization
NCD	Non communicable diseases
MOH	Ministry of Health
GSCE	General Secondary Certificate Examination (Tawjihi)

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**Breast Cancer Screening Barriers among Women in Nablus
Governorate**

By

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Abstract

Introduction: Breast cancer is still one of the major health problems not only in Palestine but also all over the world. It is one of the Non Communicable Diseases (NCD) that form a biggest challenge and major public health problem that most countries especially the developing countries face.

Knowing the breast cancer screening barriers that prevent women from performing breast cancer early screening can increase the chance of early detection and this can be minimize the occurrence of disease and related deaths.

Objectives: The main objective was to assess the barriers that prevent women from performing breast cancer screening tests.

Method: A convenient sample method including 269 women aged from 30-60 years old who lived in Nablus Governorate was used. Also a purposive sample method was used to select women's social centers from Nablus city, two villages (Beit Furik, Beita) and Askar refugee camp. Participants filled in self-administrated questionnaire, and data analysis was done by using SPSS.

Results: The percentage of the participants who knew mammogram, CBE and BSE tests (59.5%), (47.6%) and (67.3%) respectively. Moreover, the percentages of participants who did not perform mammogram and CBE tests were (60.2%) and (74.0%) respectively.

The most common barriers that prevented women from performing breast cancer screening tests were “fear of suffering cancer pains” and “changing physical appearance”, “financial cost”, “afraid of having cancer”, “shy of applying the tests” and “it takes time to conducting regularly” and “test may cause pain”. Also, there were a significant relationships between mammogram barriers and place of residency (P values .046), between BSE and educational status (P values .021), between the age and geographical and financial barriers (p value.012), (p value.001) respectively, and between the educational status and geographical and financial barriers (p value.002), (p value.001) respectively.

Recommendation: increase women’s knowledge about breast cancer screening tests, and to have a female physician in every clinic.

Chapter one

Introduction

Chapter One

Introduction

The non-communicable diseases (NCD) in the twenty-first century are challenge and major public health problem that most countries especially the developing countries face. Related deaths reached up to 35 million death around the world, 28 million from them in developing countries, and 14 million can be prevented, (W.H.O, 2009), in addition, cancer contributes to 21% of morbidity, which caused 8.2 million deaths in 2012 and 1.7 million new cases every year, (W.H.O, 2011).

Globally, breast cancer considered as the major killer of women (W.H.O, 2013). The new cases were 124.6 per 100,000 women per year (National Cancer Institution, 2014). According to Goldman and Ausiello (2004) and Barakat et al. (2009) it was the second leading cause of cancer death in women after lung cancer, and more than 1, 2 million women affected yearly worldwide (Barakat et al., 2009). In USA in 2012, about 39,920 died, but the number decreased to 39,620 in 2013.

In Palestine, cancer ranked the second among the diseases that leads to death. In West Bank; Mortality rates has increased from 10.3% in 2007 to 10.8 in 2010, and it reached 13.3% in 2013. The estimated rate reached up to 53.3% among women while for men, it estimated 48.5% of cases, (Palestinian Center Bureau of Statistics (P.C.B.S., 2013).

Breast cancer is rated third among the factors that lead to death and occupied the first type and the most common type of cancer among

Palestinian women (18.3%) it represented (35.4%) of all cancers, 60% affected age group 15-60 years old (P.H.I.C, 2013). This means that women of childbearing and motherhood catch the disease.

Nablus Governorate came second in the number of cancer cases after Bethlehem. In 2013, 103.9 per 100,000 of the population were reported to have cancer (P.H.I.C., 2013).

Therefore, in 2013, (6690) women did mammography and 3554 were normal. According to (P.H.I.C, 2013), the number of women above 40 yrs old was 290,538. So it is worth investigating why women refrain from or delay cancer examination especially because early detection might save lives (W.H.O, 2009). Moreover, through early screening and diagnosis women achieve the fifth goal of the Millennium Development Goals, i.e. improve maternal health, reduce mortality rates and to achieve universal access to reproductive health (UN, 2014).

It is worth mentioning that the Palestinian Ministry of Health recommends women to do breast cancer screening tests as following : women with age group age20- 30 must do it every 3 years ,and women after age 40 must do it every one year; these recommendations are not in line with women performance (MOH,2005).

This study aimed to assess the barriers that prevent women from performing breast cancer screening tests.

Early detection signifies the discovery of the disease before the occurrence of any symptoms (Schreer and Luttges, 2005) it can increase the chance to successful treatment through early diagnosis and screening. A screening test identifies asymptomatic individuals who may have the disease (Kanchanaraks, 2008). Many studies have shown that early detection of breast cancer has saved thousands of lives annually, and the rate of deaths due to breast cancer have decreased since 1990s because of early detection and treatment development (American Cancer Society, 2012).

1.1 Statement of problem

Breast cancer is still one of the major health problems not only in Palestine but also all over the world. It is the most prevalent type as it consisted (35.4%) of all cancers in Palestine according to P.H.I.C (2013). The morbidity rate in the general population was due to breast cancer was (15.7%), and the mortality rate was (8.7%), (P.H.I.C., 2011).

This means that women didn't perform breast cancer test including Breast Self Exam (B.S.E), Clinical Breast Exam (C.B.E) and Mammography at all, or they perform it at late time or they have inadequate knowledge about these tests or the importance of it for early detection, or the correct time to perform it or where to go to do.

This leads to cancer development into late stages. This study aimed to assess the barriers that prevent women from performing breast cancer

early screening tests in Nablus governorate, because there is a lack of studies about this subject.

1.2 Significance of the study

Knowing the barriers that prevent women from performing breast cancer early screening can increase the chance of early detection and this can minimize the occurrence of disease and related deaths. So the result of this study or part of it may be used to help health policy makers in changing some of health strategies.

1.3 Purpose of the study

This study aimed to assess the barriers that prevent women from performing breast cancer screening tests in Nablus Governorate.

1.4 Research questions

Women, should be promoted, and should be encouraged to apply breast screening according to breast cancer screening tests schedule, so that they detect any symptom at a curable stage. This research intended to answer the following questions.

- 1- What is the women knowledge about breast cancer screening test?
- 2- What are the barriers that prevent or delay women from performing breast cancer screening test?
- 3- Do women perform BST?

1.5 Research hypotheses

- 1- There will be no significant difference at (α 0.05): between participants who apply breast cancer screening test and those who do not in terms of age.
- 2- There will be no significant difference at (α 0.05): between participants who apply breast cancer screening test and those who do not in terms of place of residence.
- 3- There will be no significant difference at (α 0.05): between participants who apply breast cancer screening test and those who do not in terms of level of education.
- 4- There will be no significant difference at (α 0.05): between participants who apply breast cancer screening test and those who do not in terms of having the first degree of breast cancer.

1.6 Definition of terms

- 1- Screening, according to the American Cancer Society (2012), stands for "tests and exams used to find a disease, such as cancer, in people who do not have any symptoms."
- 2- Early detection refers to the notion of "using an approach that lets breast cancer gets diagnosed earlier than otherwise might have occurred", (American Cancer Society, 2012).

- 3- A mammography is a kind of test that produces an image of the inner breast tissue on a film. It uses x-rays to visualize normal and abnormal structures within the breasts (MedicineNet.com, 2013).
- 4- Screening mammography used to detect breast disease in women who do not have apparent symptoms of disease (American Cancer Society, 2012).
- 5- A Clinical Breast Exam (CBE) :is a physical exam of the breasts which is normally done by a health care provider such as a doctor, nurse practitioner, nurse, or physician assistant as part of a regular medical examination; the health professional carefully feels both the breast and the underarm for abnormalities (American Cancer Society, 2012).
- 6- Breast Self-examination (BSE):, done by the woman every month in order to detect any changes in the breasts and beginning in 20s (American Cancer Society, 2012) and (Jordan Breast Cancer Program, 2008).

Chapter Two

Background

Chapter Two

Background

2.1 History of Breast Cancer

Breast cancer identified by the humans since at the early stages of time. Historians have mentioned the disease in almost every era of written history. It also stated that ancient Egyptians were the first to find and trace the disease. This clearly shown in a number of documents written on papyrus as well as charts of diagnoses and treatment found in the pyramids. In the period from 460 to 475 BC, Hippocrates, the founder of Western Medicine, dealt with breast cancer and stated that it resulted from " the excess of black bile" (Mandal, 2013). Hippocrates called cancer "karkinos". In one case, Hippocrates examined a woman who suffered from breast cancer with blood discharged from her nipple (Winchester and Winchester, 2006).

The Romans found about cancer. In 200 A.D., Galen described the disease and stated that it caused "an excess of black bile in the blood". Around 30 A.D., the Roman physician, Celsus, mentioned cancer in his manuscript. Furthermore, Leonides, suggested surgical removal of breast cancers by cutting the inflicted part and then "cauterizing with hot irons to control bleeding" (Winchester and Winchester, 2006).

In the middle Ages, which were characterized by faith and feudalism, religious people, mainly monks used magic power and faith to treat breast cancer (Donegan and Spratt, 2002).

During the Renaissance period, interest in the human body increased and scientists started to employ scientific strategies to study cancer; they began to understand the blood cycle, use autopsies and treat deadly disease including cancer. "The famous Scottish surgeon John Hunter suggested that some cancers might be cured by surgery and described how the surgeon might decide which cancers to operate on. If the tumor not invaded nearby tissue and was transferable, it is possible to remove it (Donegan and Spratt, 2002).

In the nineteenth century, the microscope was invented and it started to be used to study many types of diseases in addition current technology for treatment of breast cancer had their beginnings in this century; only chemotherapy remained for development in the years to come (Winchester and Winchester, 2006).

In the next century, radical surgery started to be ignored and two very useful techniques were introduced; they are chemotherapy and mammography. Furthermore, in the twentieth century, physicians were almost sure that breast cancer is a hereditary disease. They began to use great numbers of patients for study using very complicated devices and statistical analyses,(Donegan and Spratt, 2002).

According to Donegan and Spratt (2002), breast cancer started to be a major health problem in the Western World. Consequently re-evaluation of the treatment of the disease and he further assured that breast cancer is a

"systematic disease and its course was determined by biologic struggle between tumor and host" (Winchester and Winchester, 2006).

According to the American Cancer Society (2013), cancer in general is a diseases characterized by uncontrolled growth and spread of abnormal cells. A number of factors can cause it; some are external and others are internal. On the one hand, the external factors include tobacco and smoking, infectious organisms, chemicals, and radiation; on the other hand, internal factors encompass inherited mutations, hormones, immune conditions, and mutations that result from metabolism.

2.2 Risk factors

A risk factor is something that affects the chance of getting a disease such as cancer. Some risk factors are smoking, drinking, and diet. Others, like a person's age, race, or family history, cannot be changed (Barakat et al., 2009).

There are factors that can increase the probability of breast cancer, but this does not mean that the presence of one or more factor will develop breast cancer. Many women may have more than one risk factor for breast cancer, but they do not get the disease. On the contrary, there are women who do not have any risk factor for breast, but they have the disease (American Cancer Society, 2013). These factors remain as an alert for women to take care and to apply early detection of breast cancer.

One of these factors is age; the percentage of women over 55 to get breast cancer is more than that of women under 45 years old. This does not

mean that women under 45 are not likely to have the disease (Khatib and Mojtabai, 2006). The chance of getting breast cancer goes up, as a woman gets older (Fentiman, 1998), (cancer research, 2008), table 2.1 illustrates the rate per each group.

Table (2.1): Estimated risk of developing breast cancer by certain age:

Age group	Rate
More than 29	1 in 2000
More than 39	1 in 215
More than 49	1 in 50
More than 59	1 in 22
More than 69	1 in 13
Life time risk	1 in 8

Cancer Research UK, 2008

Another Factor that cannot be changed patient sex and race. The percentage for female to get breast cancer exceeds the number of males one hundred times because the nature of the composition of breasts tissue in a woman's makes them more susceptible to breast cancer (Barakat et al., 2009). The male breast cancer was 1% of all cancers (Goldman and Ausiello, 2004).

According to American Cancer Society (2012), genetic factors and medical history of the family also play a role in the transmission of the disease. For example, 5% to 10% of the cases of breast cancer occur because of genetic factors and the ratio increases if women have first class breast cancer relatives, however 85% of women with breast cancer do not have relatives with the disease. And according to (Porth and Matfin, 2009) and (Barakat et al., 2009), there are two genes that increase the risk of breast cancer BRCA1 on the chromosome 17q21 and BRCA2 on the

chromosome 13q12-13 and they increase the risk of breast cancer up to 80% for women who are carrier .

American Cancer Society (2012) reported that there are other factors that relate to the nature of the life of the patient like physical activity by 1.25-2.5 hour per week decrease the risk of breast cancer, breast-feeding for more than one year also decrease the risk for breast cancer (NCCN, 2012). For instance, women who have reached, age of menarche at an early, women who have menopause at a late stage, and the women who exposed to radiation on their chest, all have more chances to get breast cancer. Other risk factor such as: giving birth after they reached 30 years old or more and usage of contraceptive pills or hormonal replacement therapy after menopause are more likely to get breast cancer (Fentiman, 1998). And women with high weight (I.O.M, 2012) and the women with high breast density (amount of fat), (Cancer Research UK, 2008).

2.3 Signs and symptoms

According to American Cancer Society (2013), there are no clear symptoms for breast cancer especially when the tumor is small; and according to (Barakat et al., 2009) breast cancer commonly occurred in the outer part of the breast and 13 % in left breast.

The most common types of symptoms or signs for breast cancer are the existence of a mass or a tumor in any part of the breast; it is often solid and it can identified or detected by the hand; yet there are no specific sizes or shapes of cancer tumors. (Goldman and Ausiello, 2004)

Some symptoms can be in the form of swelling in the breast or part of it, another symptom might be the outer skin becomes irregular and wrinkly or becomes stippled or convex (the skin enters inside or become irregular texture). A third sign can be a mere pain that happens in the breast or just in the nipple where we might have nipple abnormalities. Furthermore, the breast may redden or the skin becomes thick and causes irritation. And it can extend to the lymph node under the armpit and cause inflammation and bloody secretions from the nipple (Fintiman, 1998) as shown in table (2.2).

Table (2.2): presenting symptoms in operable breast cancer patients.

Symptom	Percentage
Lump	76
Swelling	8
Pain	5
Nipple retraction	4
Nipple bleeding /discharge	2
Skin puckering	1
Lump in axilla	1

Fintiman, 1998

The less common symptoms can be in the form of "persistent changes to the breast, such as thickening, swelling, distortion, tenderness, skin irritation, redness, or nipple abnormalities, such as ulceration, retraction, or spontaneous discharge. Breast pain is more likely to be caused by benign conditions and is not a common early symptom of breast cancer" (American Cancer Society, 2012). In fact, the presence of a sign or even a number of signs may indicate a change in the breast, but it does not necessarily mean there is a breast cancer; such a condition entails careful

medical advice from a professional health care provider. Moreover, one sign and more can appear in the same time, (C.D.C, 2014).

