

## **Research Article**

# Knowledge about Breast Self-Exploration Techniques in Women of a Primary Care Unit in Tijuana

Gómez-Sánchez VE¹\*, López-Martínez JM², Gómez-Sánchez CY³, Espinoza-González CM¹ and Bermúdez-Villalpando VI¹

<sup>1</sup>Department of Family Medicine, Family Medicine Unit #27 (IMSS), Baja California Delegation, Mexico <sup>2</sup>Department of Emergency, Regional General Hospital #20 (IMSS), Baja California Delegation, Mexico <sup>3</sup>Private Practice, Baja California, Mexico

\*Corresponding author: Gómez-Sánchez VE, Department of Family Medicine, Family Medicine Unit #27 (IMSS), Baja California Delegation, México

**Received:** October 10, 2019; **Accepted:** November 01, 2019; **Published:** November 08, 2019

### **Abstract**

**Background:** In Mexico, breast cancer (BC) is the most common invasive malignant neoplasm, it is also the most frequent cause of death in women contributing 15-20% of cancer mortality. Breast self-examination (BSE) is a BC detection technique based on observation and palpation made by women in their own breasts. Women's knowledge about the BSE can lead to an early diagnosis.

**Aim:** To identify the knowledge about breast self-exploration techniques in women of a primary care unit in Tijuana, Mexico.

Design and Setting: Descriptive cross-sectional study.

**Methods:** We conducted a descriptive cross-sectional study in 179 women of the family medicine unit (FMU) #27 of Tijuana, Mexico, during the period from October to December 2018. Information was obtained such as age, occupation, schooling, frequency of BSE, family history of BC, marital status and knowledge in the breast self-exploration technique. For statistical analysis, we applied descriptive statistics; for qualitative variables frequencies and percentages were used.

**Results:** 68% of women periodically performed breast self-examination. The quality of the technique was inadequate in 83% (n= 148). The knowledge about breast self-exploration was 63% (n= 113).

**Conclusion:** The research shows that it is necessary to reinforce the technique since breast self-examination is practiced but incorrectly.

Keywords: Breast Cancer; Breast Self-Exploration; Knowledge

# Introduction

Breast cancer (CM) is the abnormal and disorderly growth of epithelial cells in the breast ducts or lobules and has the ability to spread. In Mexico, breast carcinoma is the most common invasive malignant neoplasm and is the most frequent cause of death due to malignant disease in women; 20-25% of all cases of cancer in women are of this type and contribute 15-20% of cancer mortality [1]. In the appearance of BC there are factors that have a greater relevance in the development of the disease, mainly family history, obesity and absence of breastfeeding. It has also been proven that the risk increases with age; the probability of developing invasive cancer in the next 10 years is 0.4% for women between 30 and 39 years; 1.5% for 40 and 49 years; 2.8% for 50 and 59 years and 3.6% between 60 and 69 years [2].

The objective of long-term research programs should be to diagnose BC at an early stage, however, the primary prevention of this disease is difficult to achieve; therefore, due to the limitations of primary prevention, the secondary prevention (diagnosis in the initial stages) allows increase the survival of patients with three main tools: Breast Self-Exploration (BSE), mammography and clinical examination [3]. The BSE is a breast cancer detection technique based on the observation and palpation made by women in their own breasts, which is based on a high percentage of women who detect

abnormalities that indicate a breast alteration; BSE aims to detect the largest number of women with early breast conditions, which allows less invasive treatments, increases survival rates and improves the quality of life of the affected woman. It is an effective, simple and safe method but is not a procedure to reduce BC mortality. BSE can allow early diagnosis in health centers with limited economic resources that do not have sufficient infrastructure to perform mammograms routinely [3].

Women's knowledge about breast screening is variable and sometimes incorrect, especially in those with less formal education [4]. The majority of women have good knowledge and inadequate practices [5], for that reason the main objective of this study is to identify the knowledge about breast self-exploration techniques in women between 20-45 years of the family medicine unit #27 in Tijuana, Mexico.

# **Materials and Methods**

A descriptive cross-sectional study was carried out, in the Family Medicine Unite #27 of the Instituto Mexicano del Seguro Social (IMSS), located in Tijuana, Mexico; patients were selected by a consecutive sampling techniques; that met the following inclusion criteria: age between 20-45 years, that accepted and signed informed consent; patients with current or previous diagnosis of breast diseases, pregnant, breastfeeding and presenting a disability were not included

and eliminated those who did not complete the survey or those with incomplete information. The following data were obtained directly from the patients: age, schooling, marital status, occupation, BC family history, knowledge about BSE, quality of BSE technique, frequency of BSE and source of information about BSE. The procedure for the data collection was as follows: age was calculated in years according to the year of birth; marital status was expressed by each patient; schooling, occupation, BC family history and source of information about SBE were determined by asking directly to patients.

