

Attitudes and Breast Self-Examination for the Early Detection of Breast Cancer in Mexico

Research article

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Abstract

Introduction: Breast self-examination (BSE) represents an easy, inexpensive, and fast way to detect breast alterations in a timely manner. Despite its importance, not all women practice it properly and maintain attitudes of rejection. **Objective:** To describe breast attitudes and self-examination for the early detection of breast cancer in Mexico. **Methodology:** A cross-sectional, quantitative, descriptive study was conducted in 56 adult women in the state of Morelos, Mexico in 2024. A questionnaire was applied that included sociodemographic variables, relevant personal history, attitudes about BSE, and questioning about the 10 steps to perform BSE. **Results:** Most participants consider BSE useful, beneficial, harmless and easy. 12.% have never had it, 94.64% do not perform the complete procedure. 42.86% perform it each year. **Conclusion:** There is a positive attitude towards BSE, with no differences between the academic level or age of the participants. A minimum proportion is carried out correctly and at the corresponding frequency.

Keywords: Attitudes and Practice in Health, Breast Self-Examination, Women, Breast Cancer

Introduction

Breast cancer is the most common cancer in women worldwide and the second most common cancer overall. According to the report issued by the International Agency for Research on Cancer (IARC), by 2050 an increase in the incidence of breast cancer cases is expected to increase by 38%, which will result in a 68% increase in mortality from this cause.¹ In Mexico, according to data from the National Institute

of Statistics and Geography (INEGI),² in 2024, breast cancer was the leading cause of death from malignant tumors in women, so early detection through Breast self-examination (BSE), clinical examination, and mammography is essential to provide timely care and avoid premature deaths from this cause.³ The recommendations for each form of screening are: BSE should be performed from the age of 18 or 20 according to their menstrual cycle and in postmenopausal women on a fixed day of the month; annual clinical examination for women over



25 years of age, and mammography every two years for women 40 years of age or older; or every year if you have any risk factors.⁴ Despite the importance of self-examination, not all women know the correct way to perform it and there are attitudes of rejection. López and Cruz found that only 56.7% of women perform it correctly,⁵ Sarker et al. report that 42% are aware of self-examination.⁶ Castillo et al. found that 73% of women know how to perform self-examination; 77.8% strongly agree that it is good to perform it; 49% have never performed it and less than 1% have an adequate practice.

Given the importance of BSE, this study aims to describe breast attitudes and self-examination for the early detection of breast cancer in Mexico to identify areas of opportunity for education and guidance in the conduct of this study.

Methods and Materials

A cross-sectional, quantitative, descriptive study was carried out in 56 adult women in the state of Morelos, Mexico in 2024. The women were selected through non-probability sampling, for convenience. With the consent of the participants, a questionnaire was applied that included sociodemographic variables, relevant personal history, attitudes about self-examination, and questioning about the 10 steps to perform BSE.⁷ The data were captured in an Excel database and analyzed in the Stata program.

Table 1: Sociodemographic characteristics.

Feature	Number	Percentage
AGE		
40-49	16	28.57
50-59	20	35.71
60-69	20	35.71
Educational Level		
No study	2	3.57
Primary	15	26.79
Secondary	24	42.86
Bachelor's Degree/Technician	14	25
Bachelor's degree	1	1.79
Marital Status		
Married	23	41.07
Unmarried	33	58.93
History Of Breast Cancer		
No background	47	83.93
With a background	9	16.07

Table 2: Attitude towards BSE.

Statement	Totally agree
Breast self-examination can prevent problems in the future	91.07%
Performing breast self-examination is much more beneficial	89.29%
Breast self-exam helps detect lumps in the breast	89.29%
Breast Self-Exam Prevents Breast Cancer	87.50%
It is scary not to know the breast self-examination technique	71.43%
Doing a breast self-exam does not generate ridicule from my family	85.71%
Doing a breast self-exam doesn't scare me	92.86%
Breast self-exam is not painful	75%
Breast self-exam doesn't take long	80.36%
Breast self-examination involves a new habit which is not difficult	83.93%
Breast self-examination does not interfere with my activities	87.50%
By performing the breast self-exam monthly, I can find abnormalities before the annual medical check-up	83.93%

Results

A total of 56 women between the ages of 40 and 69 participated in the study. 42.86% have basic education studies, 41.07% are married or in a common-law union, 16.07% reported a hereditary family history of breast cancer (Table 1).

