

## Women's Perception Regarding the Ministry of Health Initiatives Plan for Early Detection of Breast Cancer

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### Abstract

**Background:** The major method for preventing the emergence of life-threatening breast cancer is screening for early detection. The goal of the women's health program is to focus on reproductive health by early detection of breast cancer, clinical assessment, and free treatment. **Aim of the study:** to investigate women's perception regarding the ministry of health initiatives plan for early detection of breast cancer among women in Fayoum city. **Research Design:** Descriptive approach was used in this study. **Setting:** The study was conducted in Fayoum University. **Sample type:** A purposive sample was selected. **Sample size:** 300 female employees were included in the study. **Tools:** Two tools of data collection were used structured interviewing questionnaire and Likert attitude scale. **Results:** The study showed that 51.3% of the studied sample had incorrect knowledge regarding initiatives for early detection of breast cancer. 65.3% of the studied sample had negative attitude regarding initiatives for early detection of breast cancer. There was highly significant positive correlation between total correct knowledge regarding breast cancer and total correct knowledge regarding initiatives for early detection of breast cancer among studied sample. **Conclusion:** The present study was concluded more than half among the studied sample had incorrect knowledge initiatives plan for early detection of breast cancer. **Recommendations:** Create and implement a program to raise awareness on a regular basis to encourage female employees to support Egyptian effort, create a pamphlet highlighting the significance of national initiatives for breast cancer early detection, and distribute it to university staff.

**Keyword:** Perception, Ministry, Initiative, Early detection, Breast cancer.

### Introduction

Breast cancer is the leading cause of cancer deaths in women worldwide. It is the main cause of women cancer-related deaths in developing countries, and it is the second-leading cause in developed countries (Seely & Alhassan, 2018).

In 2020, there were 2.3 million women diagnosed with breast cancer and 685 000 deaths globally. As of the end of 2020, there were 7.8 million women alive who were diagnosed with breast cancer in the past 5 years, making it the world's most prevalent cancer (WHO, 2021).

Breast cancer is cancer that forms in the cells of the breasts is made of unusual cells that grow out of control. Those cells may also travel to places in your body where they aren't usually found (Web MED Cancer Center, 2021).

Early detection of cancer greatly increases the chances for successful treatment. The two components of early detection of cancer are early diagnosis and screening. Early diagnosis focuses on detecting symptomatic patients as early as possible, while screening consists of testing healthy individuals to identify those having cancers before any symptoms appear (Aklilu, et al., 2021).

An essential factor in early identification of breast cancer is women perception concerning the ministry of health's program. Along with elements of the healthcare system and the social environment, the women's perceptions, knowledge, attitudes, and beliefs about cancer and screening proved to have a significant impact on the preventive behaviors of the women. (Yeshitila et al., 2021).

Breast cancer initiative; a global campaign to reduce disparities in breast cancer outcomes and improve access to breast health care for 2.5 million women by 2025 (**UICC global cancer control 2020**). The launching of the first Egyptian national screening program "Women Health Outreach Program" (WHOP) was announced on October 30th 2007 (**Wahdan, 2020**).

In this regard in October 2018, WHO teamed up with the Ministry of Health and Population (MoHP) to develop a nationwide screening program: "100 million Seha campaign", for mass screening and treating HCV infections and non-communicable disease (**WHO, 2020**).

Considering that nurses are the most numerous and closest to the patient among the medical team, they can play a significant part in raising community awareness (**Sachdeva et al., 2021**). The position of a nurse is further complicated since it encompasses their responsibilities as leaders who employ evidence-based practices to influence women's attitudes about initiatives for breast cancer screening and early detection (**Zhao et al., 2021**).

#### **Justification of the study:**

**Globally**, breast cancer is the most common cancer among women, comprising 23% of the female cancers. The incidence rate of breast cancer is rapidly increasing in developing countries due to increased life expectancy, growing urbanization, adoption of western lifestyle particularly in younger women (**Haque et al., 2016**).