To determine the frequency of BSE, 4 answers to the question were included: how often do you perform the BSE? (once a month, every 6 months, every year or never). The quality of the BSE technique was evaluated based on the correct organization of a diagram with the steps to carry out this test, it consists of 6 images and it was considered as appropriate technique to have 3 or more hits. To determine the knowledge about the breast self-exploration technique, a questionnaire of 12 reagents was applied, a score greater than 5 means knowledge about BSE and less than 4 hits no knowledge about BSE. This questionnaire is validated with a cronbach alpha of 0.819 [6]. For self-efficacy, a perceived self-efficacy questionnaire was applied, this tool has a Likert response pattern of 5 to 1 (totally agree, agree, indifferent, disagree and totally disagree) with Cronbach's alpha in Mexican women of 0.88 [7].

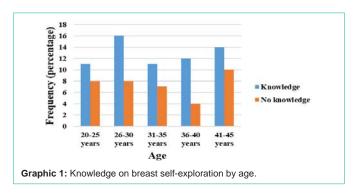
The recollected data was integrated into data collection sheets and analyzed using the SPSS program version 21 in Spanish, where we applied descriptive statistics; for qualitative variables, frequencies and percentages were used. The Protocol was authorized by the Local Committee of Research and Ethics in Health Research.

# **Results**

A total of 179 surveys were conducted in women of the family medicine unit #27, the age distribution was 20 to 45 years. In the marital state, 80% had a partner. The most frequent schooling was basic (64%). In occupation, 67% reported having paid employment. Of the 179 patients, 90% denied family history of breast cancer and 73% reported that they obtained knowledge of the breast self-exploration from health personnel. The realization of breast self-exploration was 68% of the patients but the quality of the technique was inadequate in 83% of the cases. The knowledge of breast self-exploration was 63% (n= 113), the lowest knowledge was in the age group of 41 to 45 years with 10% (graphic 1). Self-efficacy was reported high in 36%, medium in 58% and low 6%.

# **Discussion and Conclusion**

The most important finding was the low knowledge of breast self-exploration in older women, similar to Grunfeld et al where older women had less ability to identify breast cancer symptoms and risk factors [8]. However, in our study we observed a high knowledge of breast self-exploration with 63% with a higher percentage in women with basic education and paid employment. The quality of the self-exploration technique was inadequate in 148 (83%) patients, which is a sensitive point to intervene in future research. In the frequency of breast self-examination practice only 68% of women do it periodically, the highest percentage of participants (35%) did it once a month, but 32% never did.



In conclusion, we find that in older women there is less knowledge and the greater knowledge is found in women with basic schooling, this could be explained because this group of women visits primary care units more frequently where primary prevention actions are reinforced in each visit. The quality of the technique is poor in a high percentage of patients, it is necessary to improve the knowledge of the technique since knowledge alone is insufficient without the correct technique. The improperly BSE delays the early diagnosis of a breast lesion, increases mortality and the opportunity for timely treatment. Teaching to improve the quality of BSE is a low-cost and simple method, useful in family medicine units that do not have enough infrastructure to perform mammograms, so it may reduce the need for more expensive and invasive screening techniques. The primary prevention activities of health personnel and their continuous training are important because they raise awareness about the danger of the disease and the methods that exist for its early detection.

### References

- Guía de Práctica Clínica, Diagnóstico y Tratamiento del cáncer de Mama en Segundo y Tercer nivel de Atención. México: Secretaria de salud. 2009.
- Aguilar-Cordero M, Neri-Sánchez M, Padilla-López C, Pimentel-Ramírez M, García-Rillo A, Sánchez-López A. Factores de riesgo como pronóstico de padecer cáncer de mama en un estado de México. Nutr Hosp. 2012; 27: 1631-1636
- Sánchez-Urdaneta Y, Urdaneta-Machado J, Villalobos-Inciarte N, Contreras-Benitez A, Garcia J, Baabel-Zabrano N, et al. Conocimiento sobre cáncer de mama y práctica del autoexamen de mamas en mujeres de edad mediana. Rev Venez Oncol. 2016; 28: 37-51.
- Webster P, Austoker J. Women's knowledge about breast cancer risk and their views of the purpose and implications of breast screening - a questionnaire survey. Journal of Public Health. 2006; 28: 197-202.
- Vivas-Sánchez VM, Torres-Pedraza N, Esguerra-Gonzales LL, Torres-Silva CA, Mojica-Torres IC, Mendoza-Jaimes KC, et al. Conocimientos, actitudes y prácticas de prevención del cáncer de mama. Rev Cien y Cuid. 2012; 9: 43-51.
- Bazán ST. Conocimientos, actitudes y prácticas acerca del autoexamen de mama de estudiantes de enfermería. UNMSM: Lima-Perú, Tesis. 2010.
- Cancino-Flores MM. Practica de autoexploración de mamas, susceptibilidad y autoeficacia percibida. Nuevo León: Universidad Autónoma de Nuevo León. Tesis. 2004.
- Grunfeld EA, Ramirez AJ, Hunter MS, Richards MA. Women's knowledge and beliefs regarding breast cancer. British Journal of Cancer. 2002; 86: 1373-1378.