2.4 Stages of breast cancer

Staging, according to the National Cancer Institute (2012) refers to the severity of cancer based on the size and/or extent of the original or primary tumor and whether or not cancer has spread in the body. However, according to American Cancer Society (2012), it means the extent or spread of cancer at the time of diagnosis.

According to the National Breast Cancer Foundation (2013) and (Thornes, 2003), the first stage, stage 0, of breast cancer is called ductal carcinoma, it is a non-invasive cancer where abnormal cells have been found in the lining of the breast milk duct. In Stage 0 breast cancer, the atypical cells have not spread outside of the ducts or lobules into the surrounding breast tissue. Ductal Carcinoma in Site is very early cancer that is highly treatable, but if it left untreated or undetected, it can spread into the surrounding breast tissue. In Stage I, cancer is evident, but it is contained to only the area where the first abnormal cells began to develop. The breast cancer detected in the early stages and can be very effectively treated. This stage divided into two sub-stages and the difference determined by the size, which is about 2cm, of the tumor and the lymph nodes with evidence of cancer. And in Stage II means, the breast cancer is growing, but it is still contained in the breast or growth has only extended to the nearby lymph nodes. This stage is also divided into groups and the

difference is determined by the size of the tumor, which is normally about 5cm long, and whether the breast cancer has spread to the lymph nodes or not. In Stage III, cancer means the breast cancer has extended to beyond the immediate region of the tumor and may have invaded nearby lymph nodes in the axillaries and reached the lymph glands, but has not spread to distant organs. Finally, in Stage IV breast cancer means that the cancer has spread to other areas of the body such as the brain and the liver. Although breast cancer considered incurable at this stage, current progress in medical technology mean that more women are living longer by treating the disease as a chronic condition.

Table (2.3): Stages of Breast Cancer

Stage	Description
Stage 0	Tumor on membrane of milk duct
Stage 1	Small tumor (<2 cm),not spread out side breast
Stage 11	Tumor >2 cm but <5 cm , lymph node negative Or tumor <5 cm , lymph node positive
Stage 111	Large tumor (>5 cm)or tumor at any size with invasion of skin or chest wall
Stage 1V	Tumor at any size, spread to other parts of the body.

National Cancer Foundation (2012) and (Thornes, 2003).

2.5 Screening and Early Detection

Breast cancer is widespread among women in the Middle East and it occurred under the age of fifty during the reproductive age and motherhood. In most Arab countries including Bahrain, Egypt, Jordan, Kuwait, Lebanon, Oman, Saudi Arabia and Tunisia, breast cancer is diagnosed and detected in women under the age of 50 unlike in the U.S.A where it is found more in women over 50 (Khatib and Mojtabai, 2006) .

Early detection signifies the discovery of the disease before the occurrence of any symptoms (Schreer and Jutta, 2005). The goal of screening is to detect breast cancer before the symptoms, because it saved thousands of lives annually, and the rate of deaths due to breast cancer have decreased since 1990s because of early detection and treatment development (American Cancer Society, 2012).

Therefore, it is important to conduct screening which leads to an early detection of breast cancer. It can be done using any tests to discovering any sign of breast cancer before it occurs (Smith et al., 2003). Such a process makes treatment easier and reduces mortality (American Cancer Society, 2012) and (Khatib and Mojtabal, 2006).

Khatib and Mojtabai (2006) have mentioned that the simplest and the easiest way for women to make sure they are void of breast cancer is self-breast examination. This technique proved useful especially because the woman herself without any help can learn it; it does not cost anything; and, above all, it can detect up to 25 % of cases. Women can start applying this convenient technique, every month after five days of menstrual period, at the age of twenty. They can learn how to apply it through local publications or even via advertisements on TVs or radio stations, but according to (Petro-nustus and Mikhail, 2002) B.S.E can detect breast cancer in early stage if it monthly done. And mortality rate decreased to 31% for women who practice it for 7 years aged from 40 -74 (Nystron et al., 2002).

Nevertheless, this technique necessitates women know basic things about their breasts in terms of shape and outside appearance. They have to trace any change in the breast mainly the appearance of any masses or changes in the texture of the breast as well as any secretion or discharges from the nipples. (Khatib and Mojtabai, 2006; Stapleton, et al., 2010).

Another technique for early detection is the clinical breast examination (C.B.E). It is a kind of screening that done by a medical care provider such as doctors, nurses or even midwives inside a clinic. This way, according to UNFPA (2010) and Breast Cancer Foundation of Egypt, (2004) normally applied when a woman is 20-30 years old. Khatib and Mojtabai (2006) argue that this technique, Clinical Breast Examination, help to discover 3-5% of breast cancer cases which were not identified by mammography, and it be important for women who do not recommended or not receive regular mammography (Saslow et al., 2004).

The third technique that helps to detect breast cancer is mammography, an X-Ray of the breasts. It has been used since 1969 and it takes two views of the breasts. A diagnostic mammography normally applied to diagnose breast cancer when the various symptoms start to appear when the results of traditional mammography are not trusted or even are not normal. Another sub-category of mammography is called screening mammography; it is traditionally used when no symptoms appear (Breast Cancer Foundation of Egypt, 2004; Khatib and Mojtabai, 2006).

The American Cancer Society (2012) assumed that screening mammography is a test that uses small amounts of radiation, usually about a 0.1 to 0.2 rad per x-ray, to give a picture of the interior tissues of the breasts so that changes are identified, it can also be used to detect tumors whether they are palpated by hands or not. Its efficiency can reach up to 80-90 % according to American Cancer Society (2012). Furthermore, this test is safe although it uses radiation. According to (Aldridge et al., 2006) this test does increase the likelihood of catching breast cancer and that it is used with women who present with symptoms as well as those who are asymptomatic.

The best categories of women who advised to apply screening mammography are those who are 40 years old or more when they feel any difference in their breast and if they have any family history of breast cancer. Yet it can be done by women who below 40. In this case, the results are not authentic and trusted because of the nature of young women breasts (American cancer society, 2012).

The test, furthermore, does not confirm the existence of masses in the breast, but it determines the size as well as the location of those masses, let alone how widespread they are. Consequently, a biopsy should be taken to investigate the nature of the masses and whether they are cancerous or not (American cancer society, 2012). Also, 17 % of cancers can not be detected by it and can give a false-positive result about 1 in 10. Also, it have a potential problems like financial, pain, emotional and radiation

(I.O.M, 2004), this technique is helps detect the signs or the symptoms of cancer better than the past. But it is not perfect as it does not discover all types of cancer about 15 -20 % of breast cancer (Goldman and Ausiello, 2004). Nevertheless, Nelson (2012) argues that it remains the best especially because it has helped stop suffering and even reduced mortality rates among patients. The American Cancer Society has mentioned that about 80% to 90% breast cancer cases were detected before the appearance of symptoms. Furthermore, mammography has also helped in reducing the risks at later stages (Nelson, 2012). And it 18% to 45 % reduce the mortality of breast cancer, (Barakat et al., 2009).

Table (2.4) Sensitivity and Specificity for CBE and Mammography

TEST	Sensitivity	Specificity
CBE (AOGD Bulletin ,2011)	68%	85%
Mammography(Cancer Research U.K 2008)	83-95%	80%

The American Cancer Society (2012) recommends that women at risk of having breast cancer and those who are more than forty years old should apply mammography as early as they can; women who are twenty to thirty years old were advised to apply routine tests including clinical examinations. Concerning the breast self exam (BSE), it recommended to be used by women who are 20 years old or below. Finally, women who are more than forty years old and do not have any risk of having the disease can apply such a test, clinical examination, at annual basis (OPTIMT, 2014).

Table (2.5) Recommendations for Breast Cancer Screening:

Organization	Mammography	CBE	BSE
ACOG (American collage of obGyn)	Age 40+ annually	Age 20-39:2- 3yrs;age 40+annually	Consider for high-risk pt.
ACS(American Cancer Society)	Age 40+ annually	Age 20-39:2- 3yrs;age 40+annually	Optional for age 20+
NCCN(National Comprehensive Cancer Network)	Age 40+ annually	Average risk women starting at age 40	Recommended
NCI(National Cancer Institution)	Age 40+ 1-2 yrs	Recommended	Not Recommended
USPSTF (U.S Preventive Services Task Fours	Age 40-50 biannually	Insufficient evidence	Not Recommended

OPTIMT, 2014.

Chapter Three

Literature Review

Chapter Three

Literature Review

This chapter presented several international and regional studies regarding knowledge about breast cancer test, practicing these tests and barriers for breast cancer screening among women.

Several studies tried to find out the main factors and barriers. There are many barriers prevent women from performing breast cancer screening test such as lack and/or poor of knowledge, experience, time and motive, the pain and embarrassment from performing mammography, low income and lack of health insurance. Also women don't perform breast self-examination because they fear having symptoms and they also do not want to consult medical care providers for religious, societal and personal attitudes (Sosolene et al 2007, Donnelly et al 2011, Kissal and Beser 2011).

One study in Palestine was done to assess the different screening behavior in relation to cultural and environmental barriers among 397 Palestinian women in the West Bank aged from 30-60 years using a stratified sample method. It showed that more than (70 %) of the participants never applied mammography or CBE, and 62% of the participant applied BSE. Women were more likely to apply mammography if they were less religious. The chance to perform CBE increase if the participant were Christian and less religious, and they were more likely to perform BSE if they were more educated, lived or stayed in cities, were less religious, and if they have a first-degree relative suffering from breast

cancer, they realized higher effectiveness and benefits of BSE (Azaiza, et al., 2010).

Another study was done by Shaheen, et al., (2011), including a sample of 100 women living inside Gaza and another 55 women living outside Gaza, aged 35 and older. The study found that more than (90 %) of women in the two groups were willing to have a diagnostic mammography for their breasts due to having a complaint. Also 86% of those women living inside Gaza and (85%)of those living outside Gaza believed that death rates was decreased if they apply early detection, but only (27%) of Gaza residents and (50%) those residing outside Gaza agreed to apply screening mammography. Further, the study showed that religion and culture did not prevent the participants from performing mammography.

Among the barriers that prevent women from not performing mammography were limited resources and lack of access to medical facilities; it was up to (55%) of women living inside Gaza compared to (15%) of the other group. The study also found that women inside Gaza had more misconceptions about breast cancer; the misconceptions included ,beliefs that breast cancer is not very common and that breast cancer can be contagious" (Shaheen et al., 2011).

Another study conducted among Arab women who live in Israel by Soskolne et al., (2007) and they had similar results when they intended to investigate the factors related to screening mammography behavior among 510 Muslim Arab women aged 50-69 years by utilizing a cross-sectional

design. The study found that the percentage of performing mammography screening by Muslim Arab women lower compared with the general population in Israel. The factors that prevented women were beliefs about breast cancer and mammography, norms to perform mammography and socio-demographic factors including knowledge. (51%) of women never performed a mammography; (42%) said there is no need to do it and (25%) never heard about it. The women who were more likely to perform mammography were those who received a recommendation from health providers or from family/friends and perceived themselves as in danger to getting breast cancer. Most of the participants had limited knowledge about breast cancer and mammography, and the percentage of women who performed mammography was only 20% and most of these women were young and more educated.

A study conducted by Petro-Nustus and Mikhail (2002) by using a cross-sectional design in order to examine the factors and beliefs that have a kind of relation to the practice of BSE among 519 Jordanian women working and studying at two major universities in the Hashemite kingdom of Jordan. The study found that (67%) had heard of and/or read about breast self examination, only a quarter of them admitted that they applied the test within the last twelve months, and only (7%) of them had done self breast examination monthly. "Confidence, motivation, susceptibility" increase the chance to perform BSE. The most important factors that prevent the participants from performing BSE were women's age, level of

education, having heard or read about breast tumors, and personal history of breast tumors.

An Iraqi study conducted by (Al elwan et al., 2012) to evaluate the knowledge and practice of BSE among 858 females from age 18-62, by using a self-completed questionnaire. The study found that, most participants (93.9%) had heard of BSE through television and that only (53.9%) practiced the BSE, and (38%) of participants did not seek medical advice when they experienced signs/symptoms of breast disease. According to this study, the common reason for not performing BSE was lack of knowledge of how to perform the test properly, but other reasons were also identified including: lack of time and fear of discovering cancer.

In Saudi Arabia, a cross-sectional study was done by Amin et al., (2009) to assess the level and the determinants of knowledge about risk factors and the performing of screening methods among 1,315 Saudi adult females with no previous history of breast cancer. The results found that CBE performed by less than (5%) and mammography by only (3%) of the participants, the level of knowledge about risk factors, appropriate screening was low, and it depends upon educational and occupational status. Early screening was also low among participants who did not like to undergo it due to a number of barriers. A positive family history found in (18%) of cases among first and second degree relatives and 2 % had a prior history of benign breast lesions.

Also in Qatar, a study was done to determine the pattern of performing of CBE and mammography and lack of knowledge about breast cancer. In this study the barriers that were detected were ; fear of having cancer, hopelessness of finding cure, perceived benefits, and lack of time, cost and courage, fear of gossip and subsequent pains, and objections from family including husbands. The study also showed that socioeconomic status had negative effects on performing breast cancer screening. (Donnelly et al., 2013)

A Turkish study conducted by (Dundar et al., 2006), showed that (23.4%) of the participants did not know anything about breast cancer, (89.3) never underwent mammography (75%) never applied CBE, (27.9%) of the participants said they had no previous knowledge about mammography and that only (5.1%) had applied mammography for a two years.

In addition, a Turkish study conducted by Kissal and Beser (2011) including 46 old Turkish women aged from 60 -75 years, had experiences with BSE, CBE, and mammography screening tests, by using a qualitative design. They found main points concerning facilitators and barriers to early diagnosis of breast cancer. These barriers were personal factors including lack of knowledge and awareness of breast cancer screening, symptoms and signs, etiology, risk factors, knowledge of diagnosis and treatment, times of screening, and fear of having a tumor, a diagnosis of cancer, or a removal of breasts. Regarding cultural factors, they include

embarrassment and religious beliefs, and health care offers. The results also indicated that none of the women gave correct information about the times of breast screening; most of them did not know exactly when, how and how often they should perform BSE. Some women noted that "health problems and having no time for themselves due to their roles were barriers to breast screening inability to make an appointment, long waiting times, lack of physicians' recommendations and health staff's attitudes were considered as barriers to breast screening .

Another study conducted in Iran, including 120 women which aimed to assess the knowledge and the practice of breast cancer screening, used a randomly cross-sectional design. Showed that there was limited information about the knowledge and practice of women with respect to early detection of breast cancer, (47%) had no idea about any screening method and the most common breast cancer sign as reported by the participants was painless lump. The study also found that the easiest and cheapest screening method BSE had never done by (51%), also only about (20%) knew the appropriate time for doing BSE and the majority did not know. Only (18%) of the participants perform CBE in the last 2 years and the majority (68.7 %) believed that CBE cannot detect early breast cancer. Most of participants (83.9 %) had never done mammography and (52.1%) did not believe in effectiveness of mammography for early diagnosis tool. The most common reason for not performing screening tests in the participants was lack of knowledge about it (Khanjani et al., 2012).

