

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

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Abstract

Background: Screening for Early Detection of Breast Cancer remains the primary way to prevent the development of life-threatening. The women's health initiative is designed to screen carcinoma of the breast at an early stage, pursue clinical examination, and provide free of charge treatment, focusing on reproductive health. **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:** Design and implement periodically awareness raising program to motivate female employee to seek Egyptian initiative. Design brochure about the importance of national initiatives plan for early detection of breast cancer, their distributed among university employee at universities.

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).

Perception of woman towards ministry of health initiatives plan for breast cancer is a crucial determinant of early detection the women's perceptions, knowledge, attitudes, and beliefs regarding cancer and screening, together with aspects of the healthcare system and social milieu, appeared to strongly influence the women's preventive practices (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**).

Nurse as the more accessible members of the health care staff can play an important role in awareness of the community as they are the largest group of health professionals and the closest to the patient (**Sachdeva, et al 2021**). Also, the role of nurse is complex as it includes there role as caregiver, administrator, counselor, educator, researcher that use evidence based and leader to improve women's perception toward initiative for screening and early detection of breast cancer. (**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 and Eldin, 2019**).

Consequently president **Abdel Fatah Al Sisi** have declare 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:

The data collection tools were reviewed by a panel of three experts in obstetrics and gynecological nursing to test the face and content validity. Each of the experts was asked to assess the tools for content coverage, clarity, wording, length, format and overall appearance.

There was no modification done for the tool. Crombach 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 were assured that anonymity and confidentiality would be guaranteed with no harm.

Administrative design:

An Official letters 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:

In this phase the researcher reviewed the current, local and international related literature using books, periodicals journals, magazines and internet. These helped the researcher to be more acquainted with the study, and with the process of tools' designing. Then tools were designed and tested for being valid and reliable.

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 were interviewed in the private place. All woman were 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 25.0.0, 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 $p < 0.01$.

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 $p < 0.05$.

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 $p < 0.01$.

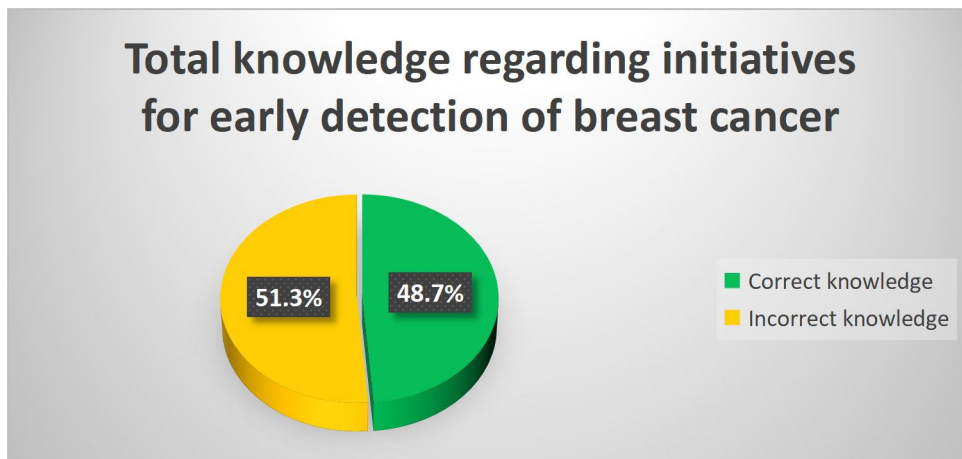


Figure (1): Percentage distribution of the studied sample according to their total knowledge regarding initiatives for early detection of breast cancer (n = 300).