**In Egypt**, the age adjusted rate of breast cancer is 49.6 per 100.000 population and the median age for diagnosis is one decade younger than European countries and most female patients are pre-menopausal (**Manzour & Eldin, 2019**).

Consequently, president **Abdel Fatah Al Sisi** have declared the importance of initiatives plan for early detection and screening of breast cancer mean while the minister of health and

population to implement the initiative through ministry of health and population all over Egypt 2019 – 2020 aiming to reducing woman morbidity and mortality (**Wahdan, 2020**).

#### **Aim of the study**

This study aimed to investigate Women's perception regarding the ministry of health initiatives plan for early detection of breast cancer among women.

#### **Research questions: -**

- 1-What is the woman knowledge regarding initiative plan for early detection and screening of breast cancer?
- 2- Are woman has positive attitude regarding initiative plan for early detection and screening of breast cancer?
- 3- What is the barrier that prevent woman to utilize the initiative plan for early detection and screening of breast cancer?

#### **Subjects and Methods:**

##### **Study Design:**

A Descriptive design was used in this study.

##### **Setting:**

The study was conducted at the selected faculties at Fayoum University: Faculty of nursing, Faculty of social work, Faculty of Dar Al Ullom, Faculty of science.

##### **Sampling:**

##### **Sample type:**

A purposive sample was selected.

##### **Inclusion criteria:**

Female reproductive age free from any breast problem

##### **Exclusion criteria:**

- Pregnant woman
- Past history of breast cancer

##### **Sample size:**

The total numbers of the available female employee were 300 females working in the Fayoum University.

#### **Tools for data collection:**

**Two tools were used for Data collection: -**

**Tool I: Structured interviewing questionnaire sheet:**

The researcher was design the tool after reviewing the related literature. It was divided into four parts:

**Part (1):** It consisted of questions related to the studied Woman's general characteristics as; age, educational level, marital status. It included questions from 1-3.

**Part (2):** knowledge of woman regarding breast cancer included (meaning of breast cancer, risk factor, symptoms, screening, source of information). It included questions from 4-8.

**Part (3):** woman's knowledge regarding the ministry of health initiatives plan for early detection of breast cancer include (meaning of initiative, services of initiative, people who provide this care, source of information). It included questions from 9-16.

**Part (4):** Barrier that prevent women to attend the initiative plan of early detection and screening of breast cancer. It included questions from 17- 24.

#### **Knowledge scoring system:**

The questionnaire was contained of 11 questions, the total scores of the questionnaire ranged from (11- 22) points., the right answer was scored as 2 points and the wrong answer was scored as 1 point. These scores were summed and were converted into a percent score and classified into 2 categories:

- Satisfactory level of knowledge  $\geq 60\%$ .
- Unsatisfactory level of knowledge  $<60\%$ .

#### **Tool II (Likert Scale): -**

It was designed to woman' attitude regarding the ministry of health initiatives plan for early detection of breast cancer. The scale covered 13 clear statements.

#### **Attitude scoring system:**

The scale was contained of 13 statements, the total scores of the scale ranged from (13- 39) points, for attitude scale using (Agree =3, Uncertain =2 and disagree =1). These scores were summed and were converted into a percent score and classified into 2 categories:

- Positive attitude (24-39)  $\geq 60\%$ .

- Negative attitude (13-23)  $< 60\%$ .

#### **Tools validity and reliability:**

An experienced panel of three gynecological and obstetric nursing professionals evaluated the data collection tools to assess the face and content validity. The tools' information coverage, clarity, phrasing, length, structure, and overall appearance were each asked to be evaluated by the experts.

There was no modification done for the tool. Cronbach Alpha coefficient test will use to measure the reliability of the tools which used in the current study. Overall test and retest reliability coefficient was alpha Cronbach values for tool (1) 0.875. And for tool (2) the value was 0.832.