Regarding the attitude towards BSE, it is notable that most women have a positive attitude, stating that they totally agree or agree in a high percentage of the statements presented, however, the false belief that BSE prevents breast cancer is notorious (Table 2).

The self-report on BSE showed that the age group of 50 to 59 years of age performs self-examination constantly, but with different frequencies, with most of the group that performs it every year (Table 3).

The questioning about the way they perform BSE showed that only 5.36% perform it correctly, while 75% do not perform the entire procedure, omitting 5 or more important exploratory movements (Table 4).

The movements omitted in greater proportion are those that should be performed in a circular manner around and on the nipple, as well as observation with the hands on the hips in front of the mirror.

No significant differences were found in age groups or education.



Table 3: How often women perform BSE.

Frequency	40-49	50-59	60-69	Total
Never	25	0	15	12.5%
Every month	31.25	30	20	26.79%
Every three months	12.5	5	10	8.93%
Every 6 months	6.25	5	10	7.14%
Every year	25	55	45	42.86%
When I remember	0	5	0	1.78%
TOTAL	100	100	100	98.22%

Table 4: Performing the self-examination.

Run Self-Scan	Percentage
Incorrect (Less than 6 points)	75%
Partially correct (6 to 8 points)	19.64%
Correct (9 -10 points)	5.36%
Total	100%

Discussion

The results coincide with studies carried out in Bangladesh,⁷ Colombia,⁶ and Mexico,⁵ finding a high proportion of participants with positive attitudes towards BSE, however, the way to perform it correctly is not known by all, which detracts from the value of the execution by not being able to make a timely detection. Despite the positive attitude towards self-examination, the short time it requires and the fact that it has no cost, 12.5% said they never perform it and more than 42% perform it every year, so it is of utmost importance to emphasize health promotion and education actions, especially emphasizing that self-examination, just as other screening tests detect the disease in early stages, but they do not prevent the disease, which is a common thought among the population.

Conclusions

The results show a positive attitude towards BSE, with no differences between the academic level or age of the participants, however, it is observed that a minimum proportion performs it correctly and in the corresponding frequency. 75% of the participants report doing it partially, omitting movements that could detect abnormalities in the breast, some report doing it only in one. Only 5.36% reported performing all the movements included in self-examination but without complying with the recommended periodicity for age. It is evident that there is acceptance of self-examination, however, 12.5% reported never doing it. A high proportion consider that self-examination serves to prevent cancer, which is a mistaken belief considering that although self-examination helps in the early detection of cancer, it does not prevent the disease. It is necessary for health personnel to promote the intention and usefulness of self-examination to eliminate false beliefs that affect the use and effectiveness of health services.

Limitations

The information was obtained through self-report by the participants, which favors the existence of memory biases. It was not possible to perform any verification to validate the report of the participants in the execution of the BSE. We were unable to validate the accuracy, timing, frequency, and sensitivity in detecting bumps or irregularities within participants. It is advisable to carry out similar studies with larger sample sizes, including various levels of education and socio-economic levels.

Relevance to Practice

The results allow us to identify the importance of providing constant guidance to women on BSE, the frequency in which it should be performed and the actions to be taken when detecting irregularities in the breast. From the health services, it is not enough to carry out massive campaigns for women to perform self-examination, it is necessary to personally teach how to perform it, explain the importance of performing it with the corresponding frequency according to the age and situation of the woman and facilitate access to early detection services.

Conflict of Interest

The authors declare that they have no conflict of interest

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