Also, an Iranian study used a convenient sample of 388 aimed to identify the BSE performance rate and mammography used by Iranian women showed that 7.5% of the participants performed BSE on a regular monthly basis. And among the women aged 40 and older, (14.3%) reported having had at least one mammography in their lifetime (Noroozi and Tahmasebi, 2011).

Another study aimed to explore knowledge and beliefs in relation to mammography screening practices among Chinese American immigrants women and 40 year and older, by using a descriptive design. The findings showed that (86%)of the participants done once a mammography, only (48.5%) had a mammography in the past year because they had an immediate family member diagnosed with breast cancer; this was five times more likely to have had an mammography in the past year despite having insurance that covered a mammography (Lee-Lin et al., 2007)

The pattern of performing of CBE and mammography was also low in Malaysian study which aimed to determine the factors that influence the awareness about breast cancer and the practice of screening procedures by using a cross-sectional design including 125 women aged from 19-60 years in urban and rural areas. The findings showed that the majority (99.2%) knew that breast cancer is the leading women's cancer, (76%) were aware that increasing age and family history were risk factors. most of them agreed that breast cancer can be fatal but knowledge on breast cancer risk factors were lacking like usage of hormonal replacement therapy. About

symptoms of breast cancer, (72%) knew that bloody discharge from the nipple was abnormal; while (76.8%) knew that there was an association between lumps and breast cancer. Also, the study found that rural women had less awareness compared to urban women and awareness of breast cancer and practice of screening procedures increases with higher education and urban living, (Kanaga, 2011).

Another Malaysian study was conducted by Al-Naggar and Bobryshev (2012) which aimed to determine the practices and barriers toward BSE by utilizing a cross-sectional design including 251 participants and found that (68%) knew mammography, 25.5% practice mammography, (15%) had had a mammography once during their life and only (2%) had performed it every two or three years. Age, family history of cancer, family history of breast cancer, regular supplement intake, regular medical check-up and knowledge about mammography were among the barriers that hindered women from undergoing mammography.

In Iran a study was done to assess barriers to mammography by using a cross-sectional design including 400 women aged from 35-69 years (Ahmadian et al., 2011). They investigated the practices and the barriers to mammography among Iranian women attending obstetric and gynecologic outpatient clinics. They reported that lack of medical care provider's advice; the majority of the women reported embarrassment and worries about the mammogram device.

Karbani et al., (2011), showed other results among South Asian women living in the UK re-assessing BSE and knowledge of cancer. Most participants said they did not practice BSE and they have a poor knowledge and understanding of the technique. Perceptions of cancer and health behavior were affected by cultural beliefs such as cancer is contagious, cancer is a taboo subject, and cancer is a stigma. Participants also expressed misunderstandings about the cause of cancer. Breast cancer, they stated, if found in the family might have "ramifications on children's marriage prospects and may cause marital breakdown".

In a Nigerian a study that was conducted to assess rural women's awareness and knowledge about breast cancer in addition to their screening practices. 180 women aged 20-60 were studied by using a descriptive design. The findings revealed that (52.7%) of the women had adequate knowledge about breast cancer risk factors and symptoms, (52.8%) of women have heard about BSE and (51.7%) about CBE, (3.9%) were aware about mammography, (72.8%) did not practice BSE , and finally (3.9 %) do a mammography test, (Olowokere et al., 2012).

Several studies discussed the barriers of breast cancer screening tests, the following (table 3.1) summaries these barriers.

Table (3.1): Studies explored the barriers of breast cancer screening tests

Study Author	Place	Barriers
Azaiza et al. 2010	West bank	Religion, place of residency, educational level, personal barriers and relatives with breast cancer.
Shaheen et al. 2011	Gaza	Lack of access to medical facilities and misconceptions.
Soskolene et al. 2007	Israel	Knowledge about breast cancer, recommendations, age and educational level
Petro-nustus and Mikhail 2002	Jordan	Confidence, age, level of education, knowledge about breast cancer and history of breast tumors.
Alwan et al. 2012	Iraq	Lack of knowledge about breast cancer screening, lack of time, fear of discovering a disease.
Amine et al. 2009	Saudi Arabia	Level of knowledge about breast cancer and screening tests,
Donnelly et al. 2013	Qatar	Fear of having cancer, hopelessness of finding cure, lack of time, cost, fear of gasping and subsequent pain, husbands, economic.
Dunder et al. 2006	Turkey	Knowledge about breast cancer
Kissal and Beser 2011	Turkey	Lack of knowledge about breast cancer, fear of having a tumor, fear of removing breasts, cultural: embarrassment- religious beliefs, health care offers, and lack of time.
Khanjani et al. 2012	Iran	Lack of knowledge
Lin et al. 2007	Chinese American	First degree breast cancer relative
Kanaga et al. 2011	Malaysia	Place of residency, level of education
Al-Naggar and Bobryshev 2012	Malaysia	Age, family history, knowledge
Karbani et al. 2011	Asian women lived in U.K	Cultural beliefs
Olowokere et al. 2012	Nigeria	Knowledge

Conceptual Framework

The conceptual framework of this study showed the major barriers that may prevent women from performing breast screening tests.

The Figure (3.1) illustrated the Barriers to Breast Cancer Screening tests as indicated by Stein (2011). These barriers consisted of five main categories; (Global, Societal, Community, Organizational, Interpersonal and individual).

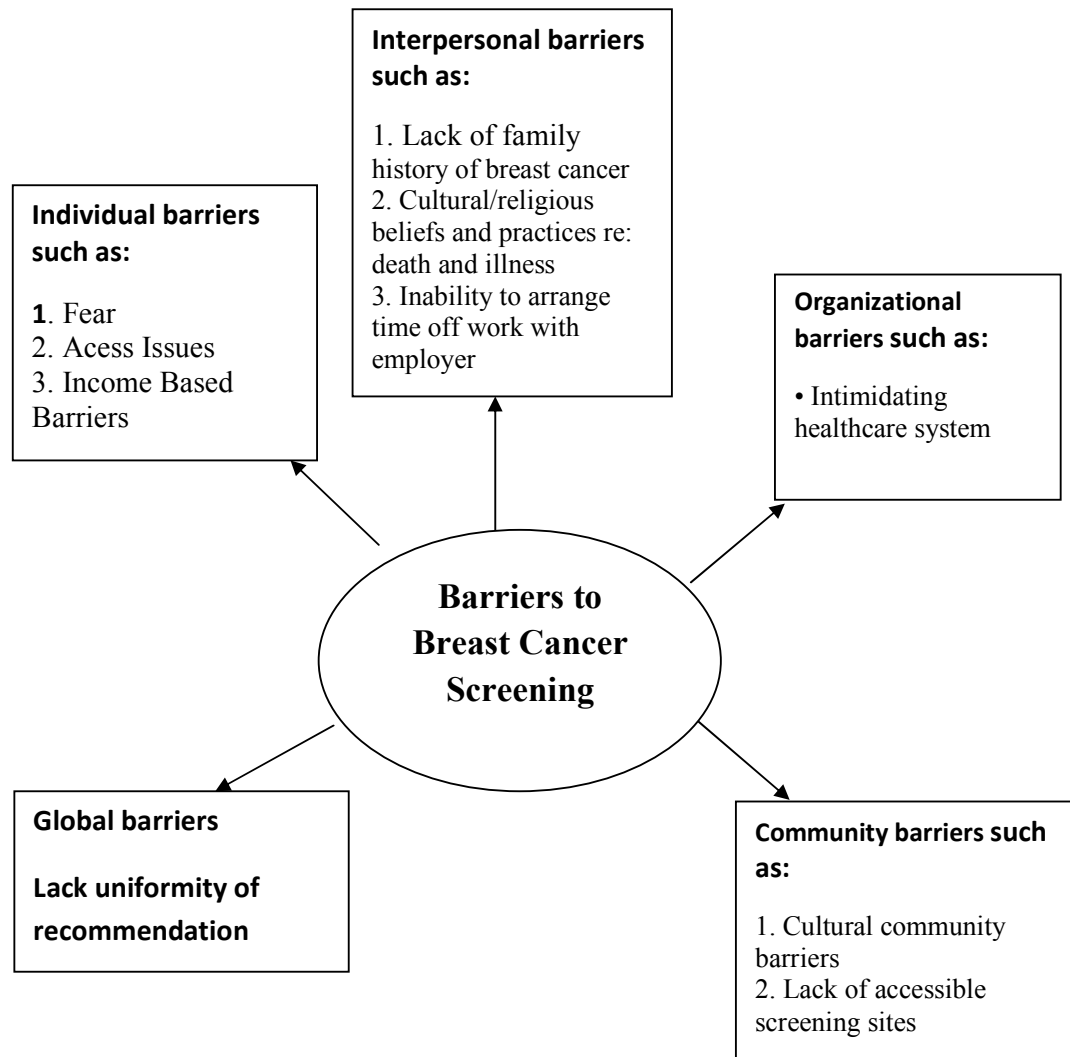


Figure (3.1): Barriers to Breast Cancer Screening

Individual Barriers well include

- Misconceptions
- Fear
- Access issues
- Income based barriers
- Personal characteristics

Interpersonal Barriers well include

- Lack of family history of breast cancer
- Need for partner/family support
- Misconceptions of family and friends
- Cultural/religious beliefs and practices re: death and illness
- Lack of childcare
- Inability to arrange time off work with employer

Organizational Barriers well include

- Long wait times for appointments
- Need for referral outside
- Intimidating healthcare system

Community Barriers well include

- Societal norms
- Lack of community support
- Cultural community barriers
- Lack of accessible screening sites
- Lack of community initiatives
- Lack of visible role models to encourage screening

Finally global Barriers well include

- Lack of uniformity of recommendations (Stein, 2011).

Barriers to Breast Cancer Screening tests

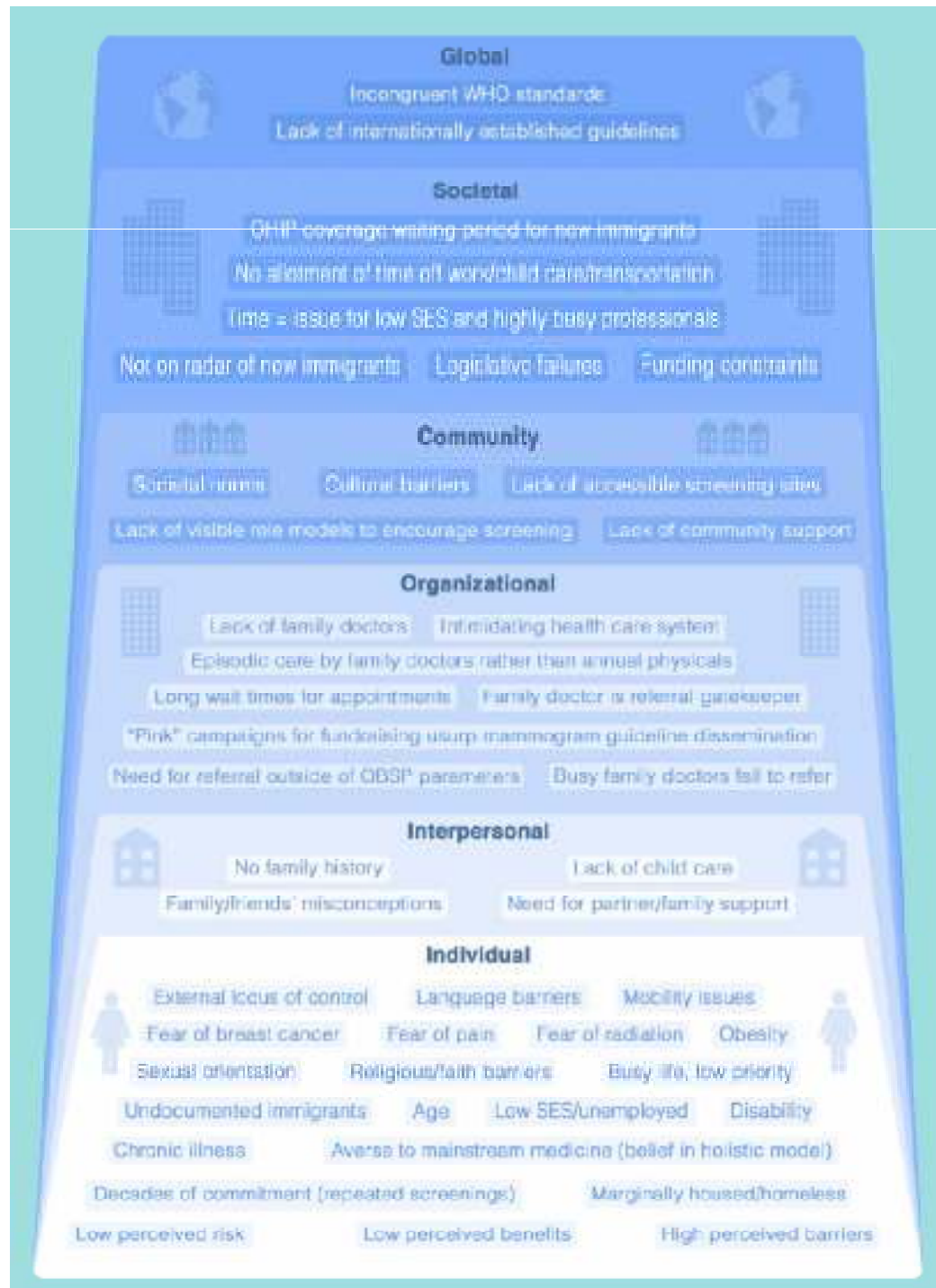


Figure (3.2): Barriers to Breast Cancer Screening (Stein, 2011).