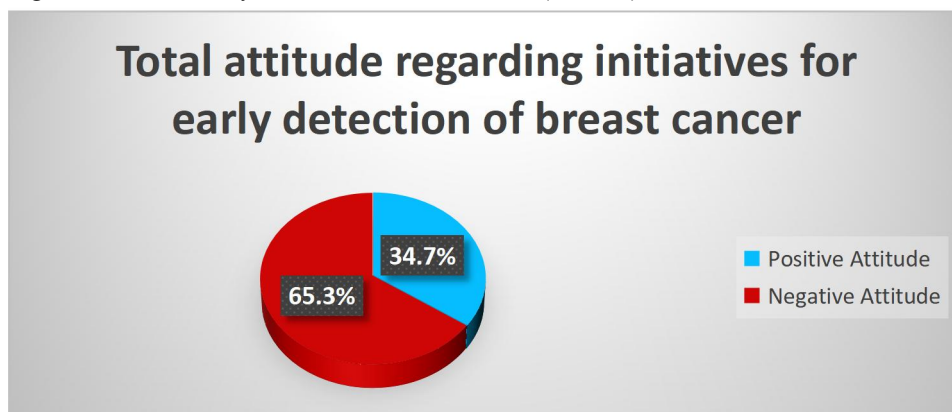


Figure (2): Percentage distribution of the studied sample according to their total attitude regarding initiatives for early detection of breast cancer (n = 300).

Discussion:

Breast cancer is the most frequently diagnosed cancer among women around the world, making it a significant public health problem. The present study finding showed that the **mean barrier** among the majority of the studied sample was fear to be infected with corona due to overcrowded. Due to the Corona pandemic affecting the world, so women were more afraid and concerned about the epidemic rather than initiatives for early detection of breast cancer.

These results agrees with the study achieved by (Nyante, et al 2021) about Population-level impact of coronavirus disease 2019 on breast cancer screening and diagnostic

procedures, who stated that, the majority of the studied sample was fear to be infected with corona due to overcrowded.

Also, these results agrees with the study achieved by (Figuroa et al., 2021), about The impact of the Covid-19 pandemic on breast cancer early detection and screening, who stated that, the majority of the studied sample was fear to be infected with corona due to overcrowded.

Also, this results is similar to the result of the study performed by (Campbell et al. 2021), about COVID-19 and cancer screening in Scotland: A national and coordinated approach to minimizing harm, who stated that, the majority of the studied sample was fear to be infected with corona due to overcrowded.

The second mean barrier, reported by the majority of the studied sample was Working hours not suitable and matched with initiative date and time, these results are in the same line with the study achieved by (Ferras et al, 2022), entitled An Examination of Factors That Influence Receipt of Reproductive Health Screenings Among Female Veterans, who mentioned that Working hours not suitable and matched with initiative date and time reported by the majority of the studied sample.

Also, these results agree with the study achieved by (Tabaczynski et al. 2021) about a comparison of total and domain-specific sedentary time in breast cancer survivors and age-matched healthy controls, who stated that, Working hours not suitable and matched with initiative date and time reported by the majority of the studied sample.

The third mean barrier, reported by three quarter of the studied sample was The places are far away from my home, these results agrees with the study achieved by (Togawa et al, 2021), about Geospatial barriers to healthcare access for breast cancer diagnosis in sub-Saharan African settings: The African Breast Cancer—Disparities in Outcomes Cohort Study, who stated that, The places are far away from my home reported by slightly more than three quarter of the studied sample.

Also, these results in agreement with (Mobley et al, 2021) about Geographic Disparities in Late-Stage Breast Cancer Diagnosis Rates and Their Persistence Over Time, who stated that, The places are far away from my home reported by slightly more than three quarter of the studied sample. In my point of view these results may be due to the locations of the campaign were far from the women's home, so it was a barrier for them not to go to the campaign .

Another mean barrier, reported by above two third of the studied sample was Long waiting time to be screening. **on the contrary**, this finding was disagree with (Masoudi et al, 2022). About Barriers to breast cancer screening in Iranian females, who found that Long waiting

time to be screening reported by less than third the studied sample.

Also, these results agrees with the study achieved by (Mwenda et al, 2021), which entitled as Breast health awareness campaign and screening pilot in a Kenyan County, who stated that, Long waiting time to be screening reported by less than third the studied sample . Because the womens had been waiting for a long time to be examined , so it was a barrier for them not to go to the campaign .

Additionally, more than half reported by studied sample was expensive transportation. these results agrees with the study performed by (Saeed & Sohail, 2021) about Fears and barriers: problems in breast cancer diagnosis and treatment in Pakistan, who stated that, Lack of financial resources reported by more than half of studied sample.