#### **Ethical Considerations:**

Ethical approval obtained from the Scientific Research Ethical Committee in the Faculty of Nursing at Fayoum University before starting the study. An official permission obtained from director of the Fayoum University in which the study will be conducted. Oral consent obtained from each participant. They received guarantees that their identities and confidentiality would be protected without incident.

#### **Administrative design:**

An Official letter including the title and purpose of the study were issued from dean of the faculty of Nursing, Fayoum University, and submitted to the Director of the pre-mentioned faculties for conducting the study.

#### **Operational Design:**

##### **Preparatory phase:**

Using books, periodicals, journals, magazines, and the internet, the researcher conducted a review of the relevant current, local, and international literature throughout this phase. These aided the researcher in becoming more familiar with both the study and the tool-designing process. After that, tools were created and evaluated for validity and dependability.

#### **Pilot study:**

The pilot study was conducted on 10% of the total sample size (30) employee to evaluate the efficiency, clarity of the tools that which used in the study. There were no necessary modifications made according to the result of the pilot study.

#### Fieldwork:

Data collection was started and finished at 6 months from the beginning of July 2021 to the end of December 2021. Firstly the researcher introduced herself to woman in confident and trust to participate in the study, then obtained their written consent, woman was interviewed in the private place. All woman were be interviewed according to their consequently in the faculty attendance book for employee and explain to them the aim of the study about perception's regarding the ministry of health plan initiative for early detection of breast cancer. The researcher interviewed 5 women each day, the researcher was asked to finish structured Arabic self-administered questionnaire within 20 minutes and assisted using likert scale and given them 10 minutes to finish their scale.

These were repeated daily till the sample size was obtained. The first faculty was the faculty of nursing, the secondly faculty was the faculty of social work, third faculty was the faculty of dar al ullom, the forth faculty was the faculty of science.

#### Statistical design:

Data entry and statistical analysis were done using the Statistical Package for Social Science (SPSS), version 250.0, a statistical software package. Results were presented in frequencies, percentages. The statistical analysis included the arithmetic mean, standard deviation and Chi-square test.

#### Results

**Table (1):** illustrated that, 96% of the studied sample reported that the fear of infection with corona was barrier that prevent them to attend initiative of early detection and screening of breast cancer. Also, 80.7% of them

reported that the work dates do not match the initiative dates, respectively.

**Table (2):** indicated that, there was highly significant positive correlation between total correct knowledge regarding breast cancer and total correct knowledge regarding initiatives for early detection of breast cancer among studied sample at ( $P = < 0.01$ ).

**Table (3):** Showed that, there was significant positive correlation between total correct knowledge regarding breast cancer and total positive attitude regarding initiatives for early detection of breast cancer among studied sample at ( $P = < 0.05$ ). Also, there was significant positive correlation between total correct knowledge regarding the initiatives for early detection of breast cancer and total positive attitude regarding initiatives for early detection of breast cancer among studied sample at ( $P = < 0.05$ ).

**Table (4):** Showed that, there was highly significant negative correlation between work dates, fear of infection with corona and total attitude regarding initiatives for early detection of breast cancer among studied sample at ( $P = < 0.01$ ). Also, there was highly significant negative correlation between lack of chair at a waiting area, lack of clean toilet and total attitude regarding initiatives for early detection of breast cancer among studied sample at ( $P = < 0.01$ ).

**Figure (1):** shows that, 51.3% of the studied sample had incorrect knowledge regarding initiatives for early detection of breast cancer. While, 48.7% of them have incorrect knowledge.

**Figure (2):** reveals that, 65.3% of the studied sample had negative attitude regarding the Egyptian ministry of health national initiatives for early detection of breast cancer. While, 34.7% of them had positive attitude.

**Table (1):** Distribution of the studied sample according to their barrier that prevent women to attend initiative of early detection and screening of breast cancer (n = 300).