Table (3.2) Barriers towards Breast Cancer Screening tests among Arab Women

Barrier	Country
Inadequate knowledge of breast cancer and screening activities	Saudi Arabia, Egypt, Jordan, Israel, Yemen, Sudan, Iran, Palestine, UAE
Adequate knowledge yet still low participation rates	Kuwait, Qatar, Turkey, Jordan, Iran
Sources of knowledge of breast cancer and screening activities: media, friends and health care providers	Saudi Arabia, Yemen, Iran, Kuwait
Health care providers were found to have inadequate knowledge of breast cancer screening	Jordan, Iran
Adequate knowledge yet only 65% were regularly performing BSE	UAE
Professional recommendation was found to be an important facilitator however low percentages of health care providers were found to provide recommendation for breast cancer screening	Iran, Israel, Yemen
Socio-demographic factors such as age, education, income, marital status, employment, living in urban vs. semi-urban areas as predictors of breast cancer screening	Saudi Arabia, Iran, Egypt, Qatar, Lebanon, UAE, Jordan
Socio-demographic such as age, education, marital status were not predictors	Turkey, UAE
Informal social support-objection of spouse to breast cancer screening only mentioned by small minority of 2.7% and 8.9% respectively	UAE, Qatar
Fear of losing traditional role as woman as a result of cancer diagnosis as barrier	Israel
Fear of losing traditional role as woman not a barrier	Israel
Fear of losing traditional role as woman was concern but not strong enough to act as barrier	Israel
Fear of losing traditional role as woman as a facilitator	Iran
Embarrassment regarding breast cancer screening activities	Saudi Arabia, Qatar, UAE, Jordan, Egypt, Israel, Iran

Barrier	Country
Embarrassment only mentioned by 4%	Turkey
Although embarrassed women expressed this was not enough to act as a barrier	Israel, Iran
Fear of gossip regarding breast screening practices	Israel
Recommendation of breast screening from friend or family	Iran, Jordan, Israel
Religious influences regarding breast cancer screening as a Facilitator	Israel, Iran
Women expressed religion not to be a barrier for BSE	Iran
Religious influences regarding breast cancer screening as a barrier	Israel
Accessibility to breast cancer screening facilities	Qatar, UAE, Iran, Egypt, Iran
Cost and lack of health insurance to cover breast cancer screening as barrier	Turkey, Jordan, Iran, Israel
Cost were not a barrier	Saudi Arabia, Qatar
Positive attitude toward learning about breast screening	Yemen, Kuwait, Saudi Arabia, Jordan
Self-confidence in ability to perform BSE	Iran, Yemen, Jordan, Turkey
Self-confidence in BSE only mentioned by 7%	UAE
Self-care as a low priority	Egypt, Kuwait, Turkey, Iran, Qatar, UAE
Fear of breast cancer diagnosis as a barrier	Qatar, UAE, Yemen, Kuwait, Egypt, Turkey
Fear of breast cancer diagnosis as a barrier or a facilitator	Israel
Fear of pain from mammogram or CBE	Israel, UAE, Qatar,
Fear of pain only mentioned by minority	Jordan
Perception of low susceptibility to breast cancer as barrier	Israel, Turkey, Iran, Jordan
Perception of low susceptibility to breast cancer not found as barrier	Iran
Perceived effectiveness of breast cancer screening	Israel, Iran, Kuwait, Turkey

Donnelly et al., 2013.

Chapter Four

Methodology

Chapter Four

Methodology

This chapter describes the research methodology, which include the research design, setting, population, process of sample and sampling method, fieldwork preparation, , data collection tool, validity and reliability and data analysis.

4.1 Study design

A cross sectional descriptive design was used to achieve the aim of the study that was intended to explore Breast Cancer screening test barriers among women in Nablus Governorate.

4.2 Setting and site

After searching about centers that deal with woman's issues, 13 centers were found in Nablus city, and five centers were in Beta and Beit Furik villages.

The study was conducted at women's social centers in each of the following areas: Adjoined Association center (Nablus city).

The second center Beta Development Association center which established in 2007 aimed at empowering women (Municipality of Beit Furik, 2013).

The third was Beit Furik Association center: which regularly do health education, straw and household arts courses (wafainfo.ps).

The last one was Al Ommahat Association center in Old Askar refugee camp which aimed to develop the cognitive abilities of housewives and young mothers in the core subjects of the curriculum at the elementary level (wafainfo.ps).

4.2.1 Nablus Governorate

Nablus is a governorate located in the north of West Bank. The total area is about 10.7 % of the West Bank. It includes 67 localities including three refugee camps that equal 26.3% of the area. The governorate's population was estimated at 340,117 people at the end of 2010; 168,018 were females and the rest are males (PCBS, 2010).

4.2.2 Nablus City

Nablus city is located in the mid northern of West Bank, and it is the heart of Palestine; it links the north with south and east with west. It is 69 km² away from Jerusalem and 114 km² from Amman. The total population reach up to 126 132, and the number of women from age (30 – 60) is 18 000, and the total number of women centers is nearly 19 centers (PCBS, 2007).

4.2.3 Beita Town

Beita is 15 km to the southeast of Nablus; it is in the center of the area, which is made of thirty-one different villages and communities. The total area of the town is twenty-two thousand acres with a population of

9079 people and 975 women with in the age group of (30 – 60). (PCBS, 2007)

There are three medical clinics; the Ministry of Health runs one; the other two are private centers, (Beita Municipality, 2010), in addition, there are two social centers cared about women.

4.2.4 Beit Furik Village

It is located to the east of Nablus City about 7 km; the population is about 14,000 people. Women who are at the age (30-60) are more than 1,243 according to the (PCBS, 2007). There is only one governmental health clinic in addition to a number of private clinics. More over there are three social centers cared about women issues (Municipality of Beit Furik, 2013).

4.2.5 Askar Refugee Camp

This camp is only 5km to the north east of Nablus. The total population reach about 16,000 inhabitant, and the number of women within the age group of (30- 60) reaches up to 1,534 women, and it has 7 health centers (PCBS, 2011)

4.3 Study Population

The study population was women of the age group of 30 to 60 who lived in Nablus Governorate. According to (PCBS, 2011), the total population was estimated about 42000 distributed as following 18,136 in Nablus city , 20.144 in the villages and 4,072 in the three refugee camps .

4.4 Sample Size and Sampling Method

The sample size was determined based on having confidence level 95%, confidence interval 5.65, with percentage of 50%, and so the sample size calculated to be 300; Using the soft ware calculation system.

Simple random method was used to select the different areas of the study; in which the old Askar camp was selected from three camps; (Balata refugee camp, Alain refugee camp and Askar refugee camp). And the two villages (Beit Furik, Beita) were selected out of the highest populated villages (above five thousand) ; (Asira ash Shamaliya , Salim ,Beit Furik, Awarta , Huwwara, Beita, Jamma'in, Aqraba, Qabalan).

The Proportion method was used to select the sample size from each area as following; Nablus city (42. 8 %) 127, villages (47. 6%) 133, refugee camps (9.6%) 40(table 1).

Convenience method was used to select the participants women from each selected center and meeting the inclusion criteria during the period of study.

Table (4.1): The distribution of study sample

Type of locality	No. of pop.	% of pop.	Sample size	Response rate
Nablus city	18,136	42,8	127	78 %
The rest of the urban and rural communities	20.144	47,6	133	96%
Refugee camps	4,072	9.6	40	100%
Total	42,352	100,0	300	89%

4.5 Exclusion and Inclusion Criteria

The sample selected according to the following criteria:

1. Women's age between 30 to 60 years.
2. Women have no breast cancer history.

4.6 Data Collection Tool

After searching the literature review and previous studies related to the field of accessing breast cancer screening barriers, the tool adopted and modified from previous study by (Azaiza, et al 2010).

The questions (5, 7, 13, 15, 16, 18, 19, and 26) were not included in questionnaire of this study as they were designed to assess the general knowledge of women about breast cancer and its seriousness and the susceptibility of developing it .

The questionnaire consisted of four parts (Annex 1)

Part one: the demographic data; age, marital status, academic qualification, and work, place of residence, monthly income and kind of health insurance.

Part two: Women's knowledge about breast cancer screening test and it consisted of two types of questions; the first one included three questions answered by (yes or no) to detect if women knows the types breast cancer screening tests. The other one composed of three statements

about the usefulness of doing these tests and answered by Likert scale of five choices (Very Useful to - Not useful).

Part three: Women's practicing of breast cancer screening test: it consisted of six open-ended questions. (Annex 1-1)

Part four: Barriers inhibiting women from performing breast cancer screening test; this part was answered by Lickart scale composed of five choices range from (Strongly agree -strongly disagree) and it consisted of 53 items that covered 5 domains;

First domain: fear from breast cancer, which consisted of 12 items that describe women's feeling that inhibit them from performing breast cancer screening test (Annex 1-2).

Second domain: consisted of 12 items about general barriers that prevent women from performing breast cancer screening tests (Annex 1-3).

Third domain: included 9 items about barriers that prevent women from performing CBE by health care providers (Annex 1-4).

Forth domain: consisted of 11 items about barriers that prevent women from performing BSE (Annex 1-5).

Fifth domain: consisted of 9 items about the Mammogram screening barriers (Annex 1-6)

Independent variables: Age, Educational status, Place of residency, Relatives with breast cancer.

Dependent variables: Performing breast cancer screening tests (Mammography, CBE, BSE), General barriers (Cultural, Financial, Geographical)

4.7 Validity and Reliability

The questioner was reviewed by two experts, and there were no comments.

A pilot study was carried out in 70 women from Nablus city considering inclusion criteria in order to test the study tool and to revise the method and logistic of data collection before starting the actual fieldwork. Accordingly no changes performed on data collection tool, and the piloting sample was excluded from the actual study sample.

The reliability coefficient was found out by chronbach alpha as following :

Table (4.2): The result of chronbach alpha test

Item	chronbach alpha
Fear of catching breast cancer	(.805)
Obstacles that prevent women to perform breast cancer screening	(.872)
Barrier that prevent women to perform CBE	(.578)
Barrier that prevent women to perform BSE	(.681).
Barrier that prevent women to perform mammography	(.613)

4.8 Ethical Considerations

Approval from An-Najah National University was obtained before starting the thesis.

A written signed consent (Annex 2) form to indicate women's agreement to participate in the study was obtained after the objectives and

aims were explained to participants before distributing of the questionnaire and filling them.

4.9 The Study Procedure

The questionnaire was distributed to the participants in the period between 1 \ 8 to 1 \ 9 \ 2013.

The total number of retained questioner was (269) with rate (89%).

The administrative / head of each centre was contacted through telephone, and an initial visit was arranged to each center.

During the first visit, the purpose and objective of study was clarified, in addition an estimation of the number of women who visited the centers was taken. The procedure and the way of distributing and return back of questionnaire were discussed, and the number of visits need for each center was determined.

1-Nablus city: three visits have been carried out and in each visit the purpose and inclusion criteria was explained to women who were present in that days in Aljinied Association. Each visit took 30-40 minutes, resulted of the visits 120 participants from 16 \ 8 to 24 \ 8 \ 2013

2-Askar refugee camp: two visits have been carried out and in each visit the purpose and inclusion criteria was explained to women who were present in that days in Al Ommahat Association center. Each visit took

30-40 minutes, and 49 participants agreed to participate from 25 \ 8 to 1 \ 9 \ 2013

3-Beta and Beit Furik: five visits had been carried out and in each visit the purpose and inclusion; criteria were explained to women who were present in that days in Beta Development Association and Beit Furik Association. Each visit took 30-60 minutes, and 130 participants agreed to participate (80 in Beta and 50 in Beit Furik) from 1 \ 8 to 15 \ 8 \ 2013.

4.10 Scoring System

To analyze the findings, the following scale was used to represent the estimation level of women' responses, which have five –response Lickert method:

Strongly agree (5) points

Agree (4) points

Moderately agree (3) point

Disagree (2) point

Strongly disagree (1) point

Then the percentage and level of agreement were calculated and arrangement in a descending order according to the mean of all the questions of the questionnaire and the level of agreement score was as following:

80% and more=very high

79.9%-60%= high

59.9%-40%=middle

39.9%and less= Low

4.11 Data Analysis

The data were analyzed by using (SPSS) to provide answers to the questions of the study including the following tests:

1. Frequencies and Percentages
2. Mean and Standard Deviation
3. One-Way Analysis of Variance (ANOVA),
4. Scheffe Post Hoc test

Chapter Five

Results

Chapter Five

Results

This chapter presented in details the result of the study .It includes description of socio-demographic data of participants, their knowledge and practice of breast cancer screening test, and the related barriers.

5.1 Participant's socio-demographic data

Table (5.1): Distribution of the percentage of the participant regards their socio-demographic data

Item	Valid	No.	%
Age	30-40	163	60.6
	41-50	61	22.7
	More Than 50	45	16.7
Marital Status	Single	32	11.9
	Married	209	77.7
	Widowed	22	8.2
	Divorced	5	1.9
Educational Status	Bachelor Degree	62	23.0
	Diploma	23	8.6
	The General Secondary Certificate Examination- GSCE - (Tawjihi)	74	27.5
	Preparatory Stage	104	38.7
Job Status	Employed	55	20.4
	Un Employed	205	76.2
Place Of Residency	City	100	37.2
	Village	130	48.3
	Camp	39	14.5
Monthly Income	Less Than 1000 Nis	66	24.5
	1000 - 2000 Nis	92	34.2
	2001 - 3000 Nis	74	27.5
	More Than 4000 NIS	32	11.9
Type Of Insurance	Governmental	158	58.7
	UNRWA	25	9.3
	Private	29	10.8
	No Assurance	56	20.8
Family History Of Breast Cancer	Yes	55	20.4
	No	214	79.6

Item	Valid	No.	%
Relative With Breast Cancer	Mother	5	1.9
	Sister	4	1.5
	Aunt	11	4.1
	Grandmother	3	1.1
	Others	32	11.9
Physician Advice To Do Breast Test By X-Ray	Yes	50	18.6
	No	167	62.1
	Don't Remember	42	15.6
The Hazard Of Breast Cancer According To Participants Perception	Very Dangerous	171	63.6
	Dangerous	51	19.0
	Medium	35	13.0
	Small	9	3.3
	Not dangerous at all	1	.4
	Total	269	100.0

Table (5.1.1) showed that (60.6%) of participants were within the age group of (30 – 40) years and (77.7%) of them were married. It also showed (38.7%) of them completed preparatory stage and (70.3%) of them were housewife. Regarding their monthly income, it ranged from 1000 to 2000 NIS (34.2%) and (24.5%) of them had less than 1000 NIS. Moreover (58.6%) had a governmental insurance.

5.2 Participants knowledge and their perceptions about usefulness of breast cancer screening test for early detection

Table (5.2) Distribution of the percentage of the participant regards their knowledge of breast cancer screening tests and the Usefulness for early detection.

Variable		Mammogram		BSE		CBE		Total
Knowledge of participants about breast cancer test	Answer	No.	%	No.	%	No.	%	269
	Yes	160	59.5	181	67.3	128	47.6	
	No	106	39.4	83	30.9	132	49.1	100.0
Participants perceptions of usefulness of breast cancer screening test for early detection	Mean \pm Std.	4.3167 \pm .97228		4.0042 \pm 1.10343		3.9534 \pm 1.13454		4.0978 \pm .89158
	Percentage	86.3		80.1		79.1		82.0

Table (5.2) showed that (39.4%), (49.1%), (30.9%) of participants did not know mammogram, CBE and BSE respectively. For their perceptions about usefulness of breast cancer screening test, (86.3%), (80.1%), (79.1%) of them believed in the value of Mammography, BSE and CBE respectively in early detection of breast cancer.

5.3 Participants practice of breast cancer screening tests:

Table (5.3) Distribution of the percentage of the participant regards their practice of breast cancer screening tests.