Because most of the women in the current study were from far away, so they had to ride more than one means of transportation to go to the campaign, and this represented an additional financial burden for them.

Also, these results agrees with the study achieved by (Agha & Rind 2021) about Exploring Breast Cancer Patients' Experiences of Struggle against Socio-Economic and Geographical Barriers in Rural Pakistan, who stated, Lack of financial resources reported by more than half of studied sample.

Finally, the majority of the studied sample reported that No availability of bathroom, this results is in disagreement with the result of the study performed by (Al Ameen et al, 2019), in their study about Clients' Satisfaction with Breast Cancer Early Detection Clinics in Iraq, who stated that availability of toilet reported by two fifth of the studied sample. Because difference may be due to variation between study sample and setting .

According to Correlation between total correct knowledge and total positive attitude regarding initiatives for early detection of breast cancer among studied sample, the present study revealed that, 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. It's may be due to, less than half of the study sample had enough knowledge about breast cancer and initiative for early detection of breast cancer.

These findings agree with (Sarker et al, 2021), in their study about Knowledge towards breast cancer, and breast self-examination practices and its barriers among university female students in Bangladesh, who mentioned that significant positive correlation between total correct knowledge regarding breast cancer and total positive attitude regarding initiatives for early detection of breast cancer.

However, this finding was in **contradicting with (Jackline, et al (2021))**, who stated that, there was no significant positive correlation between knowledge regarding the initiatives for early detection of breast cancer and attitude regarding health awareness campaign on breast cancer early detection. It's may be due to different in educational level of the studied sample.

As regard to Correlation between total correct knowledge regarding breast cancer and total correct knowledge regarding initiatives for early detection of breast cancer among studied sample, the present study finding revealed a 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.

In my Point of view, may be due to some of women aware by breast cancer screening because media done adverting about free breast cancer screening though health unit this help increase awareness of women about breast cancer and its early detection.

The present study finding was in the same line with (Kalliguddi & Gore 2019), who reported that a highly significant positive correlation between total correct knowledge regarding breast cancer and total correct knowledge regarding breast self examination for early detection of breast cancer.

Also, these results agree with the study achieved by **Alam et al. (2021)**, who mentioned that, there was a highly significant positive correlation between total correct knowledge regarding breast cancer and total correct knowledge regarding initiatives for early detection of breast cancer.

Also, this result was consistent with **Khan et al. (2021)**, who stated that a highly significant positive correlation between total correct knowledge regarding breast cancer and total correct knowledge regarding initiatives for early detection of breast cancer.

Regarding the Correlation between total attitude and barrier that prevent women to attend initiative of early detection and screening of breast cancer, the present study revealed that there is highly significant negative correlation between work dates, fear of infection with corona and total attitude regarding initiatives for early detection of breast cancer. Because the women in this study have poor knowledge about initiative of early detection of breast cancer.

On the contrary, this finding was disagreed with (Garcia-Roca et al, 2022), who found that there is significant positive correlation between work dates, fear of infection with corona and total attitude regarding initiatives for early detection of breast cancer. Because women have awareness about breast cancer and initiative for early detection of breast cancer and know that the initiative is very important for detection and follow up.

Also, the present study revealed that, 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, these results are in agreement with the study achieved by (Santos et al, 2021), who mentioned that 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. It is may be due to most of the campaign places are uncomfortable for most women because of the lack of facilities.

Conclusion

Based on results the current study concluded that, more than half among the studied sample had incorrect knowledge initiatives for early detection of breast cancer. Additionally, more than two third among the studied sample had negative attitude regarding the initiatives for early detection of breast cancer. Moreover, the main barrier to seek initiative was fear to be infected with corona virus among the majority of the studied sample. Furthermore, there was significant positive correlation between total correct knowledge regarding breast cancer and total positive attitude regarding initiatives among the studied sample.

Recommendations

Based on these findings of the present study the researcher recommended;

- Design and implement periodically awareness raising program to motivate female employee to seek Egyptian initiative.
- Design brochure about the importance of national initiatives plan for early detection of breast cancer, their distributed among university employee at universities.

For further research in this field;

Replicate the Present study in another university and another sample.

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