Items	Yes		No	
	N	%	N	%
Long waiting time to be screening	204	68	96	32
The places are far away from my home	228	76	72	24
Work dates do not match the initiative dates	242	80.7	58	19.3
Expensive transportation	176	58.7	124	41.3
Avoid crowding for fear of infection with corona	288	96	12	4
No comfortable and available chair at a waiting area	210	70	90	30
No availability of clean water to drink	198	66	102	34
No availability of clean toilet	260	86.7	40	13.3

**Table (2):** Correlation between total correct knowledge regarding breast cancer and total correct knowledge regarding initiatives for early detection of breast cancer among studied sample (n=300).

Items	Total correct knowledge regarding breast cancer
Total correct knowledge regarding the initiatives for early detection of breast cancer	r =.752 P =.000**

r= correlation coefficient test \*\*highly significant at p &lt; 0.01.

**Table (3):** Correlation between total correct knowledge and total positive attitude regarding initiatives for early detection of breast cancer among studied sample (n=300).

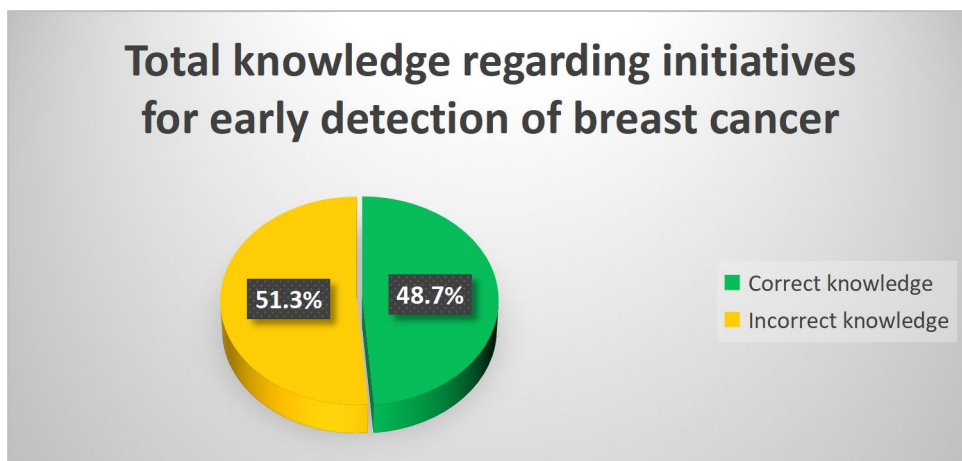
Items	Total correct knowledge regarding breast cancer	Total correct knowledge regarding the initiatives for early detection of breast cancer
Total positive attitude regarding initiatives for early detection of breast cancer	r =.396 P =.042*	r =.418 P =.031*

r= correlation coefficient test \*statistically significant at p &lt; 0.05.

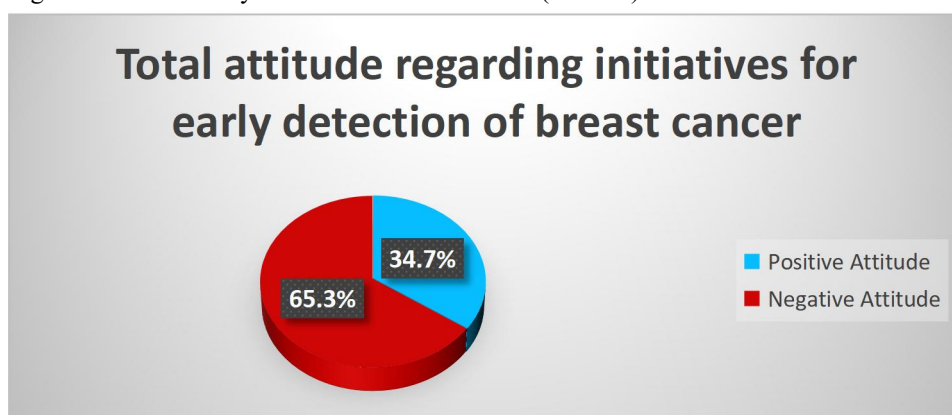
**Table (4):** Correlation between total attitude and barrier that prevent women to attend initiative of early detection and screening of breast cancer among studied sample (n=300).