Item	CBE		Mammography	
	No	Percent	No	Percent
Frequency of performing test				
Once each six months	34	12.6	33	12.3
Every year	22	8.2	6	2.2
Every other year	21	7.8	10	3.7
Never do	162	60.2	199	74.0
Other	29	10.8	21	7.8
Total	269	100.0	269	269

Table (5.3) showed that (60.2%) of the participants had never performed CBE and (7.8%) of them did it every other year. For Mammography (74.0%) did not perform it and (3.7%) of them did it every other year.

5.4 Participants perceptions of breast cancer screening barriers:

Table (5.4): Distribution of the mean, standard deviations, level of agreement and percentage of participants regarding their fear of having cancer.

No	The order	Items	Mean \pm Std	%	agreement
9	1	Fear of suffering cancer pains خشية من معاناة المرض	3.7569 \pm 1.24693	75.1	big
10	2	Fear of changing physical appearance الخشية من تغيير مظهري الخارجي	3.6473 \pm 1.25519	72.9	big
2	3	Fear of family grief الخشية من حزن أبناء العائلة	3.5659 \pm 1.36005	71.3	big
7	4	Fear of losing children and finding one to look after them خشية من إهمال العناية بالأولاد، ولا يوجد من يعتني بهم	3.2992 \pm 1.30862	66.0	big
8	5	Fear of death خشية من الموت	3.0941 \pm 1.39705	61.9	big
1	6	Fear of people sympathy الخشية من شفقة الناس الذين يعرفونك	3.0588 \pm 1.37486	61.2	big
11	7	Fear gossips and rumors الخشية من حديث الناس والأقارب	2.9300 \pm 1.29714	58.6	middle
12	8	Fear of changing sexual relations with husband الخشية من التغيير في العلاقة الجنسية مع زوجي	2.9295 \pm 1.32571	58.6	middle
3	9	Fear of husband's leave or abandonment خشية من هجر الزوج	2.6560 \pm 1.30863	53.1	middle
4	10	Fear of losing job خشية من فقدان العمل	2.2880 \pm 1.07409	45.8	middle
6	11	Fear of losing friends خشية فقدان الأصدقاء	2.1265 \pm 1.03501	42.5	middle
5	12	Fear of children disrespect خشية من عدم احترام الأولاد لك	1.8233 \pm 1.03998	36.5	little
Total average			2.9569 \pm .77166	59.1	middle

Table (5.4) illustrated the mean score of feeling of fears. The mean score of fear was $2.9 \pm .77$ and it reflects average agreements (59.1%).

"Fear of suffering" and "Fear of change in my appearance" took the highest percentages among fears, as (75.1%), (72.9%) respectively of participants reported.

It also showed that "Fear of sexual relation disturbances with my husband".

And "Fear of being abandoned by husband" took a middle agreement as (58.6%), (53.1%) of them agreed upon it respectively.

Table (5.5): Distribution of the means, the standard deviations, the level of agreement and percentage regarding the general barriers of practicing breast cancer screening tests.

NO	The order	Items	Mean± Std	%	Agreement
Culture					
1	1	Being ashamed of uncovering herself to a male physician الخجل من كشف الجسم أمام طبيب	3.2890± 1.36762	65.8	big
5	2	Fear of having the disease الخشية من اكتشاف المرض لدي	3.2165± 1.08479	64.3	big
9	3	Lack of my experience in detecting changes in my breasts لا تتوفر الخبرة لدي لملاحظة التغيرات التي قد تحصل لنثدي	2.8725± 1.26082	57.5	middle
6	4	Being uncomfortable when looking at my body أنا لا أشعر بالارتياح عند النظر إلى جسمي	2.8025± 1.24591	56.1	middle
7	5	Being dissatisfied and annoyed when touching my breasts لا أشعر بالارتياح عند لمسي لصدري	2.7125± 1.32338	54.3	middle
3	6	Religion rulings concerning uncovering the body to a foreigner منع كشف الجسم حسب الدين	2.4856± 1.28004	49.7	middle
8	7	Lack of privacy in conducting the test لا توجد عندي خصوصية للقيام بهذا الفحص	2.4696± 1.34314	49.4	middle
4	8	Fear of being seen at clinic or hospital by relatives خشية رؤية المعارف لي في العيادة	2.4449± 1.23223	48.9	middle
2	9	Being ashamed of uncovering herself to a female physician الخجل من كشف الجسم أمام طبيبة	2.4077± 1.29911	48.2	middle
Mean culture			2.7282± .84063	54.6	middle

Geographical					
	10	Long distance from clinic or hospital بعد المسافة وصعوبة الوصول للعيادة	2.3180± 1.14456	46.4	middle
	11	Military check-points and Separation Wall وجود الحواجز العسكرية والجدار الفاصل	2.4231± 1.33481	48.5	middle
Mean geographical			2.3566± 1.13263	47.1	middle
Financial					
	12	Cost التكاليف المادية	3.1756± 1.28344	63.5	big
Total mean			2.7552± .83177	55.1	middle

Table (5.5) showed the general barriers of practicing breast cancer screening tests. It showed that the mean score is $2.7 \pm .83$, with average agreement of (55.1%). It illustrated three types of barriers the cultural, geographical and financial barriers.

The mean of financial barrier was 3.1 ± 1.2 with high agreements as (63.5%) reported, the cultural and Geographical barriers represented middle agreement with a mean scores of $2.7 \pm .84$ and 2.3 ± 1.13 for each respectively.

Regarding cultural barrier, “Embarrassment with exposing the body in front of a male doctor is difficult for you in undergoing a breast”, and “The fear of being diagnosed as having breast cancer is difficult for you in undergoing a breast exam” represented the highest mean 3.2 ± 1.36 , 3.2 ± 1.08 respectively, which had a high agreement.

Table (5.6): Distribution of the means, the standard deviations, the level of agreement and percentage of participants regard CBE barriers.

NO	The order	Items	Mean± Std	%	Agreement
2	1	Conducting CBE by medical care providers enables to control your health. القيام بفحص الثدي من قبل مقدمي الرعاية الصحية يعطيك الإحساس بالسيطرة على صحتك	4.0228± .90769	80.5	big
4	2	Conducting CBE by medical care providers increases the likelihood of curing the disease. القيام بفحص الثدي من قبل مقدمي الرعاية الصحية يزيد من احتمالات الشفاء من المرض	4.0077± 1.03401	80.2	big
5	3	Conducting CBE by medical care providers ensures you are free of the disease and reduces anxiety or fear. القيام بفحص الثدي من قبل مقدمي الرعاية الصحية يعطيك ضمان بأنك سليمة ويقلل من قلقك	3.9921± 1.14778	79.8	big
1	4	Conducting CBE by medical care providers enables to early detect possible changes and problems القيام بفحص الثدي من قبل مقدمي الرعاية الصحية ممكن من اكتشاف أية مشكلة لديك بالثدي بمرحلة مبكرة	3.8294± 1.20037	76.6	big
3	5	If you don't examine your breast regularly, your health will be endangered. إذا لم تواظبي على القيام بفحص الثدي من قبل مقدمي الرعاية الصحية هذا قد يعرض حياتك للخطر أكثر	3.7947± 1.14404	75.9	big

8	6	You feel afraid of having the disease if you conduct CBE with medical care providers. أنت تخشين الذهاب لفحص الثدي من قبل مقدمي الرعاية الصحية خوفا من اكتشاف شيء	3.0474± 1.26213	60.9	big
6	7	You feel ashamed of conducting CBE by medical care providers. أنت تشعرين بعدم الراحة والخجل من القيام بفحص الثدي من قبل مقدمي الرعاية الصحية	2.9225± 1.18756	58.5	middle
7	8	Conducting CBE by medical care providers causes pain. فحص الثدي من قبل مقدمي الرعاية الصحية يؤلم	2.3957± .96120	47.9	middle
9	9	In case you have the disease, it is useless to conduct breast screening because it is too late. لا داعي للقيام بفحص الثدي لأنه في حال اكتشاف سرطان سيكون قد تأخر الوقت	2.3478± 1.23666	47.0	middle
Total average			3.3909± .55632	67.8	big

Table (5.6) showed the barriers that prevented the participants from performing CBE by health care providers; the mean score was $3.3 \pm .55$, which had a high agreement (67.8%).

"You are afraid to go and have a breast exam by a health care provider because something might be discovered" represented the highest barriers with high agreement (60.9%) and the mean score was 3.0 ± 1.2 .

The second barriers were "You feel discomfort and embarrassment to undergo a breast exam by a health care provider" and "Breast exam by a health care provider is painful" which got middle agreement as (58.5%), (47.9%) reported respectively.

Table (5.7): Distribution of the means, the standard deviations, the level of agreement and percentage of participants regarding barriers of performing BSE:

NO	The order	Items	Mean± Std	%	Agreement
4	1	Conducting BSE gives me the feeling to control myself. إجراء الفحص الذاتي يعطيك الإحساس بالسيطرة على صحتك	3.9154± .98666	78.3	Big
3	2	Conducting BSE enables me to early detect the disease. إجراء الفحص الذاتي للثدي يمكنك من الاكتشاف المبكر لسرطان الثدي	3.8340± 1.04210	76.7	Big
6	3	Conducting BSE guarantees that I am void of the disease and reduces my stress and anxiety. إجراء الفحص الذاتي للثدي يعطيك الضمان بأنك سليمة ويقلل من قلقك	3.7817± 1.08042	75.6	Big
5	4	Conducting BSE increases the possibility to treat and get rid of the disease. إجراء الفحص الذاتي للثدي يزيد من احتمالية الشفاء من مرض سرطان الثدي	3.6538± 1.20943	73.1	Big
1	5	I know how to apply BSE. لديك المعرفة بإجراء الفحص الذاتي للثدي.	3.5644± 1.12845	71.3	big
2	6	I am sure of my ability to apply BSE. متأكدة من قدرتك على إجراء الفحص الذاتي للثدي	3.3015± 1.14668	66.0	big
10	7	You fear conducting the BSE because you may have the disease. تخشين الفحص الذاتي للثدي خوفاً من اكتشاف شيء	2.6463± 1.17148	52.9	middle
7	8	You feel shy of applying the BSE. تشعرين بعدم الراحة والإحراج من القيام بالفحص الذاتي للثدي	2.5224± 1.18240	50.4	middle

11	9	It is useless to conduct the BSE in case you have the disease, as it is too late. لا داعي للقيام بفحص الثدي الذاتي لأنه في حال اكتشاف سرطان سيكون قد تأخر الوقت	2.3454± 1.28311	46.9	middle
8	10	You don't have the time to conduct the BSE. لا يوجد لديك الوقت لإجراء فحص الثدي الذاتي	2.3254± 1.13495	46.5	middle
9	11	Conducting BSE causes pain. الفحص الذاتي للثدي مؤلم	2.2041± 1.13765	44.1	middle
Total average			3.3977± .53065	68.0	big

Table (5.7) showed the barriers regarding performing BSE, which also took a high agreement as (68.0%) reported it and its mean score was 3.3±.53.

"You are afraid to do a breast self-exam because you might find something", "You feel discomfort and embarrassment to perform a breast self-exam", "You have no time to perform a breast self-exam"

And "Performing a breast self-exam is painful" represented the mean barriers with mean scores of 2.6±1.17, 2.54± 1.18, 2.3±1.13, 2.21±1.13 respectively with a middle agreement of (52.9%), (50.4%), (46.5%), (44.1%) respectively.

Table (5.8): Distribution of the means, the standard deviations, the level of agreement and percentage of participants regard barriers of performing mammography.

NO	The order	Items	Mean± Std	%	Agreement
1	1	Conducting mammography ensures you are void of the disease and increases your confidence. إجراء فحص الأشعة يمكن أن يعطي ضمان بانك سليمة ويقلل المخاوف	4.2143± .82401	84.3	Very big
2	2	Conducting mammography may find a swelling at an early stage which results in sound and successful treatment. عند إجراء فحص الأشعة يمكن اكتشاف درنة في الثدي و هي ما زالت صغيرة وهذا يؤدي لعلاج وشفاء ناجحين	4.0325± 1.02964	80.7	Very big
5	3	Conducting mammography regularly is expensive. فحص الأشعة هو فحص غالي الثمن	3.0241± 1.14275	60.5	big
7	4	Conducting mammography regularly is difficult as it may lead to negative results. تجدين صعوبة في إجراء فحص الأشعة خوفا من اكتشاف شي	2.9442± 1.12644	58.9	middle
4	5	Conducting mammography regularly is difficult as it takes time. من الصعب إجراء فحص الأشعة بشكل ثابت لأنه يأخذ وقتا	2.7647± 1.08465		Middle
6	6	Conducting mammography regularly may harm your health. فحص الأشعة يمكن أن يؤدي صحتك	2.6411± 1.12581	52.8	Middle
3	7	Conducting mammography causes pain. فحص الأشعة هو فحص مؤلم	2.5080± 1.03451	50.2	Middle
9	8	You don't feel relaxed when you conduct mammography. انت تشعرين بعدم الراحة والخرج من إجراء فحص الأشعة	2.4545± 1.14906	49.1	Middle
8	9	It is useless to conduct mammography in case you have the disease as it is too late. لا داعي من إجراء فحص الأشعة لأنه إذا وجد سرطان فسيكون قد تأخر الوقت	2.4127± 1.23862	48.3	Middle
Total average			3.0825± .57470	61.7	Big

Table (5.8) showed the barriers related to performing Mammography and this section got the high agreement as (61.7%), with mean score $3.0825 \pm .57470$.

"Mammography is an expensive test" had a highest agreement (60.5%).

The other barriers which took a middle agreement were "It's difficult to undergo regular mammography tests because it takes time" (55.3%), "Mammography tests can be harmful to your health" (52.8%), "Mammography is a painful test" (50.2%), and "You feel discomfort and embarrassment regarding undergoing a mammography" (49.1%).

5.5 Results of the hypothesis

Relationship between Breast cancer screening test barriers and demographic data (age, place of residency, educational status and relatives with breast cancer) were assessed in the current study.

Table (5.9): Distribution of Mean, standard deviation and significances of the relationship between Breast cancer screening tests barriers and demographic data

Item	Mammogram		F / Sig.	CBE		F / Sig.	BSE		F / Sig.
	N	Mean ±Std.		N	Mean ± Std.		N	Mean ± Std.	
Age									
30-40	156	3.0175±.57355	2.704/ .069	160	3.3656±.56389	.469/ .626	161	3.3984±.53147	.269/ .765
41-50	60	3.2089±.57739		61	3.4444±.51400		61	3.4289±.52745	
More Than 50	44	3.1402±.55241		44	3.4090±.59072		44	3.3518±.54097	
Place Of Residency									
City	100	2.9765±.45816	3.106/ .046	100	3.3764±.58512	.060/ .941	100	3.4106±.58960	.072/ .931
Village	127	3.1308±.63882		127	3.3971±.58346		128	3.3949±.53034	
Camp	33	3.2172±.59487		38	3.4085±.36322		38	3.3731±.34658	
Educational Status									
Bachelor Degree	61	2.9496±.51530	1.687/ .170	60	3.2717±.68797	2.383/ .070	61	3.4009±.69553	3.291/ .021
Diploma	23	3.0779±.46199		23	3.2120±.52570		23	3.1530±.28121	
Tawjihi	71	3.0933±.55705		73	3.4713±.49475		73	3.5203±.47736	
Preparatory Stage	100	3.1585±.63669		104	3.4234±.49798		104	3.3495±.47597	
Relatives With Breast Cancer	T / Sig.			T / Sig.			T / Sig.		
Yes	55	3.1221±.71435		55	3.5131±.70321		55	3.5681±.56051	
No	205	3.0718±.53265	.010	210	3.3589±.50815	.000	211	3.3533±.51475	2.706/ .291

Table (5.9) illustrated the relationship between breast cancer screening tests barriers and demographic data by using One-way ANOVA (F) and T test (T).

It showed that there was no relation between age and the barriers of conducting the mammography, CBE and BSE screening tests (*p values* .069), (*p values* .626), (*p values* .765) respectively. It also showed that there was no relation between place of residency and the barriers of performing CBE and BSE screening tests (*p values* > *than 0.05*), but it was significant in relation to barriers of performing mammography (*P values* .046. Table (5.10) indicated the mean of barriers was higher in village and camp (.154, .240) respectively than those in the city.

Table (5.10) Scheffe Post Hoc test, for comparing the means of mammography to place of residence:

place of residence	City	Village	Camp
City		.15429(*)	.24071(*)
Village			
Camp			

*Statically significant at ($\alpha = 0.05$)

Table (5.10) also showed there was a significant relationship between presence of relatives with breast cancer and the barriers of conducting mammography and CBE (*P values* .010) (*P values* 0.00) respectively.

Regarding the relationship between educational status and the barriers of conducting mammography and CBE, there was no significant relationship. While between educational status and the barriers of conducting the BSE there was a significant relationship (*P values* .021). Table (5.11) indicated the mean of barriers to level of education was higher in General secondary

certificate examination (GSCE) stage than those in Diploma (.367) and higher in preparatory stage than those in GSCE stage (.170).

Table (5.11) Scheffe Post Hoc test, for comparing the means of barriers to level of education:

Educational level	Bachelor Degree	Diploma	GSCE	Preparatory stage
Bachelor Degree				
Diploma			-.36732(*)	
GSCE				
Preparatory stage			.17082(*)	

**Statically significant at ($\alpha = 0.05$)*

Table (5.12) showed the Relationship between general barriers (Cultural, geographical and financial barriers) and demographic data (age, place of residency, educational status and presence of relatives with Breast Cancer)

Table (5.12) Mean and standard deviation of relationship between general barriers and demographic data:

Item	Culture		Geography		Financial costs		Total Mean±Std.
	N	Mean ±Std.	N	Mean ± Std.	N	Mean ± Std.	
Age							2.7552±.83177
30-40	140	2.6476±.83190	158	2.2089± 1.07995	161	2.9565±1.29106	
41-50	45	2.8543±.83074	58	2.4569± 1.05666	60	3.3833±1.24997	
More Than 50	30	2.9148±.87083	42	2.7738± 1.32150	41	3.7317±1.09600	
F / Sig.	1.905	.151	4.543	.012	7.318	.001	.002
Place Of Residency							
City	88	2.6225±.72333	100	2.3500±1.10896	100	2.8300±1.09226	2.7552±.83177
Village	100	2.7844±.92435	121	2.3678±1.20029	124	3.2500±1.36522	
Camp	27	2.8642±.86195	37	2.3378±.98639	38	3.8421±1.19744	
F / Sig.	1.276	.281	.013	.988	9.544	.000	.096
Educational Status							
Bachelor Degree	55	2.5455±.86259	60	2.0167±.93866	61	2.6393±1.22519	2.7395±.80957
Diploma	22	2.7929±.53375	23	2.3261±.98406	23	3.3043±1.01957	
Tawjihi	61	2.6776±.82793	68	2.1691±1.13824	72	3.1944±1.29614	
Preparatory Stage	74	2.8949±.86534	103	2.6602±1.17409	103	3.4660±1.25882	
F / Sig.	2.022	.112	5.213	.002	5.747	.001	.001
Relatives With Breast Cancer							
Yes	51	3.0523±.88509	54	2.4630±1.26585	51	3.0523±.88509	2.9948±.86029
No	164	2.6274±.80272	204	2.3284±1.09633	164	2.6274±.80272	2.6931±.81481
T / Sig.	3.221	.761	.776	.056	3.221	.761	.652

Table (5.12) showed the relationship between general barriers (Cultural, geographical and financial barriers) and demographic data.

In general, there was a significant relationship between age, educational status and general barriers (*p value.002*), (*p value.001*) respectively.

Also there was a relationship between the age and geographical and financial barriers (*p value.012*) and (*p value.001*) respectively.

Further, there was a relationship between the educational status and geographical and financial barriers (*p value.002*), (*p value.001*) respectively.

Scheffe Post Hoc test:

Table (5.13) Scheffe Post Hoc test, for comparing the mean of general barriers according to age

Age	30 to 40 years	41 to 50 years	More than 50 years
30 to 40 years			.46479(*)
41 to 50 years			
More than 50 years			

**Statically significant at ($\alpha = 0.05$)*

Table (5.13) illustrated the mean of general barriers according to age was higher in the age group (more than 50 years).

Table (5.14) Scheffe Post Hoc test, for comparing the mean of general barriers according to level of education

Educational Status	Bachelor Degree	Diploma	GSCE	Preparatory stage
Bachelor Degree				.50252(*)
Diploma				
GSCE				.30747(*)
Preparatory stage				

**Statically significant at ($\alpha = 0.05$)*

Table (5.14) showed the mean of general barriers according to level of education was higher in preparatory stage, as reported by participants (.502, .307) than those of bachalore degree and higher than those of GSCE degree.

Chapter Six

Discussion

Chapter six

Discussion

6.1 Demographic data

Table (5.1) showed that two-third (60.6%) of participants within the age group of (30 – 40) years; according to (PCBS, 2007) the percentage of women aged from 30-40 in Nablus governorate reached (%6.8%). The table also showed that about more than one-third (38.7%) of them completed preparatory stage. These finding go in line with the (PCBS, 2010) findings which reported that the percent of women within the age group of (30-60) who ended the preparatory stage is (35.2 %). And that only (20.4%) of them has a paid work (table 1).This result is in consistent with (PCBS, 2010) statistics that (24.1%) of women had work.

6.2 Participant knowledge about breast cancer screening tests

Table (5.2) showed that about less than two-thirds (59.5%) were familiar with and know mammography. This result was consistent nearly with (Al nagger, Bobryshev, 2012) study in Malaysia which showed that about two thirds of study sample (68%) knows mammography. But it differs from another study which was conducted in Iran by (Montazeri et al., 2008) who found that only (9%) knows mammography. Such differences may be due to the place/country where the study was conducted and so the changes in the information and knowledge regard mammography were different among the participants.

The Participant's knowledge table (5.2) about CBE shows that about less than half of them (47.6%) knows it; a study by (Kanaga et al., 2011) shows nearly the same results as it stated that (50.4%) know CBE. But it differs from (Montazeri et al., 2008) study which showed that only (21%) know it.

BSE is know by two- thirds (67.3%) of the participants table (5.2) this result was in line with (Petro-nustus and Mikhail, 2002) study which conducted in Jordan and stated that about two- thirds (67%) have heard or read about BSE. Another study in Iraq by (Alwan et al., 2012) showed that the majority of the study participants (90.9%) have heard about BSE.

The lack of knowledge about BSE or CBE may due to health education programs about breast cancer screening tests not enough or not effective or the way that these information given to women.

With respect to participant's perceptions about the usefulness of breast cancer screening tests table (5.2), the mean for the participants who believed in the value of mammography, CBE and BSE for early detection were $(4.31 \pm .97)$, (3.95 ± 1.134) , and (4.0 ± 1.10) respectively. These results were nearly closed to those of (Azaiza et al., 2010) study which showed that the mean of women who perceived high benefits of breast screening for mammography was (4.24 ± 0.71) , CBE (3.88 ± 0.73) , and BSE (3.69 ± 0.87) . This means women know about all breast cancer screening tests although they are not practice it and this may be there is a differences between perception and practice.

In table (5.2) (80.1%) of the participants perceptions in the usefulness of BSE, the same result can be seen in (Petro-Nustus et al., 2002) study in Jordan, which stressed that (81%) knows about the usefulness of BSE. In terms of participants perception about the usefulness of mammography, table (5.2) showed that (86.3%) of them were aware about it usefulness in early detection. This result was nearly closed to (Shaheen et al., 2011) study done in Gaza and reports (88%) of the sample were aware that mammography was a useful test for early detection. This positive perception may due to the health education program that focus of the percent of surviving when performed these tests.

6.3 Participant Practice of breast cancer screening tests

As far as the practice of breast screening cancer test is concerned, table (5.3) shows that (39.4%) of the participants perform CBE. In another hand for example a study conducted in Gaza by (Shaheen et al., 2011) revealed that about a quarter (25%) of participants has done a previous CBE. (Donnelly et al., 2013) shows that (33%) performed CBE. Another study was done by (Amin et al., 2009) in Saudi Arabia showed a low percentage, less than (5%) practice CBE. (Khanjani et al., 2012) in Iran found that only (18%) did CBE in the last 2 years.

These differences between Gaza and West Bank may due to different district and different in the year of conducting of the study or it might be due to differences in awareness among women and health centers about the importance of breast cancer in West Bank rather than Gaza.

With respect to mammography performance the result of current study shows that only (26%) did it table (5.3). A study in Gaza conducted by (Shaheen et al., 2011) shows also a low percent (17%) performed a mammography at last once during their live. And according to study done among Muslim women in Israel by (Soskolne et al., 2007) it reported that about half (51%) of participants has never performed mammography, and (47%) had checked once only in a year. These differences between West Bank and Gaza result and Muslim women in Israel may due to follow up for these women and free mammography tests, which is known to the women living in Israel in comparing with women living in West Bank and Gaza.

Also, a study conducted in Saudi Arabia by (Amin et al., 2009) showed also a low percentage as only (3%), had performed mammography. Another study conducted by (khanjani et al., 2012). Also in Iran showed that the majority (83.9%) has never done mammography before. In Iran, (Noroozi and Tahmasebi, 2011) indicated that only (14.3%) of participants aged 40 or more has done mammography once during their live. (Al nagger and Bobryshev , 2012) showed in their study in Iran that only (15%) has mammography once during their live, and only(2%) do it every 2-3 years .

According to MOH recommendations (2005), women from age 35 -40 must do it every three years; women over 40 years should do it every two years, and after they are 50 years or more, they should apply it once every year.

6.4 Participants perceptions of breast cancer screening barriers

The findings showed table (5.4) illustrate that the mean score of women feeling fears of applying breast screening is $2.9 \pm .77$, about two-thirds (59.1%) of participants reported it.

"Fear of suffering" and "Fear of change in my appearance "were ranked the highest among the fears women suffered; more than two-thirds (75.1%) and (72.9%) of participants reported respectively.

When comparing with other studies in term of fear as a barrier, (Parsa et al.,2006) and (Amin et al., 2009) pointed in their studies that “Fear of screening results”, “ Fear of breast cancer screening tests,” and “ Fear of the treatment outcomes” are among the barriers to perform breast cancer screening.

Table (5.4) also showed that "Fear of sexual relation disturbances with my husband" and "Fear of being abandoned by husband" are also among the barrier as (58.6%), (53.1%) of them agreed upon it respectively. (Donnelly et al., 2013) pointed in a study in Israel that “Fear of losing traditional role as woman” was one of the fears but it was not a barrier, this different may due to cultural values that present.

The results in table (5.5) illustrated and showed the general barriers (cultural, geographical and financial) to screening. The financial barrier was reported by about two-thirds (63.5%) of the participants. This result was consistent with (Donnelly et al., 2013) who found in their study in Qatar that

one of the barriers that prevented women from performing breast cancer screening tests was the financial matter. Furthermore, (Donnelly et al., 2013) pointed in their study that cost and not having a health insurance prevented women from performing breast cancer screening test in Turkey, Jordan, Israel and Iraq. This matching may due to the same economic status in those countries. (Donnelly et al., 2013) also pointed that the cost of the test was not a barrier to perform breast cancer screening test in Saudi Arabia due to the level of economic status for Saudi women.

The cultural barrier includes “Embarrassment with exposing the body in front of a male doctor is difficult for you in undergoing a breast” and “The fear of being diagnosed as having breast cancer is difficult for you in undergoing a breast exam” represents the highest mean 3.2 ± 1.36 , 3.2 ± 1.08 respectively; the percentages were (65.8%), (64.3%). Previous study (Parsa et al., 2006) showed that women’s “Feel ashamed to do the CBE at the presence of a male physician”. While (Donnelly et al., 2013) showed in their study, in Qatar, that women’s “Fear of having cancer”, “Hopelessness of finding cure”, perceived benefits” and ,” Fear of gossip and subsequent pains” were likely to be barriers according to such a result. While a Turkish study by (Kissal and Beser, 2011) showed that “Fear of having a tumor”, “Diagnosis of cancer”, or “A removal of breasts” were more to cultural barriers. The similarities of the result about cultural barriers in Palestine and some Arabic and Islamic countries may due to same religious and nearly the same culture which women feeling ashamed when examined by male and the present of wrong thoughts about cancer and cancer treatment.

Table (5.6) showed the barriers that prevented participants in the current study from performing CBE by health care providers were "You feel discomfort and embarrassment to undergo a breast exam by a health care provider" then "Breast exam by a health care provider is painful ".

These results match with the results of (Amin et al., 2009) in Saudi Arabia who showed that the main barriers include “Being ashamed to be examined by male physician and lack of female physicians”. (Donnelly et al., 2013) pointed that “Shame of conducting breast cancer screening tests” was a barrier in seven countries like Saudi Arabia, Qatar, UAE, Jordan, Egypt, Israel, and Iran. This can be attributed to religious and cultural traditions or male controlling over women in those countries. (Donnelly et al., 2013) also pointed that “Fear of pain when performing CBE” was a barrier in Israel, the UAE, and Qatar.

The finding of the study table (5.7) showed the barriers regarding performing BSE. About two-thirds (68.0%) of the participants reported this and the mean score was $3.3 \pm .53$.

The participants believed that "You are afraid to go and have a breast exam by a health care provider because something might be discovered" was the main barrier to perform BSE. An Iranian study by (Al nagger et al. 2011) showed that the percentage of “Being afraid of a diagnosed breast cancer” was only (4.4%), but it was one of the main barriers that hinder women from performing BSE. This fear may due to lack of knowledge of advantages of

that test or due to the present of wrong cultural believes about breast cancer or no present of family encourage to perform it.