Items	Total attitude
Long waiting time to be screening	r = -.375 P =.003**
The places are far away from my home	r = -.685 P =.000**
Work dates do not match the initiative dates	r = -.702 P =.000**
Expensive transportation	r = -.501 P =.001**
Avoid crowding for fear of infection with corona	r = -.753 P =.000**
No comfortable and available chair at a waiting area	r = -.693 P =.000**
No availability of clean water to drink	r = -.623 P =.000**
No availability of clean toilet	r = -.728 P =.000**

r= correlation coefficient test \*\*highly significant at p &lt; 0.01.



**Figure (1):** Percentage distribution of the studied sample according to their total knowledge regarding initiatives for early detection of breast cancer (n = 300).



**Figure (2):** Percentage distribution of the studied sample according to their total attitude regarding initiatives for early detection of breast cancer (n = 300).

#### Discussion:

**Breast cancer** is the cancer in which women are most frequently diagnosed worldwide, making it a serious issue for public health. According to the results of the current investigation, the most common barrier faced by the majority of the sample under consideration was the worry of contracting corona due to crowding. Women were more terrified of and concerned about the outbreak due to the global Corona pandemic than they were about programs for early breast cancer screening.

These findings are consistent with research by **Nyante et al., (2021)** who found that the majority of the investigated sample was

concerned about coronavirus infection because of overcrowding. Additionally, these findings support a study by **Figuerola et al., (2021)** who found that the majority of the tested sample was concerned about contracting the disease because of overcrowding.

Furthermore, this outcome is comparable to that of the study by **Campbell et al. (2021)**, who said that the majority of the studied sample was concerned about contracting corona because to overcrowding.

Working hours not acceptable and linked with initiative date and time was the second mean barrier, which was cited by the majority of the examined sample. These results are consistent with a study by **Ferras et al., (2022)**, who also mentioned that Working hours

not suitable and matched with initiative date and time was the second mean barrier.

Likewise, these findings support a study by **Tabaczynski et al., (2021)** who found that working hours were not appropriate and matched with the initiative date and time reported by the majority of the studied sample.

The third average barrier, cited by three-quarters of the sample, was the distance from home. These findings are consistent with a study by **Togawa et al., (2021)** who found that "The places are far away from my home" was cited by slightly more than three-quarters of the sample.

Correspondingly, these findings support a study by **Mobley et al., (2021)** who found that slightly more than three-quarters of the sample under study reported that their homes were far from the places where their cancer was diagnosed. In my opinion, these outcomes may be attributable to the fact that the campaign's locations were distant from the homes of the ladies, making it difficult for them to participate.

Long screening wait times were another typical barrier, as indicated by more than two thirds of the group under study. Contrarily, this conclusion was contested **Masoudi et al., (2022)** Regarding screening barriers in Iranian women, it was discovered that fewer than one-third of the group under study reported long screening wait times.

Similarly, these findings are in line with a study conducted by **Mwenda et al., (2021)** who found that fewer than a third of the study sample reported having to wait a long time for a screening. It was a hurdle for the women not to attend the campaign because they had been waiting a long time to be assessed.

Furthermore, more than half of the sample under study mentioned pricey transportation. These findings support the findings of a research by **Saeed et al., (2021)** who claimed that, More than half of the group under study reported having insufficient financial resources.

The majority of the women in the current study had to take multiple forms of transportation to get to the campaign because they were from distant places, which added to their financial burden. Additionally, these findings are consistent with a study conducted by **Agha et al., (2021)** who found that more than half of the study group reported having insufficient financial resources..