For the barriers related to performing mammography table (5.8); about two-thirds (61.7%) of the participants showed this with mean score was $3.0825 \pm .57470$. "Mammography is an expensive test" said about one-third (60.5%) of the study sample. Other barriers include "It's difficult to undergo regular mammography tests because it takes time" according to more than half of the sample (55.3%), "Mammography tests can be harmful to your health" according to (52.8%), and "Mammography is a painful test" according to (50.2%) of the participants.

The previous literature showed nearly the same results; (Al naggar and Bobryshev, 2012) reported that "Lack of time" (42.5%), and "Fear from the test result" (20%) were among the barriers to perform mammography. Another study conducted by Parsa et al. (2006) showed the same barriers "Cost and lack of time" due to women responsibilities especially for married women or having children were among of the most common barriers to perform breast cancer screening tests. (Kanaga et al., 2011) also repeated in their study in Iran that "Low income" was a barrier to perform mammography. In Iranian study by (Ahmadian et al., 2011) showed that "Women's worry of mammography device" was a barrier. And according to a study conducted by (Shaheen et al., 2011) in Gaza (49%) of the sample thought that "Mammography may cause cancer," and (17%) thought it was "Painful". These barriers may due to most women think that there are no

family history of breast cancer, cancer did not affect young women, economic status ,or the women's responsibilities like child caring and home caring in our society that take all the women's time, and the present of wrong cultural believes that mammography cause pain and cancer, and may due to that not all health insurance cover all screening tests or lack of knowledge that this test free for women over 40 years .

6.5 Results of the hypothesis

Table (5.9) showed the relationship between breast cancer screening tests barriers and demographic data (age, place of residency, educational status and relatives with breast cancer).

Regarding the relation between age and the barriers of conducting the mammography, CBE and BSE screening tests, there was no significant relationship (*p values .069*), (*p values .626*), (*p values .765*) respectively. But a study done among Arab women in Israel conducted by (Soskolne et al., 2007) showed that younger women were significantly more likely to perform mammography. Also (Petro-Nustus and Mikhail, 2002) in their study in Jordan proved that women's age was one of important factors that promoted them to perform and practice BSE. On the other hand, (Parisa et al., 2006) pointed that young age was also one of the factors that influence women to perform BSE. Another study carried out by (Alhurishi et al., 2011) reported that there was a relation between old age and the late performance of breast cancer screening tests in three studies in the Middle East. (Rabon-Stith ,2011) showed that young women were less expected to perform breast cancer

screening test than old women for African American women ; women who are 50 and over were more expected to perform breast cancer screening tests than younger women because older women may have more breast cancer knowledge which contributed to their compliance to do it. These differences between results may due to the cultural values that present in our society; as still cancer is perceived by old as taboo that not to be discussed or talk about. Moreover the political situation in the west bank in term of the Presence of checkpoints and long distance to reach the clinics has its effect in the performing of the mammography.

In terms of the relation between place of residency and the barriers of performing CBE and BSE screening test, the results showed that the there was no significant relationship (*p values higher than 0.05*) . But with respect to the relationship between place of residency and the barriers of performing mammography, there was a significant relationship (*P values .046,*) and these barriers were present in the villages and camp, this might be to presence of checkpoints and the transportation cost and time as the mammography screening test is conducted only in the city. Moreover, (Azaiza et al., 2010) showed that women living in cities and villages tended to perform CBE and BSE more than women living in the camp did.

For the relationship between educational status and the barriers of conducting mammography and CBE (table 5.9), there was no significant relationship. Yet there was a significant relationship (*P values .021*) between education and the tendency to conduct the BSE. These barriers were present

in GSCE and preparatory degree. The low educational status may affect the women knowledge and interest to read or hear about breast cancer screening test, increase wrong believes about breast cancer and the bad ideas about breast cancer screening tests.

A study by (Petro-Nustus and Mikhail ,2002) proved that women with high school education performed BSE more .Also low education has a strong relationship with the late performance of breast cancer screening tests as (Alhurishi et al.,2011) reported in three studies in the Middle East . (Amin et al., 2009) also reported that women's educational level influences the performing of CBE for African American and Latins women. Azaiza, et al. (2010) found that women in West Bank were more likely to perform BSE if they were more educated. Another study by (Rabon-Stith, 2011) pointed that there is a relationships between education and breast cancer screening, but another study showed that there is no relation between education and breast cancer screening.

Finally, results (table 5.9) showed that there was a significant relationship between the presence of relatives with breast cancer and the barriers of conducting mammography and CBE (*P values .010*), (*P values 0.00*) respectively. And these results matched with (Azaiza et al., 2010) study in West Bank, that the presence of a first-degree relative suffering from breast cancer, stresses a higher effectiveness and benefits of BSE. Another study by (Lee-Lin et al., 2007) showed that performing mammography in the past has a strong relationship with having an immediate family member diagnosed with

breast cancer. The presence of relatives with breast cancer may increase the women's seriousness of breast cancer, and this encourages performing breast cancer screening test.

The last table (5.12) showed there was a relationship between the age and (geographical, financial) barriers. The mean of general barriers according to age was higher in the age group (more than 50 years) table (5.13). This may due to women responsibilities in this age or fear of discover breast cancer in this age or another diseases that prevent the women from performing breast screening test.

Also Table (5.12) shows that there was a relation between (geographical, financial) barriers and level of education. As table (5-14) showed higher in preparatory stage, as than those of bachalore degree and higher than those of GSCE degree ,this may due to low educational and there opportunity receive the knowledge about breast cancer was little and this increase the wrong thoughts about breast cancer screening test .

Chapter seven

**Summary, Conclusion and
Recommendation**

Chapter seven

Summary, Conclusion and Recommendation

This chapter represents the Summary, Conclusion, and Recommendations regarding the current research results.

7.1 conclusions

The study concluded

- The percent of participants who did not know mammography and CBE and BSE was (39.4%), (49.1%), (30.9%) respectively.
- (60.2%) of the participants never do CBE, (74.0%) never do Mammography.

Regarding breast cancer screening barriers:

- The most barriers were Fear of suffering cancer pains, changing physical appearance took the highest percentages among fears, as (75.1%), (72.9%) respectively, Financial barriers and Cultural barrier, “Ashamed of uncovering to a male physician”, and “The fear from discovering the disease”.
- “Feel afraid of having the disease” and “Feel ashamed and “it may causes pain” was the most barriers regarding CBE and BSE performance.
- About mammography tests barriers there was a 5 barriers “Conducting mammography regularly is expensive”, “It’s difficult as it takes time to

conducting mammography regularly”, “Conducting it regularly may harm health”, “It causes pain” , and “Don’t feel relaxed when conduct it” .

- The study shows that there was a significant relationship between place of residency and mammography barriers (P values .046) these barriers in seen in village and camp).Age and Geographical and financial in the age group (more than 50 years). And between educational status and BSE barriers (P values .021) and geographical and financial barriers.

7.2 Recommendations

- 1- Use different ways to increase the knowledge about breast cancer screening tests like media and Brochure.
- 2- Increase the role of health care providers to increase the knowledge of women about breast cancer screening tests.
- 3- Inform the women that CBE and mammography free for women over 40 years in governmental clinics.
- 4- Try to spread the correct and right information throw media like mammography did not harm the health and not painful test.
- 5- In every clinic a female physician must be to encourage women to do CBE and mammography.
- 6- To target women under 40 years and who has low education for health education programs.

7.3 Limitations of the Study

The current study had a number of limitations which can be summarized as following:

First: the questionnaire self-administrated and some women cannot read which took time to read it for them.

Second: the study done only in Nablus governorate and cannot be generalized among whole women in west bank.

Third: most of women whom founded in the associations not work or not have a high educational status.

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Annexes

(Annex 1): Questioneer in Arabic

استبانة

السيدة الفاضلة

تحية طيبة وبعد،،

تقوم الباحثة بدراسة عنوانها:

" المعوقات التي تحول دون إجراء النساء لفحوصات سرطان الثدي في محافظة نابلس "

وذلك استكمالاً لمتطلبات الحصول على درجة الماجستير في دراسات المرأة في جامعة النجاح الوطنية، لذا يرجى الإجابة عن فقرات الاستبانة بموضوعية، علماً أن كل ما يرد في الاستبانة سيكون موضع تقدير واحترام، وسيعامل بسرية تامة، وسيستخدم لأغراض البحث العلمي فقط.

شاكراً لكن حسن تعاونكن،،

الباحثة: دينا يونس

(Annex 1-1)

أولاً: المعلومات العامة

أرجو وضع إشارة (√) في المربع المناسب:

1.	العمر			
	30 - 40 سنة	41 - 50 سنة	أكثر من 50 سنة	
2.	الحالة الاجتماعية			
	عزباء	متزوجة	أرملة	مطلقة
3.	إذا كان لديك أطفال (ما عدد أطفالك)			
	1-3	4-6	7-9	أكثر من 9
4.	المؤهل العلمي			
	بكالوريوس	دبلوم	توجيهي	إعدادي
5.	إذا كنت متزوجة ما هو المستوى العلمي لزوجك			
	بكالوريوس	دبلوم	توجيهي	إعدادي
6.	طبيعة العمل:			
	مأجور	غير مأجور	تطوعي	ربة منزل
7.	مكان الإقامة			
	مدينة	قرية	مخيم	
8.	مستوى الدخل الشهري:			
	أقل من 1000 شيكل	1001-2000 شيكل	2001-3000 شيكل	أكثر من 4000 شيكل
9.	ما نوع التأمين لديك؟			
	حكومي	وكالة	خاص	لا املك

ثانياً: فقرات الاستبانة المتعلقة بمدى المعرفة بفحوصات سرطان الثدي :

أرجو قراءة الفقرات بدقة ووضع إشارة (√) أمام العبارة بما يتناسب والدرجة التي تشعرين بها تجاه الصعوبة الواردة في العبارة من وجهة نظرك.

1. هل تعرفين الفحوصات التالية؟

نعم	لا	كم مرة في مثل عمرك يجب إجراء هذه الفحوصات؟
		1. تصوير الثدي بالأشعة
		2. الفحص الذاتي للثدي
		3. الفحص السريري للثدي (الذي يجريه الطبيب أو الممرضة)

2. حسب رأيك: عند الإصابة بسرطان الثدي ، هل هناك من فائدة لفحوصات الاكتشاف المبكر لسرطان الثدي؟

كبيرة جداً	كبيرة	متوسطة	قليلة	ليست مفيدة
				1. تصوير الثدي بالأشعة
				2. الفحص الذاتي للثدي
				3. الفحص السريري للثدي

3. هل لديك قريبة مصابة بسرطان الثدي؟

a. نعم b. لا

4. إذا كان الجواب نعم؟ ما هي صلة القرابة

a. أم b. أخت

c. خالة d. جدة

e. غير ذلك

ثالثاً: فقرات الاستبانة المتعلقة بمدى ممارسة فحوصات سرطان الثدي

1. كم مرة تذهبين لفحص الثدي من قبل مقدمي الرعاية الصحية (الطبيب أو الممرضة) ؟

a. مرة كل ستة شهور

b. مرة كل سنة

c. مرة سنة بعد سنة

d. لا أذهب أبداً

e. شيء آخر

2. متى كانت آخر مرة أجريت فيها الفحص لثدييك من قبل مقدمي الرعاية الصحية (الطبيب أو

الممرضة) -----

3. كم مرة تذهبين لإجراء فحص الثدي بواسطة التصوير بالأشعة (الماموجرام)

(mammogram)؟

a. مرة كل سنة

b. مرة كل سنة بعد سنة

c. مرة كل عدة سنوات

d. لم أفحص أبداً

e. فحصت مرة واحدة قبل

4. متى كانت آخر مرة أجريت فيها فحص الثدي بواسطة الأشعة (الماموغرام) mammogram؟

.....

5. هل نصحك الطبيب بإجراء فحص التصوير بالأشعة (الماموغرام)؟

a. نعم

b. لا

c. لا أذكر

6. ما مدى خطورة مرض سرطان الثدي، حسب رأيك؟

- a. خطير جداً
b. خطير
c. متوسط الخطورة
d. قليل الخطورة
e. ليس خطيراً أبداً

(Annex 1-2)

رابعاً: فقرات الاستبانة المتعلقة بالمعوقات التي تحول دون إجراء النساء لفحوصات سرطان الثدي

أرجو قراءة الفقرات بدقة ووضع إشارة (✓) أمام العبارة بما يتناسب والدرجة التي تشعرين بها تجاه الصعوبة الواردة في العبارة من وجهة نظرك.

1. الخوف من مرض السرطان ينبع من عدة أسباب. أي من هذه المشاعر يمكن أن تنطبق عليك؟

أوافق بشدة	موافق	إلى حد ما	لا أوافق بشدة	لا أوافق بشدة
				1. الخشية من شفقة الناس الذين يعرفونك.
				2. الخشية من حزن أبناء العائلة
				3. خشية من هجر الزوج
				4. خشية من فقدان العمل
				5. خشية من عدم احترام الأولاد لك
				6. خشية فقدان الأصدقاء
				7. خشية من إهمال العناية بالأولاد، ولا يوجد من يعتني بهم
				8. خشية من الموت
				9. خشية من معاناة المرض
				10. الخشية من تغيير مظهري الخارجي
				11. الخشية من حديث الناس والأقارب
				12. الخشية من التغيير في العلاقة الجنسية مع زوجي

أوافق بشدة	موافق	إلى حد ما	لا أوافق بشدة	لا أوافق بشدة
				13. الخجل من كشف الجسم أمام طبيب
				14. الخجل من كشف الجسم أمام طبيبة
				15. بعد المسافة وصعوبة الوصول للعيادة
				16. وجود الحواجز العسكرية والجدار الفاصل
				17. منع كشف الجسم حسب الدين
				18. خشية رؤية المعارف لي في العيادة.
				19. التكاليف المادية
				20. الخشية من اكتشاف المرض لدي
				21. أنا لا أشعر بالارتياح عند النظر إلى جسمي
				22. لا اشعر بالإرتياح عند لمسي لصدي
				23. لا توجد عندي خصوصية للقيام بهذا الفحص
				24. لا تتوفر الخبرة لدي لملاحظة التغيرات التي قد تحصل لنثدي

أوافق بشدة	موافق	إلى حد ما	لا أوافق بشدة	لاوافق
				25.القيام بفحص الثدي من قبل مقدمي الرعاية الصحية مكنك من إكتشاف أية مشكلة لديك بالثدي بمرحلة مبكرة
				26.القيام بفحص الثدي من قبل مقدمي الرعاية الصحية يعطيك الإحساس بالسيطرة على صحتك
				27.إذا لم تواظبي على القيام بفحص الثدي من قبل مقدمي الرعاية الصحية هذا قد يعرض حياتك للخطر أكثر
				28.القيام بفحص الثدي من قبل مقدمي الرعاية الصحية يزيد من إحتتمالات الشفاء من المرض
				29.القيام بفحص الثدي من قبل مقدمي الرعاية الصحية يعطيك ضمان بأنك سليمة ويقلل من قلقك
				30.أنت تشعرين بعدم الراحة والخجل من القيام بفحص الثدي من قبل مقدمي الرعاية الصحية
				31.فحص الثدي من قبل مقدمي الرعاية الصحية يؤلم
				32.أنت تخشين الذهاب لفحص الثدي من قبل مقدمي الرعاية الصحية خوفا من اكتشاف شيء
				33.لا داعي للقيام بفحص الثدي لأنه في حال إكتشاف سرطان سيكون قد تأخر الوقت

(Annex 1-5)

4. الجمل التالية معيقات تتعلق بفحص الثدي الذاتي. أرجو أن تحدد درجة موافقتك على كل منها:

أوافق بشدة	موافق	إلى حد ما	لا أوافق	لا أوافق بشدة
				34. لديك المعرفة بإجراء الفحص الذاتي للثدي
				35. متأكد من قدرتك على إجراء الفحص الذاتي للثدي
				36. إجراء الفحص الذاتي للثدي يمكنك من الاكتشاف المبكر لسرطان الثدي
				37. إجراء الفحص الذاتي يعطيك الإحساس بالسيطرة على صحتك
				38. إجراء الفحص الذاتي للثدي يزيد من احتمالية الشفاء من مرض سرطان الثدي
				39. إجراء الفحص الذاتي للثدي يعطيك الضمان بأنك سليمة ويقلل من قلقك
				40. تشعرين بعدم الراحة والإحراج من القيام بالفحص الذاتي للثدي
				41. لا يوجد لديك الوقت لإجراء فحص الثدي الذاتي
				42. الفحص الذاتي للثدي مؤلم
				43. تخشين الفحص الذاتي للثدي خوفاً من اكتشاف شيء
				44. لا داعي للقيام بفحص الثدي الذاتي لأنه في حال اكتشاف سرطان سيكون قد تأخر الوقت

(Annex 1-6)

5. الجمل التالية معيقات تتعلق بفحص الثدي بالأشعة (الماموغرام) . ارجو أن تحدد درجة موافقتك على كل منها:

أوافق بشدة	موافق	إلى حد ما	لا أوافق	لا أوافق بشدة	
					45. إجراء فحص الأشعة يمكن أن يعطي ضمان بانك سليمة ويقلل المخاوف
					46. عند إجراء فحص الأشعة يمكن اكتشاف درنة في الثدي و هي ما زالت صغيرة وهذا يؤدي لعلاج وشفاء ناجحين
					47. فحص الأشعة هو فحص مؤلم
					48. من الصعب إجراء فحص الأشعة بشكل ثابت لأنه يأخذ وقتاً
					49. فحص الأشعة هو فحص غالي الثمن
					50. فحص الأشعة يمكن أن يؤدي صحتك
					51. تجددين صعوبة في إجراء فحص الأشعة خوفاً من اكتشاف شيء
					52. لا داعي من إجراء فحص الأشعة لأنه إذا وجد سرطان فسيكون قد تأخر الوقت
					53. انت تشعرين بعدم الراحة والحر ج من إجراء فحص الأشعة

شكراً جزيلاً على التعاون

(Annex 2): Consent form

شهادة الموافقة على المشاركة في البحث

إقرار من المشارك في البحث:

قمت بقراءة المعلومات الواردة في ورقة معلومات البحث وأتاحت لي الفرصة أن أسأل أي سؤال وقد تمت الاجابة على كافة أسئلتي بشكل كاف، وبناءا على ذلك أوقع طوعيا على المشاركة في هذا البحث.

إسم المشارك.....

توقيع المشارك.....

التاريخ.....\.....\.....

إقرار من الباحث:

قمت بقراءة المعلومات الواردة في ورقة معلومات البحث بطريقة صحيحة وواضحة، وبذلت جهدي ان يعي المشارك ان البحث سيتضمن:

الإجابة على استبيان يتعلق بالمعوقات التي تحول دون إجراء النساء لفحوصات سرطان الثدي

في محافظة نابلس

أؤكد على أن المشارك أخذ الفرصة الكافية للإجابة على استفساراته بشكل واضح وصحيح وبذلت ما بوسعي لتحقيق ذلك.

أؤكد أن المشارك لم يجبر على التوقيع على الورقة وأن مشاركته كانت بمحض إرادته وكامل إختياره.

الباحثة دينا زايد صدقي يونس

توقيع الباحثة.....

التاريخ.....\.....\.....

(يتم عمل نسختين من هذه الشهادة واحدة للباحث وأخرى للمشاركة إن رغبت بذلك)

Annex (3) Barriers and Facilitators towards Breast Cancer Screening in the Arab World

Barrier or facilitator	Country	Author
Inadequate knowledge of breast cancer and screening activities	Saudi Arabia, Egypt, Jordan, Israel, Yemen, Sudan, Iran, Palestine, UAE	Abdelrahman & Yousif, 2006; Alam, 2006; Amin et al., 2009; Ahmed, 2010; Aghamolaei et al., 2011; Azaiza & Cohen, 2010; Bener et al., 2001; Dandash & Al Mohaimeed, 2007; Heidari et al., 2008; Milaat, 2000; Montazeri et al., 2008; Seif & Aziz, 2000; Rashidi & Rajaram, 2000; Soskolne et al., 2007
Adequate knowledge yet still low participation rates	Kuwait, Qatar, Turkey, Jordan, Iran	Alkhasawneh et al., 2009; Al-Qattan et al., 2008; Bener et al., 2009; Alkhasawneh et al., 2009; Al-Qattan et al., 2008; Bener et al., 2009;
Sources of knowledge of breast cancer and screening activities: media, friends and health care providers	Saudi Arabia, Yemen, Iran, Kuwait	Ahmed, 2010; Al Qattan et al., 2008; Dandash & Mohaimeed, 2007; Montazeri et al., 2008
Health care providers were found to have inadequate knowledge of breast cancer screening	Jordan, Iran	Alkhasawneh, 2007; Jaradeen, 2010; Haji-Mahmoodi et al., 2002;
Adequate knowledge yet only 65% were regularly performing BSE	UAE	Madanat & Merrill, 2002 Sreedharan et al., 2010
Professional recommendation was found to be an important facilitator however low percentages of health care providers were found to provide recommendation for breast cancer screening	Iran, Israel, Yemen	Al-Naggar et al., 2009; Harirchi et al., 2009; Soskolne et al., 2007
Socio-demographic factors such as age, education, income, marital status, employment, living in urban vs. semi-urban areas as predictors of breast cancer screening	Saudi Arabia, Iran, Egypt, Qatar, Lebanon, UAE, Jordan	Abdel-Fattah, et al., 2000; Adib et al., 2009; Alam, 2006; Amin et al., 2009; Bener et al., 2001 & 2009; Dandash & Mohaimeed, 2007; Petro-Nustas & Mikhail, 2002; Montazeri et al., 2008

Socio-demographic such as age, education, marital status were not predictors	Turkey, UAE	Avci & Kurt, 2009; Bener et al., 2001
Informal social support-objection of spouse to breast cancer screening only mentioned by small minority of 2.7% and 8.9% respectively	UAE, Qatar	Bener et al., 2001 & 2009
Fear of losing traditional role as woman as a result of cancer diagnosis as barrier	Israel	Baron-Epel, 2004; Remmenick, 2006
Fear of losing traditional role as woman not a barrier	Israel	Soskolne et al., 2007
Fear of losing traditional role as woman was concern but not strong enough to act as barrier	Israel	Azaiza & Cohen, 2008
Fear of losing traditional role as woman as a facilitator	Iran	Lamyian et al., 2007
Embarrassment regarding breast cancer screening activities	Saudi Arabia, Qatar, UAE, Jordan, Egypt, Israel, Iran	Akhtar et al., 2010; Amin et al., 2009; Bener et al., 2009; Bener et al., 2001; Cohen & Azaiza, 2005; Petro-Nustas, 2001b; Seif & Aziz, 2000
Embarrassment only mentioned by 4%	Turkey	Cam & Gvmvs, 2009
Although embarrassed women expressed this was not enough to act as a barrier	Israel, Iran	Azaiza & Cohen, 2008; Montazeri, 2003
Fear of gossip regarding breast screening practices	Israel	Azaiza & Cohen, 2008
Recommendation of breast screening from friend or family	Iran, Jordan, Israel	Lamyian et al., 2007; Petro-Nustas, 2001b; Soskolne et al., 2007
Religious influences regarding breast cancer screening as a Facilitator	Israel, Iran	Azaiza & Cohen, 2008; Hatefnia et al., 2010

Women expressed religion not to be a barrier for BSE	Iran	Montazeri et al., 2003
Religious influences regarding breast cancer screening as a barrier	Israel	Baron-Epel (2010)
Accessibility to breast cancer screening facilities	Qatar, UAE, Iran, Egypt, Iran	Bener et al., 2001; Bener et al., 2009; Hatefnia et al., 2010; Lamyian et al., 2007; Seif & Aziz, 2000
Cost and lack of health insurance to cover breast cancer screening as barrier	Turkey, Jordan, Iran, Israel	Alkhasawneh, 2007; Azaiza et al., 2010; Cam & Gvmvs, 2009; Lamyian et al., 2007; Petro-Nustas, 2001b
Cost were not a barrier	Saudi Arabia, Qatar	Amin et al., 2009; Bener et al., 2009
Positive attitude toward learning about breast screening	Yemen, Kuwait, Saudi Arabia, Jordan	Ahmed, 2010; Al Qattan et al., 2008; Milaat, 2000; Petro-Nustas, 2001b
Self-confidence in ability to perform BSE	Iran, Yemen, Jordan, Turkey	Ahmed, 2010; Cam & Gvmvs, 2009; Lamyian et al., 2007; Montazeri et al., 2008; Petro-Nustas, 2001a; Petro-Nustas, 2001b; Petro-Nustas & Mikhail, 2002
Self-confidence in BSE only mentioned by 7%	UAE	Bener et al., 2001
Self-care as a low priority	Egypt, Kuwait, Turkey, Iran, Qatar, UAE	Ahmed, 2010; Bener et al., 2001; Bener et al., 2009; Al-Qattan, 2008; Çam & Gümüş, 2009; Hatefnia et al., 2007; Lamyian et al., 2007; Seif & Aziz, 2000
Fear of breast cancer diagnosis as a barrier	Qatar, UAE, Yemen, Kuwait, Egypt, Turkey	Ahmed, 2010; Al Qattan et al., 2008; Bener et al., 2009; Cam & Gvmvs, 2009; Petro-Nustas, 2001a; Petro-Nustas and Mikhail, 2002; Seif & Aziz, 2000
Fear of breast cancer diagnosis as a barrier or a facilitator	Israel	Azaiza & Cohen, 2008; Baron-Epel, 2010; Cohen et al., 2005
Fear of pain from mammogram or CBE	Israel, UAE, Qatar,	Azaiza et al., 2010; Bener et al., 2001; Bener et al., 2009; Soskolne et al., 2007
Fear of pain only mentioned by minority	Jordan	Petro-Nustas, 2001a
Perception of low susceptibility to breast cancer as barrier	Israel, Turkey, Iran, Jordan	Abbaszadeh et al., 2007; Avci, 2009; Avci & Kurt, 2008; Dundar et al., 2007; Petro-Nustas, 2001a; Petro-Nustas, 2001b; Soskolne et al., 2007
Perception of low susceptibility to breast cancer not found as barrier	Iran	Hatefnia et al., 2010; Tavafian et al., 2009
Perceived effectiveness of breast cancer screening	Israel, Iran, Kuwait, Turkey	Abbaszadeh et al., 2007; Avci & Kurt, 2008; Baron-Epel, 2010; Hatefnia et al., 2010; Soskolne et al., 2007; Tavafian et al., 2009

Donnelly et al., 2013

جامعة النجاح الوطنية

كلية الدراسات العليا

المعوقات التي تحول دون ممارسة النساء لفحوصات سرطان الثدي في محافظة نابلس

إعداد

دينا زايد صدقي يونس

إشراف

د. مريم الطل

قدمت هذه الأطروحة استكمالاً لمتطلبات الحصول على درجة الماجستير في برنامج دراسات المرأة في كلية الدراسات العليا في جامعة النجاح الوطنية في نابلس، فلسطين.

2015م

ب

المعوقات التي تحول دون ممارسة النساء لفحوصات سرطان الثدي في محافظة نابلس

إعداد

دينا زايد صدقي يونس

إشراف

د. مريم الطل

الملخص

المقدمة: سرطان الثدي لا يزال واحدة من المشاكل الصحية الرئيسية ليس فقط في فلسطين ولكن أيضا في جميع أنحاء العالم، و هو أحد الأمراض غير المعدية التي تشكل أكبر تحد ومشكلة صحية عامة رئيسية في معظم البلدان خاصة الدول النامية. لذلك معرفة المعوقات التي تمنع المرأة من اجراء الفحص المبكر لسرطان الثدي يمكن أن تزيد من فرصة الكشف المبكر وهذا يمكن أن يقلل من حدوث الوفيات.

الأهداف: الهدف الرئيسي هو الكشف عن المعوقات التي تمنع المرأة من أداء فحوصات سرطان الثدي.

الأسلوب: عينة عشوائية منهجية من 269 امرأة تتراوح أعمارهن بين 30-60 عاما والذين يعيشون في محافظة نابلس وتم اختيارهم من مدينة نابلس، و قرنتين (بيت فوريك، بيتا) ومخيم عسكر للاجئين. و تم تعبئة الاستبانة من قبل المشاركات و تم التحليل باستخدام برنامج SPSS.

النتائج: كتنت نسبة معرفة النساء بفحوصات سرطان الثدي (الماموغرام ، الفحص السريري للثدي ، الفحص الذاتي للثدي)، (59.5%)، (47.6%)، (67.3%) على التوالي. والمشاركون الذين لم يؤدوا فحص الماموجرام والفحص السريري للثدي (60.2%)، (74.0) على التوالي. كانت المعوقات الأكثر شيوعا التي تمنع المرأة من أداء فحوصات سرطان الثدي: الخوف من المعاناه من آلام السرطان والخوف من تغيير المظهر الجسدي، والتكلفة المالية، والخوف من اكتشاف السرطان، الخجل من اجراء الفحوصات وعدم توفر الوقت الكافي لإجراء الفحوصات بانتظام والخوف من أن يسبب الفحص الألم.

كذلك اوضحت الدراسة ان هناك علاقة ذات دلالة إحصائية بين معوقات اجراء الماموجرام ومكان الإقامة (0.046) p value في القرية والمخيم.

ج

كذلك هناك ذات دلالة إحصائية بين معيقات اجراء الماموجرام و المؤهل العلمي

p value(0.021)

لمرحلة التوجيهي و المرحلة الاعدادية. .

وكانت هناك علاقة بين العمر والمعيقات الجغرافية والمالية (0.012) p value (0.001)

value على التوالي، وبين المؤهل العلمي والمعيقات الجغرافية والمالية (0.002) value p value

p (0.001) على التوالي.