The results of the study conducted by **Al Ameen et al., (2019)** disagree with the findings of the majority of the studied sample, which stated that availability of toilet reported by two fifths of the studied sample. Because differences could result from differences in the study sample and setting.

**According to the present study's analysis of the correlation between total correct knowledge of breast cancer and total favorable attitudes toward early detection programs among the sample**, there is a strong positive relationship between total correct knowledge of breast cancer and favorable attitudes toward such programs. Less than half of the study sample may be responsible for this because they lacked the motivation and knowledge necessary for breast cancer early detection.

These results are consistent with **Sarker et al., (2022)**, who noted a significant positive correlation between total correct knowledge about breast cancer and total positive attitude toward initiatives for early detection of breast cancer in their study about knowledge towards breast cancer, breast self-examination practices, and its barriers among university female students in Bangladesh.

This finding, however, was at odds with that of **Gore et al., (2019)**, who claimed that there was no appreciable relationship between attitudes toward health awareness campaigns on breast cancer early detection and knowledge of initiatives for early detection of the disease. It can be as a result of the varying educational levels of the sample under study.

The results of this study showed a highly significant positive correlation between total correct knowledge of breast cancer and total

correct knowledge of initiatives for early detection of breast cancer among the studied sample. According to my opinion, some women's awareness of breast cancer screening may be attributable to media advertisements regarding free breast cancer screenings offered by health facilities, which have the effect of raising women's awareness of breast cancer and the benefits of early diagnosis.

The results of the current study are consistent with those **Gore et al., (2019)** who found a highly significant positive association between total correct knowledge of breast cancer and total correct knowledge of breast self-examination for the early identification of breast cancer.

Additionally, these findings support a study conducted by **Alam et al., (2021)**, which found a highly significant positive link between total knowledge accurately describing breast cancer and total knowledge accurately describing programs for early detection of breast cancer.

Additionally, this outcome agreed with **Khan et al., (2021)** who found a highly significant positive link between total knowledge accurately about breast cancer and total knowledge accurately regarding programs for early detection of breast cancer.

The current study found a highly significant negative correlation between work schedules, fear of corona infection, and overall attitude toward initiatives for early detection of breast cancer. This negative correlation is a barrier that prevents women from attending initiatives of early detection and screening of breast cancer. Due to the women's lack of understanding of the campaign for early breast cancer screening.

Contrarily, **Garcia-Roca et al., (2022)** observed that there is a strong positive link between work dates, fear of infection with corona, and overall attitude toward programs for early identification of breast cancer. They disagreed with this finding. Women are more likely to take the initiative to discover breast cancer early because they are more aware of its importance for detection and follow-up.

Additionally, the current study found a highly significant negative correlation between the absence of a chair in a waiting area, an unclean restroom, and an overall attitude toward initiatives for the early detection of breast cancer. These findings are consistent with those of a study conducted by **Santos et al., (2021)** which also found a negative correlation between the absence of a chair in a waiting area, an unclean restroom, and an overall attitude toward initiatives for the early detection of breast cancer. It might be because most campaign locations are uncomfortable for most women because there aren't enough facilities there.

### Conclusion

The research questions were addressed based on the findings of the current study, and it was determined that more than half of the sample had inaccurate knowledge of initiatives for the early diagnosis of breast cancer. Furthermore, more than two thirds of the tested sample showed a negative attitude toward initiatives for breast cancer early detection. In addition, for the majority of the sample under study, the biggest impediment to taking initiative was fear of corona virus infection. Additionally, among the sample of those who were evaluated, there was a strong positive association between overall knowledge of breast cancer facts and overall optimism toward projects.

### Recommendations

**The researcher made the following recommendations based on the study's findings:**

- Construct and occasionally implement an awareness-raising program to encourage female employees to support Egyptian project.
- Develop a leaflet that is given to university staff members to explain the significance of national initiatives for breast cancer early detection.

### For additional study in this area;

Reconstruct the current study using a different sample from a different university.



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